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## Urban Housing Affordability Problem in Africa: A Search for Pragmatic Solution?

By Kwame Addae-Dapaah

*Universiti Sultan Zainal Abidin*

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# Urban Housing Affordability Problem in Africa: A Search for Pragmatic Solution?

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## I. INTRODUCTION

The world's housing affordability problem has vindicated Abrams (1964:53) that "so far as housing is concerned, the whole world has remained underdeveloped". Housing affordability is problematic in both developed and developing countries. Given all the technological advancement, the copious housing policies that have been promulgated, and the virtues of the market economy, it is bewildering that a solution to the problem has thus far proven to be a will-o-the-wisp. The paper is therefore aimed at, firstly, conducting a review of the urban housing affordability problem of Africa to propose practical measures for resolving the problem in the context of the socio-economic, cultural, and political milieu of Africa. Secondly, it is aimed at provoking more research and debate on the issue. The key to resolving the problem

could be found in the statement of the respondents to a survey for affordable housing in Lagos: "We are the answer...We can build cheap homes for ourselves" (Osunsina, 2018).

The rest of the paper proceeds as follows. The following section deals with a review (with particular reference to Africa) of the relevant literature. This is followed by the methodology, after which the results of secondary data analyses are presented and discussed. This leads to the policy discussion section. The last section is devoted to concluding remarks.

## II. LITERATURE REVIEW

### a) *Housing and the Housing Problem*

There is no consensus among housing experts on the definition, nature, and scope of housing, and the housing problem. The definition of housing is complicated by the fact that words like home, house, shelter, dwelling, and housing are often used interchangeably in the same context (Burn and Grebler, 1977). According to Rapoport (1980), housing has been approached as a product, as a commodity, as a process, as a place (including such concepts as the expression of identity, self-worth, and status of the inhabitants), as a territory, as private domain, as a 'behavior setting' (a unit of analysis in ecological psychology), or as the response to a set of purely functional requirements (a locus of activity). Rapoport (1980) further notes that the definition of housing has been neglected because, since we all live in housing, we feel that we know what dwellings are. According to Francescato (1993, p.37), the real reason for neglecting to define housing could be the multiplicity of meanings evoked by housing. Teymur (1988, p.19), in trying to define housing, states: "housing is a complex phenomenon... The terms and the framework which we talk and think about housing constitute a concept of 'housing' ... It is an amorphous, heterogeneous, multi-media, imprecise and relativistic concept; but one which has a real existence in our lives, language and thinking". Similarly, Carter (1993, p.xi) states that "although the visual aspects of houses carry some significance, these are often masked by traditions and other social processes that add salience to the various physical forms". In effect, "housing is ethnoscapic, that is, cross-cultural and cross-disciplinary" (Carter, 1993, p.xvi). However, housing is culture-specific in its symbolism as a cultural edifice (Rapoport, 1980).

**Author:** Ph.D, Associate Professor Bartlett School of Planning, Faculty of the Built Environment University College London, 14 Upper Woburn Place London WC1H 0NN United Kingdom.  
e-mail: k.addae-dapaah@ucl.ac.uk

The heterogeneity of housing stems from, among other things, the bundle of services which it renders vis-à-vis the diversity of customers involved. The mix of these services and the importance which occupants attach to each of them vary widely among and within cultures. Moreover, several people and institutions such as architects, planners, academics, environmentalists, health officers, sociologists, politicians, economists, philanthropists, financiers, builders, surveyors and the residents have vested interest in housing. Given such a complex web of inextricably intertwined issues and diverse people and institutions with conflicting interests, it is not surprising that “people would define housing, and therefore the housing problem in terms of their special fragments” (Culliton, 1975, p.1182). This implies that the definition of housing is essentially hermeneutic. Therefore, housing and any associated problem may not be amenable to a one-size-fits-all solution.

Forrest and Hirayama (2015) define housing as a consumption and investment goods. Defining housing as an investment good “de-houses” housing by prevaricating its primary use as shelter. It places housing in the market to create a problem by marginalizing all people who need housing but do not have effective demand. Furthermore, unlike the West, Africans do not acquire housing primarily for investment but as a dwelling (Gillespie, 2018). Moreover, “asset” has different connotations to the African and the Westerner. To the Westerner, an asset is an investment/economic good that is freely traded, while to the African, an asset is a treasure to be bequeathed to the next of kin, not pawned. This opposed perception of an asset implies that Western models could be a total misfit for Africa. Even placing housing in the market realm in the West to preclude the poor from accessing housing may controvert the Universal Declaration of Human Rights – UDHR - (1948, p.25) that “Everyone has the right to a standard of living for the health and well-being of himself and his family, including food, clothing, housing, medical care and necessary social services and the right to social security in the event of unemployment, sickness, disability, widowhood, old age, or other lack of lack of livelihood in circumstances beyond his control”. The yawning question is, if housing is everyone’s right, whose obligation is it? One cannot presumably expect one’s neighbor to be responsible for one’s right to housing as everyone has a right to housing too. Thus, the UDHR (1948) declaration may be construed that housing is everyone’s obligation as it is everyone’s right. Paradoxically, this is not the case in Western Societies where housing the majority of the population who cannot house themselves is the Government’s responsibility. This is in total contradistinction to Africa, where the head of the family, usually the husband, is responsible for providing housing for his family. The practice of individual

responsibility for housing himself and his family has served Africa extremely well (Amoako and Boamah, 2017). Thus the veiled imposition of state responsibility for housing on Africa by international bodies appears to be unfortunate, regrettably somewhat patronizing if not misguided, and smacks of cultural insensitivity. If the Community Land Trust in the United Kingdom insists on housing its members rather than having others to house them, while self-help housing has succeeded in Freiburg, Germany (see Benson and Hamiduddin, 2018), it would be folly for Africans to abandon the nobility and sustainability of individual responsibility for housing under any pretext.

Moreover, the market does not operate on the basis of individual’s right to own (which could imply free for all) but on individual’s ability (predicated on financial capability) to buy what is being sold. Thus, making housing, a basic human need, an investment good puts housing beyond the reach of the vast majority of humanity that do not have effective demand.

Another school of thought, which conceptualizes housing as a verb (e.g. Turner, 1972, 1976; Ward, 1982; Harris, 1998) defines housing and the housing problem as functions of:

- Mis-matches between people’s socio-economic and cultural situation, and their housing processes and products; and
- The waste, mis-use, or non-use of resources available for housing.

This definition is the key to understanding the urban housing and the associated affordability problem of Africa, where the imposition of Western standards and models (Owusu-Ansah, Soyeh and Asabere, 2019) have created a mis-match between housing processes and products, and the people’s socio-economic and cultural situation (Addae-Dapaah, 1983; Agyemang and Morrison, 2018) to lead to non-use of resources (especially, human capital and local building materials) available for housing (Ghana Statistical Service – henceforth GSS– 2014; UN-Habitat, 2012). The failure of this definition to expressly address housing quality differentiates it from the concept of housing as a noun.

From the viewpoint of housing as a noun, the housing problem is “the extent to which the quantity and quality of existing accommodation fall short of that required to provide each household with accommodation of specified minimum standard and over” (Needleman, 1965, p.18). This definition encompasses unfit, overcrowded dwellings and squatter settlements. Kirby (1979), states that the term “slum” was used in the nineteenth century to refer to an entire area of social pathology and to an individual dwelling unfit for human habitation. Mellor (1977, p.67), notes that “the slum was the locale of vice, crime, delinquency and disease, a disorderly gathering of people beyond society and without community”. Therefore housing

problems have been interpreted as pathological conditions which prevent society from functioning harmoniously. Unfortunately, the yardstick for assessing pathological conditions and harmony is a function of the ideology of the party concerned. Given this definition, about 80-90% of the housing stock of Ghana and most African countries which are self-built and have been calumniated as informal developments, slums, etc. suffer from pathological conditions, notwithstanding them being extremely socially functional and decent physical environments, albeit some lacking good access roads and drainage system. McFarlane (2012) challenges the notion that informality is illegal and belongs to the poor while formality is legal and belongs to the rich. According to O'Donnell (2010, p.3), "the problem is actually one of value, recognition, and rights of the residents of informal settlements," not pathology, while King, Orloff, Virsilas and Paide (2017) propose the upgrading of informal settlements to provide expanded opportunities for those who live there. Furthermore, just increasing the housing supply may exacerbate, rather than solve, the housing problem. For example, Cullingham (1979) reported more housing units than housing needs in United Kingdom in the 1960s. Yet, there existed a housing problem as people refused to accept the existing supplies for being a mis-match to their needs. Jenkins (2018) reports that while 58% of demand was for houses priced at below £450/ft<sup>2</sup>, only 20-25% of new homes in London were at that price to attest to a mismatch of supply to demand. Veras (2018) has documented mismatches between housing supplies and housing needs in Rwanda and Kenya. The ghost cities of Luanda (Watson, 2014) are further attestation of mis-matching housing supply to need, which exacerbates the housing and its concomitant affordability problem. Moreover, providing an "acceptable" quality housing for those beset with housing problems could compound and complicate the problem. Ferguson and Pettigrew (1954) reported that providing slum dwellers in Glasgow with relatively high-quality housing units led to high mortality rate. This resulted from malnutrition, which was the corollary to sacrificing meals to pay for the higher rental. Note that this school of thought puts the obligation for housing on the state.

In urban Africa, the supply deficit (one of the major causes of housing affordability problem) cannot be disputed. Nigeria is estimated to have a housing deficit of 17 million; South Africa, Kenya, and Angola have about 2 million each, while Ethiopia's housing deficit is about one million (Veras, 2018). The cumulated housing deficit for Ghana from 1960-2010 is estimated at 717,059 and 2,771,961 if the estimate is based on 6-persons and 4-persons per household per 2-bedroom housing unit, respectively (GSS, 2014). Ghana is supposed to require 100,000 housing units annually but production is 35% of the required estimate (GSS, 2014).

According to Institute of Statistical, Social and Economic Research (ISSER) (2013), the metropolitan centers of Ghana account for 53% and 28.70%, respectively, of the 717,059 and 2,771,961 cumulative housing deficits. This is similar to Tanzania, where urban areas account for 40% of the 3,000,000-housing deficit, with Dar es Salam alone accounting for 36% of the 1,200,000 urban housing deficit (Shelter Afrique, 2012). Given the unprecedented pace of urbanization in Africa, which is fueling rural-urban migration, vis-à-vis the housing supply crunch, the dynamic disequilibrium between housing supply and demand is likely to widen over the future.

i. *Urbanization and Urban Housing Problem of Africa*

Before dealing with Africa's urban housing affordability problem, it is worth briefly discussing the contributory factors of urbanization and the urban housing problem of Africa, which include: high birth rate, rural-urban migration, expansion of urban areas through annexation, globalization, poverty (Vera, 2018; Gillespie, 2017), market-oriented approach, lack of governmental initiative (UN-Habitat, 2011), rising land cost (Yankson and Gough, 2014), proscription of indigenous building materials (Ghana Statistical Service (GSS), 2014; UN-Habitat, 2012) and land tenure/acquisition.

GSS (2014, p.69) notes that "the housing deficit...to a large extent can be described as urban phenomenon". Thus, urbanization, fostered by the market through the benefits of agglomeration, is a significant driver of the housing deficit and its corollary urban housing affordability problem. Furthermore, rising land cost and poverty are, to some extent, the creation of the market. It may be contended that high birth rate exerts pressure on housing need to increase land and house prices. However, it is the market that prices land while a significant proportion of the high birth rate do not have effective demand to affect the market pricing mechanism. This implies that the effect of high birth rate on land and housing prices may not be significant in the short to medium term. Furthermore, in most, if not all, African countries, the land is owned by the indigenous people who do not buy land for housing development. It is the migrants to the urban areas who neither have families nor friends in the urban areas to have access to rent-free accommodation, and who constitute effective demand, that affect land prices. Moreover, the same market that prices land beyond the reach of most urbanites attributes low values to labor provided by the urbanites plagued by the housing affordability problem. Thus, the urbanites beset with the housing affordability problem are hemmed in by the market's "inequitable valuation trap" – i.e. attributing high value to land and houses but relatively meager value to labor. Furthermore, the market that prices the low, and low-middle-income urbanites out of the land and housing market de-houses housing by using it for investment at

the expense of the hapless low-income urbanites who need housing for “housing”. Thus, the market appears to vindicate the Marxist’s contention that the capitalist system is the problem (Engel, 1845 & 1872; Harvey, 2012).

#### b) Definition of Housing Affordability

The definition of affordable housing is briefly discussed to provide a suitable context for dealing with the housing affordability in urban Africa. ‘Affordability’ denotes the ability to meet the cost of something. Montreal (2005, p.2) defines it as ‘a measure of the ability to pay’. Thus, the United Kingdom Government’s definition of affordability in terms of rental that does not exceed 80% of the average market rental (Ministry of Housing, Communities & Local Government (MHCLG), 2019) masks the affordability problem. According to the Department of Housing and Urban Development (HUD) (2020), a dwelling unit is affordable if the occupant householder’s total expenditure on the house does not exceed 30% of the gross household income. This definition, formally known as the housing expenditure-to-income ratio (HEIR), is the traditional meaning of affordable housing. The definition is household- specific but makes an implicit assumption that the household’s gross income is high enough to meet all other expenses necessary for its survival after spending 30% of the gross income on housing (Hulchanski, 1995).

Odunsi (2018) asserts that affordable housing would be achievable and sustainable if all the major related parties - the government, private sector, professionals, the community, and the individual – could work together. However, “the concept of affordable housing means different things to various ministries and levels of government” to negate cooperation (Friedman and Rosen, 2018, p.2). The reason for this may be found in the public choice theory (see Stigler, 1971; Friedman, 1999; Felgendreher and Lehmann, 2017), which in a nutshell, states that self-interest is the common feature of all actors in the market. Readers who are interested in this theory may refer to Owusu-Ansah, Ohemeng-Mensah, and Abdulai (2017). It must be noted that throughout the world, especially in Africa, those affected by the urban housing affordability problems are disenfranchised as far as housing policymaking is concerned. They are dray horses at the mercy of the patronizing self-seeking policymakers and “stakeholders” – the financial powerhouses. Furthermore, notwithstanding that housing affordability and affordable housing are often used interchangeably, Stone (2006) and Friedman and Rosen (2018) argue a subtle but significant distinction between the two phrases. While housing affordability relates housing to people (i.e. people-specific), affordable housing implies that a specific form of housing is affordable to the target group (i.e. one-size-fits-all). Therefore, a gap will always exist between the ostensible supply of affordable

housing and the affordability of the housing stock (Friedman and Rosen, 2018). Moreover Fisher (2007) argues that affordability should be measured by a comprehensive approach that captures the potential impacts of housing choices including utility efficiency, maintenance expense, accessibility to public services and community environment – This is akin to the housing as a verb concept.

Thus it is not surprising that different actors define affordable housing to suit their interests. Given this conundrum, it is not easy to measure housing affordability as different definitions require different measurement criteria. Some authors (e.g. Stone, 2010; Mulliner, 2016) commend the residual income approach index, while Jewkes and Delgadillo (2010) have classified ten affordability indices. A variant of HEIR, mortgage interest ratio (MIR) is used to measure the urban housing affordability of Africa for this paper due to the dearth of data.

### III. METHODOLOGY/DATA SOURCING

The paper relies on archival research to predominantly collect secondary data from publications of government and international bodies, internet sources, and the main highlights of the results of surveys conducted by two of my graduate students, Osunsina (2018) and Sanni (2018) for housing affordability of low- and middle-income groups of Ikeja and Lagos Island, and Lagos State respectively of Nigeria for the paper. The secondary data are supplemented with primary data obtained from a guided tour of Rehoboth Properties Limited residential developments in Accra, Ghana, by the Managing Director in August 2019.

The internet search was executed by using google to search for phrases like urban housing affordability of Africa, urban housing affordability of different African countries, urban housing deficit of Africa, urban housing deficit of different African countries, informal housing in Africa, informal housing in different African countries, mean household income and expenditure of urban Africa, etc.

The following monthly present value annuity factor (MPVAF), Equation 1, is used to calculate the maximum loan the mean/median household income can support at given mortgage interest rates to provide verifiable basis for analyses and discussion.

$$MPVAF = \frac{1 - \frac{1}{\left(1 + \frac{i}{m}\right)^{n \times m}}}{\frac{i}{m}} \quad \text{Eq.1}$$

Where  $i$  is the annual interest rate,  $m$  is the number of months (12 for one year), and  $n$  is the mortgage term.

#### IV. AFFORDABILITY OF URBAN HOUSING IN AFRICA

Table 1 provides data on housing affordability for five African countries. The price-income- ratio (PIR) ranges from 19.88 (Algeria) to 3.78 (South Africa). These figures, together with the MIR (Column 4, Table 1) and the affordability index (Column 5, Table 1), show that even South Africa (MIR of 45.48 and affordability index of 2.20), where housing is most affordable, is technically

beset with housing affordability problem. Gloomier levels of affordability are depicted by the results in Table 2. Apart from Pretoria, which exhibits a reasonable level of housing affordability (3.47), the results demonstrate that all the remaining Cities face housing affordability problem. The PIR figures in Tables 1 and 2 imply that at least half of the population of these countries and cities are facing acute housing affordability problems.

*Table 1: Africa Property Prices Index by Country 2019 Mid-Year*

Rank	Country	Price to Income Ratio*	Mortgage as % of Income**	Affordability Index***
1	Algeria	19.88	175.65	0.57
2	Morocco	14.45	119.23	0.84
3	Egypt	13.60	206.10	0.49
4	Tunisia	11.46	116.57	0.86
5	South Africa	3.78	45.48	2.20

\*Ratio of median apartment prices to median family disposable income

\*\* Ratio of actual monthly cost of mortgage to take-home family income

\*\*\* Inverse of mortgage as a % of income

Source: Extracted from 2009-2019 Numbeo (numbeo.com)

*Table 2: Africa Property Prices Index by City 2019 Mid-Year*

Rank	Country	Price to Income Ratio*	Mortgage as % of Income (MIR)**	Affordability Index***
1	Algiers, Algeria	27.41	243.83	0.41
2	Nairobi, Kenya	20.39	311.54	0.32
3	Casablanca, Morocco	17.87	141.10	0.71
4	Alexandria, Egypt	15.21	256.24	0.39
5	Cairo, Egypt	13.10	195.02	0.51
6	Tunis, Tunisia	11.33	120.47	0.83
7	Cape Town, South Africa	7.54	89.67	1.12
8	Johannesburg, S. Africa	3.62	43.42	2.20
9	Durban, South Africa	3.47	41.51	2.41
10	Pretoria, South Africa	2.38	28.79	3.47

\*Ratio of median apartment prices to median family disposable income

\*\* Ratio of actual monthly cost of mortgage to take-home family income

\*\*\* Inverse of mortgage as a % of income

Source: Extracted from 2009-2019 Numbeo (numbeo.com)

Similarly, the results of rental affordability analyses (Table 3) confirm the housing affordability predicament of Africa's urbanites. Table 3, Column 6 shows that apart from Johannesburg (28.58%), Pretoria (26.43), and Durban (28.40%), the rental for median, 1-bedroom apartments in the city centers of the remaining cities range from 38.20% (Cape Town) to 78.65%

(Nairobi) of the respective median household incomes. The situation is worse for householders living in similar apartments outside the city centers where, apart from Pretoria (25.11%), the proportion of the median household income spent on rent ranges from 43.92% (Johannesburg) to 103.34% (Algiers).

*Table 3: Affordability of Monthly Median 1-bedroom Apartment Rental by City*

City	1 Bedroom CC	1 Bedroom OCC	Median H/hold Income 1B CC	Median H/hold Income 1B OCC	% of Median H/hold Income CC	% of Median H/hold Income OCC
Cape Town	789.37	527.96	2066.43	1011.51	38.20	52.20

Johannesburg	471.18	417.24	1648.64	1194.99	28.58	43.92
Nairobi	434.03	189.27	551.86	232.00	78.65	81.94
Casablanca	430.12	210.23	632.51	345.76	68.00	60.80
Pretoria	375.54	378.77	1421.13	1508.35	26.43	25.11
Durban	344.07	364.50	1211.47	1258.26	28.40	28.97
Algiers	260.61	258.33	439.60	249.99	59.28	103.34
Cairo	211.38	107.36	308.41	197.36	68.54	54.40
Tunis	183.16	138.24	393.99	275.28	46.49	50.22
Alexandria	140.68	84.61	278.00	117.86	50.60	71.79

Source: Author – Based on data from Numbeo.com and quora.com

Note: CC = City Centre

OCC = Outside City Centre

1B CC = Median household income for households in 1-bedroom apartment in City centre 1B OCC = Median household income for households in 1-bedroom apartment outside City Centre.

In West Africa, the PIR for Accra, Ghana, was 14:1 in 2003 (UN-Habitat, 2003), while UNDP (2008) reported that 70.8% of Nigerians earned less than US\$1 a day at the time. Table 4 (Accra, Ghana) reinforces the housing affordability problem of African urbanites. According to available information from www.quora.com downloaded on 16/06/2019, the median monthly income for workers in Accra is US\$320. The average monthly income for the 75th percentile income group is US\$851 compared to a national average of US\$170. Assuming a mortgage term of 25 years and mortgage interest rate of 5%, 10%, 15%, and 20% per annum monthly compounding, the maximum mortgage loan that the

above incomes can support based on 30% MIR, and if all the income is hypothetically used for housing expenses are calculated as:

$$\text{Maximum Loan} = \text{MMP}(\text{PVAFi\%/12,300}) \quad \text{Eq. 2}$$

Where MMP = monthly mortgage payment, and PVAFi%/12,300 = present value annuity factor at monthly interest rate of i%/12 (i.e. i% per annum divided by 12 to convert it to monthly equivalent) over 300 months (i.e. 25 years mortgage term)

The results are presented in Table 4.

Table 4: ACCRA - Maximum Mortgage Loan Analysis Results

MIR (%)	PVAF	MML Based on MMP (30% MIR Bracketed)	
		US\$320 (US\$96)	US\$851 (US\$255.30)
5	171.06005	54,739 (16,422)	145,572 (43,672)
10	110.04713	35,215 (10565)	93,650 (28,095)
15	78.00744	24,984 (7495)	66,441 (19,932)
20	59.57872	19,065 (5720)	50,701 (15,210)

Source: Author

The cheapest “affordable” 1-bedroom (42m<sup>2</sup>) and 2-bedroom (60m<sup>2</sup>) apartments developed by Rehoboth Propert Limited (RPL) during visit in August 2019, the cheapest on the market at the time, were selling at a discounted price of US\$22,500 and US\$26,500, respectively. The results in Table 4 imply that at least 50% of all workers in Accra cannot afford the cheapest “affordable” apartment even at a mortgage interest rate of 5% per annum, monthly compounding. The average income earners among the 75-percentile income group can afford the cheapest “affordable” apartments on the market if mortgage interest rates are at most 10% per annum, monthly compounding. Based

on 20% mortgage rate, compounded monthly, and 30% MIR, one must earn at least US\$1,259 monthly (instead of US\$320) to afford the cheapest 1-bedroom apartment in Accra. Moreover, the discounted monthly rental for the cheapest “affordable” 2-bedroom apartment in Accra is US\$180 (56.25% of the median income of workers in Accra) to confirm the housing “affordability” predicament besetting at least 50% of the workers.

Tables 5 and 6 provide affordability indicators for more African countries from another viewpoint to complete the analyses as the numbeo.com database deals with only 5 African countries (Tables 2 & 3).

*Table 5: Affordability of Cheapest Newly Built House*

Country	Price US\$	% of Urban Household	
		Can Afford	Cannot Afford
Libya	49,651	7.95	92.05
Senegal	17,237	40.26	59.74
Gambia	30,185	6.04	93.96
Liberia	15,000	0.01	99.99
Mali	22,925	3.48	96.52
Nigeria	8,040	26.95	73.05
Angola	34,901	8.12	91.88
Equatorial Guinea	38,524	62.52	37.48
Gabon	148,417	11.03	88.97
Central African Republic	23,176	1.45	98.55
Chad	9,972	18.86	81.14
Congo Democratic Republic	40,000	0.58	99.42
Rwanda	19,759	4.29	95.71
Zambia	73,918	8.50	91.5
Malawi	21,045	1.91	98.09
Uganda	33,719	3.93	96.07
Ethiopia	20,702	0.42	99.58
Djibouti	30,374	47.89	52.11
Tanzania	16,509	2.25	97.75
Sudan	79,422	8.33	91.67
Madagascar	24,675	1.76	98.24
Namibia	19,111	73.90	26.1
Botswana	36,150	22.11	77.89
Lesotho	11,679	39.58	60.42

Source: Extracted and adapted from Centre for Affordable Housing Finance in Africa (CAHF) (2019)

Table 5 implies that the percentage of households who cannot afford the cheapest newly- built house on the market ranges from 26.1% (Namibia) to 99.9% (Liberia) with an average of 83.25%. Table 6

summarises the affordability problem on regional basis. The most/least affordable housing regions are North/Southern Africa.

*Table 6: Regional Average Affordability Index of Africa – Price-Income-Ratio (Range Bracketed)*

Region	40m <sup>2</sup> House	80m <sup>2</sup> House
North Africa	1.9 (1.0-2.7)	3.3 (2.0-5.0)
Southern Africa	17.7 (15-21)	55.7 (35-82)
Central Africa	11.3 (5.0-17)	24.5 (10-40)
East Africa	9.3 (3.0-13)	22.3 (5.0-33)
West Africa	8.2 (4.0-19)	21.6 (10-43)

Source: Based on Bah, Faye and Geh (2018)

Before discussing what could be done to resolve the problem in a meaningful African way, the main highlights of the psychographic study by Osunsina (2018) and Sanni (2018) on housing affordability of the low-income group of Lagos State, Nigeria (68% of the population) are presented below to complement the above discourse.

a) *Relevant Highlights of Housing Affordability – Lagos State, Nigeria*

The study by Osunsina (2018) and Sanni (2018) were aimed at ascertaining the people's perception of housing affordability, and how to resolve the problem. Overall, the findings focus on the economy, high construction and maintenance cost, market-oriented

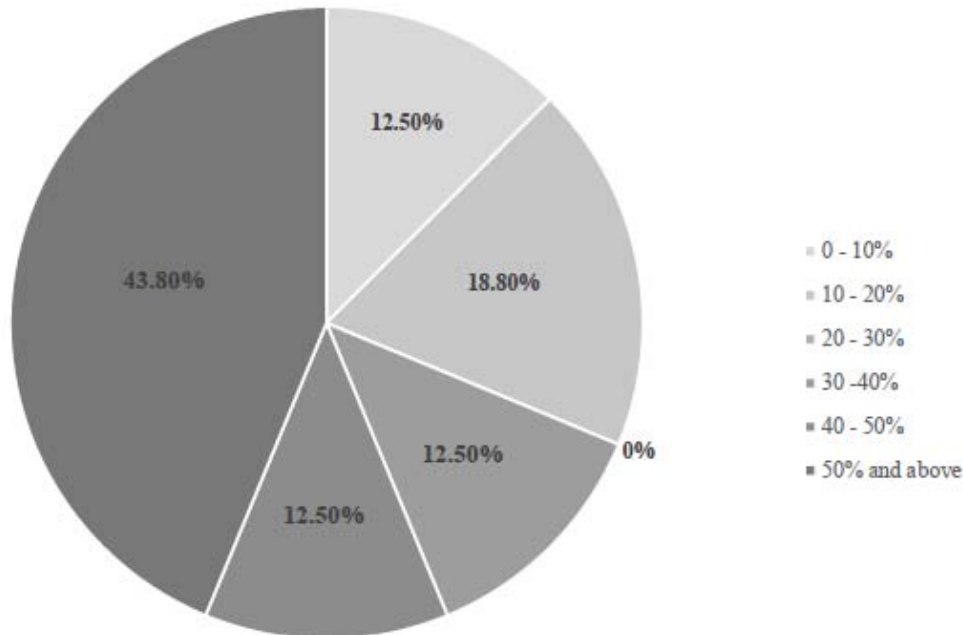


housing policies and a total distrust of the government, and self-reliance as the solution to the urban housing affordability problem.

About 69% and 44% of the respondents spend more than 30% and 50% of their incomes respectively on housing (Figure 1). Paradoxically, about 80% of the respondents claim that they do not face housing affordability problem to imply that their conception of housing affordability is at variance with conventional definition and perception. This may be attributable to the

fact that about 88% of the respondents own their houses (Osunsina, 2018).

Given that the ascendancy of home ownership is priceless among Africans, the percentage of income spent on home ownership may not be conclusively probative of housing affordability. However, this argument applies only to the native urbanites and the naturalized migrants but not to migrants who are in urban areas to “get” a living.



Source: Based on data from Osunsina (2018)

Figure 1: % of Income Spent on Housing

For those in urban Africa to “get” a living, the notion that affordable housing are units that are within the financial capability of those whose income is below the median household income should prevail (Economic Times, 2019). This implies the need to differentiate between the native and the naturalized urbanites on one side and the migrant-urbanites to “get” a living when dealing with the urban housing affordability problem. This requires research to identify the urban migrants to “get” a living to facilitate housing policy initiatives to address their affordability problem.

The distrust in the government is encapsulated in the statement, “the government does not care” (Osunsina 2018,36). This results from the government’s dependence on the private sector – which capitalizes on the housing deficit to maximize profit – for the provision of affordable housing. Affordable houses provided by members of the Real Estate Developers Association of Nigeria (REDAN) cost between N2.5million (US\$15,151.52) and N5million (US\$30,303.03) (Kalu, Agbarakwa and Oluchuku, 2014). These are affordable to only the high- income group – 3% of the Nigerian population (World Bank, 2016). This explains Osunsina’s

(2018) and Sanni’s (2018) finding that Nigeria only caters to the rich. What else could be expected from a market-oriented approach? The market understands money. REDAN, a market institution, is in the market primarily to make money, not to solve the social problem of housing the poor. The urban poor cannot realistically survive by paying rental that predominantly ranges from 38.2% to 103.3% of median household income (see Table 3). This explains Sanni’s (2018) finding that the paltry income of the low-income group puts the market off affordable housing for it not being profitable.

In view of the preceding discourse, how can Africa solve the urban housing affordability problem? The interviewees and respondents to Osunsina’s (2018) survey were almost unanimous in saying: “Nigeria needs better government policies. They” (i.e., the government) “should scrap the idea of making Lagos a megacity or the new Dubai and focus on how they can make housing affordable for those who live in slums. We are the answer. They should make land cheaper and increase access to land. We can build cheap homes by ourselves”.

## V. THE WAY FORWARD

A pragmatic African solution revolves around being “Africa-centric” by breaking loose from the shackles of Western market-oriented models, which lack proven record of success. The question of whether we really want a solution to the housing/affordability problem has been asked to no avail at some housing seminars in the West. Two seasoned real estate market players once gave the following answers during a small group discussion: “No, business will be over if the problem is resolved,” “Property values will fall if the problem is resolved.” Two successive graduate cohorts replicated the same sentiment to answer unequivocally “no!” when they were asked the same question. This goes to the heart of the problem, self-interest as encapsulated in the public choice theory briefly discussed earlier in the paper, if the two answers (concurring by about 50 graduate students) are tenable. Thus, it is in the market’s interest that the problem is somehow perpetuated to ensure “business as usual” – a plausible explanation for the elusiveness of a solution over the decades – as attested by Colenutt (2020). Colenutt (2020) has documented how the property market of England (developers, landowners, investors and financiers) has, through its lobby groups – House Builders Federation, The Country Land and Business Association, UK Finance, etc., professional associations such as the RICS as well as professional advisers and consultants – received the blessing of the government to use business models to orchestrate housing shortage over the past few decades to exacerbate the housing affordability problem of the poor by mainly focusing the few supplies on high-value developments to enhance profitability.

The market is oblivious of those who are beset with the affordability problem for lacking effective demand. Moreover, the urban housing affordability problem is a function of poverty. Eradicate poverty, and the affordability problem could disappear. Unfortunately, any attempt to increase wages would be fiercely opposed by the market on the premise that business cannot afford it. To pacify the market, the urban poor is likely to be evermore caught in the “inequitable valuation trap” by the market.

Furthermore, given that urbanization is arguably one of the most potent catalyst of rural- urban migration, which is a significant contributory factor of the urban housing affordability problem as discussed earlier, the simplest solution is to stem the trend of urbanization.

However, suggesting this solution is touching the hornets’ nest as urbanization is driven by economics, which has overriding supremacy over every decision in society. Thus, humanity has been, and is being regrettably made to economics as fodder is to cattle. Given this cataclysmic inversion of subjugating humanity to economics, it would be impossible to solve

the urban Africa housing affordability problem through market-oriented policies. It is worth noting that the economies of almost all African nations were founded on agriculture and other rural industries. There is therefore a strong equitable basis – and even economic basis as cocoa from rural Ghana, for example, has been a backbone of the Ghanaian economy – for arguing for rural development in contradistinction to the disproportionate development of urban Africa which fuels urbanization to exacerbate the urban housing affordability problem through increased rural-urban migration. A comprehensive development of rural Africa, coupled with policies that force business to locate in rural Africa, will keep potential rural- urban migrants in the rural areas where they are already housed. This will reduce demand for urban housing to be a potent panacea for the urban housing affordability problem. It must be noted that business cannot exist without human beings but society existed before Adam Smith. It cannot be denied that business needs the poor as (if not more than) the poor needs business.

The problems emanating from making housing an investment good in Africa may be simply addressed by banning all the institutions – private equity funds, pension funds, insurance companies, corporate entities, etc. – from the housing market, and restricting them to the traditionally commercial, hospitality and industrial real estate markets. This has worked in Freiburg (Benson and Hamiduddin, 2018). Making housing to be a dwelling place, not a financial good for trading, will bring down the value of urban land and housing in a moment.

But that is the problem, economics, and therefore the market. It must be noted, however, that in Africa, housing is not traditionally acquired for investment as portrayed by economists and financial experts – It is acquired as a dwelling place with the socio-cultural attribute of being a cultural edifice and a status symbol (see Osunsina, 2018). Financialisation of housing is a market-driven phenomenon, which is a mismatch to the socio-cultural milieu of housing in Africa and cannot be the panacea for the affordability problem. If it were a potent remedy, urban housing affordability would not have been problematic in the West, where housing has been so financialised that it is traded as a commodity and a financial asset. Moreover, reliance on the market by African governments for a solution to the housing affordability problem has yielded no dividend. ISSER (2013) argues that the private sector is unlikely to provide housing for low-income urbanites without being given appropriate incentives as the market has never played any meaningful role in the delivery of housing for the urban poor – The low income of the poor puts the market off housing delivery for the poor. This phenomenon operates in China (Cai, 2017) and the United Kingdom (Colenutt, 2020) too. Furthermore, giving the private sector incentives is a waste of public

funds as articulated by a minister of Zambia, “Large developers attract attention but do little to solve the housing issues of the majority...Large developers are the only ones benefiting from government subsidies...” (UN-Habitat, 2012, p. 4).

Given severely constrained governments' budget vis-à-vis corrupt politicians with mis-placed housing policies, poverty, rural-urban migration that exacerbates the problem, governments that do not care or at best play politics with housing, a market that has no social scruples, does not ensure equitable distribution of wealth from the point of view of the well-

being of humanity, and is there to exploit social problems to maximize profits, how does Africa realistically deal with the urban housing affordability problem?

#### a) Pragmatic African Solution

The symbols in Figure 2 urges us to learn and retrieve from antiquity what is best (in this case, self-built housing) to build the future. Housing has ever been the responsibility of individuals and families, not the central governments of Africa.



Source: Adinkra Design. Retrieved from <https://www.ghanaiamuseum.com/adinkra-symbols-and-meanings>.

Figure 2: Lessons from Antiquity

It is culturally required of a man to provide a roof for his family. The typical African man, since antiquity, embraces the challenge of having a roof over his head before contemplating marriage. The entire house may not be completed at a single period, but step by step, it will be completed at a pace suited to his financial capabilities. It neither puts undue financial burden on the people nor the national coffers. Most often, local building materials are utilized for the construction. The development from inception to completion has the impress of the personality of, and thus gratifying to, the owner-developer. It is the owner's masterpiece reflecting his personality, lifestyle, and culture – a status symbol which is priceless to him. He upgrades it over time as his finances permit with the intention of bequeathing it to his next of kin. It is meant to be his residence, but in the urban areas, any excess space may be let to a tenant(s) where possible. This meets the needs of migrants who are in the urban areas to “get a living” as the rental is far lower than private sector rental units (GSS, 2014). This is good housing as the housing procedures and the dwelling environments act as vehicles for personal fulfillment and stimulate real social and economic development (Turner and Fichter, 1972).

Although calumniated as informal housing, 90% of Africans live in it (World Bank, 2015a). The proportion

is 97% in Cameroon, 65% and 80% in Urban Ethiopia and Senegal respectively, while all affordable housing in Malawi and Liberia are produced informally (World Bank, 2015b). GSS (2014) states that the self-financing housing option (housing by the people) is the most viable option for many people in Ghana.

As early as the 1950s, Charles Abrams remarked that Ghana's major resource is the number of people who can build, consequent on which the bulk of all housing is represented by self-built housing (UN, 1957). UN Habitat (2012) states that households and their informal small-scale contractors are the main source of housing provision in urban Zambia. Some of these self-built houses are of excellent material quality and belongs to wealthy people. Therefore, one may argue that self-built housing is the most pragmatic and feasible solution to the urban Africa housing affordability problem. This is supported by Osunsina's (2018) finding: “We are the answer”, “make land cheaper and increase access to land. We can build cheap homes by ourselves”. This accords with Grindley's (1972) conclusion that an owner-builder's savings on construction cost ranges from 22-53% of developer houses while Duncan and Rowe (1993) document savings of 20-60%. UN-Habitat (2012, p. 140), states that “the median cost (2011 prices) of dwellings built or bought in Lusaka, Zambia are US\$3192 (Low-cost

formal) and US\$604 (Informal settlement)” – a saving of 81.08%.

The people are the answer to the housing affordability problem of urban Africa. They can do for themselves (build cheap homes by pre-empting whatever building materials available to them) what practically nobody – the government, the market, international bodies, etc. — can do for them. This is an ingrained African cultural heritage – self-reliance in housing oneself and one’s immediate family. This is the way African villages, towns and cities were, and are still being built, albeit to the chagrin of some professionals and those who cannot see past the market.

The main problem with the self-built housing is the lack of infrastructure facilities: access roads, adequate drainage, sewage disposal systems, street lighting and potable drinking water. The governments of Africa and interested international bodies could significantly assist the urban poor by providing the needed infrastructural facilities to the informal housing environments as well as helping the migrants with access to land to enable them to house themselves in a socially, culturally, environmentally and economically gratifying manner.

## VI. POLICY INITIATIVES

To resolve the problem in the African way as discussed above, African governments and Western-trained African technocrats responsible for making housing policies, and especially foreign housing experts who significantly influence housing policies of Africa, must learn to respect, appreciate and accept the noble African heritage of individual responsibility for housing which has served Africa very well since antiquity. Even some Western countries, which rely on the government for housing provision are, to some extent, embracing self-help housing through the Community Land Trust in the United Kingdom and the US. It is time African governments and technocrats woke up to the fact that self-built housing in Africa is unstoppable – Owner-builders are survivors with a future (Grindley, 1972; Duncan and Rowe, 1993; World Bank, 2015). By housing 90% of Africans (World Bank, 2015) informal settlements are producing housing solutions. It is deep-rooted in African culture. It must be nurtured, harnessed, and encouraged. How?

1. The government should work with all traditional settlements which are self-built and regrettably categorized as slums, and all other self-built housing environments in urban areas to provide them with the needed infrastructure. Money that would otherwise have been used to incentivize the market to build “affordable” housing for the poor that ends up in the hands of the rich, while increasing the profits of the private sector, should be channeled into this venture. This is supported by

World Bank (2015a). In addition to proposing the upgrading of informal settlements, King et al (2017:2) conclude that “increasingly the international consensus favors in situ upgrading over relocating residents” That will change their stigmatization as “slums” to something more desirable which correlates with the inhabitants’ perception as succinctly stated by an American slum dweller: “slums, they call us. That’s a terrible word – these are our homes, our shrines. We live there” (Woodbury, 1953, 379). Provision of infrastructure facilities/services - responsibility of the government - will turn these settlements into “shrines” and tourist attractions. This government individual housing delivery partnership (PIHDeP) could prove to be the best ever variant of PPP in Africa in terms of human well-being. The government and the individual families and communities (stakeholders of the partnership) will see immediate and lasting tangible benefits (especially improved healthy housing environment and preservation of social capital) that will facilitate community and nation building.

2. Building and planning standards for all African countries should promote the use of local building materials (see UN, 1972) to enable the urban poor to build for themselves acceptable housing that no-one else can build for them. Strict enforcement of building codes and regulations in almost all African countries will forbid the use of many popular local building materials to risk alienating further the urban poor and many more who are without access to decent housing (see GSS, 2014). UN-Habitat (2012, p.1,3) states: “the building regulations remain too expensive to fulfill for most Zambian households to follow them...The building regulations impose standards to which the majority of households can only aspire....They are also shrouded in mystery as no one approached could find a copy. Other regional and international regulations are used”. It is ludicrous that “affordable” housing in urban Ghana, for example, RPL’s residential units, has imported marble-tiled flooring which significantly increases the cost beyond the urban poor’s affordability and drains the already depleted foreign reserves of the country. The promotion of local building materials will facilitate the building of more houses by reducing construction cost partly by negating any exchange rate risk (through imported building materials) inflating housing prices. The additional derived benefits (which require further research) are the provision of employment for local artisans and labor as well as the promotion and development of African building technology. It provides housing solutions for the vast majority of those who work in the formal economic sector, and therefore makes significant contribution (not acknowledged by

informal housing bashers) to the overall economy and society as a whole.

3. African governments should be Africa-centric by promoting Africa in Africa and overseas by building on Africa's unique heritage. African cities must be uniquely African. They should abandon the grandiose plans to turn African cities into New Dubais and mega-cities. Apart from the Multi-national companies and the corrupt politicians who will profit from such ventures, very few Africans may want African cities to be turned into New Dubais/Manhattans which will, apart from anything else, exacerbate the urban housing affordability problem (see Watson, 2014 and 2018). This could lead to dispossession and displacement of indigenous African urbanites of their lands for the super-rich owners of the New Dubais etc. to marginalize and impoverish the affected Africans to make them outcasts in their own countries. If Osunsina's (2018) findings could be generalized, it could be said that the idea of "New Dubais" etc. in Africa is repugnant and loathsome to most Africans. African cities must be uniquely African by building on Africa's heritage to show that Africa has something unique to offer the world. Individual responsibility for housing which is socio-culturally and financially gratifying to Africans is the way forward. It is a positive approach to normative outcomes as the houses lend themselves to incremental development and improvement in quality. This time-tested model is superior to the capitalist model of the West, which has not resolved the housing problems of Western cities. Currently CAHF (2019) and Veras (2018) are trumpeting the expandable studio "shell finish" apartments and the 32m<sup>2</sup> one-bedroom semi-detached housing in Nigeria by Millard Fuller Foundation (MFF) as something novel. However, it is the same instalment/piecemeal house building that has prevailed in Africa since antiquity especially in the informal housing settlements. The main difference is quality which comes at a price that is not affordable to 73% of the urbanites (see Table 5). Notwithstanding, the buildings in the informal housing settlements are amenable to qualitative incremental improvements, which the owners undertake as and when their financial resources permit. It is time Africa capitalized on its heritage to resolve the housing affordability problem in an African way.
4. As a medium to long-term solution, emphasis should shift from urban development to rural development to reverse the unprecedented rural-urban migration in Africa, which fuels the urban housing affordability problem. In addition to reducing the urban Africa's housing need to be an effective panacea for the urban housing affordability

problem, it will significantly contribute to social development for the forgotten rural Africans to advance the UN development goals.

## VII. CONCLUSION

The urban housing affordability problem of Africa cannot be over-emphasized. However, it is human construct. Human institutions, especially the market, with the help of the governments and housing policymakers in Africa, are a significant part of the problem. Therefore, it will be naive to look to the market to solve the urban housing affordability problem of Africa. Moreover, Africans have never looked up to the market nor the central government for housing. Individual responsibility for housing is an ingrained African cultural heritage as a house is not a "traded" asset that should be subjected to mass production, but a residence and a cultural edifice, which must therefore have the impress of his personality. Given that almost all the housing stock of African villages, towns, and cities is supplied by the informal sector/self-built approach, there is no need to contemplate replacing it with a capitalist model which is incongruent to the African socio-cultural, economic, and environmental milieu, and has not proven to be a panacea for the affordability problem of the capitalist West. The solution to the problem is being Africa-centric by embracing, harnessing, nurturing, and promoting the African heritage of individual responsibility for housing, which has made the informal housing sector the main source of housing delivery for urban and rural Africa. "We are the answer...We can build cheap homes for ourselves" is the cry and plea of the African urban poor. Unleashing the latent potential of the urban poor of Africa to build cheap houses for themselves - something no one else can do for them - is the most pragmatic, socially, culturally, economically, and environmentally feasible way of solving the urban housing affordability problem.

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