

Itam Ekpenyong B. , Archibong A. E. , Ita Ekpe E.

THE PROBLEMS OF ACCESS TO AFFORDABLE HOUSING FOR URBAN DWELLERS IN NIGERIA AND THE CHALLENGE OF THE 21ST CENTURY

Адрес статьи: www.gramota.net/materials/1/2010/12/19.html

Статья опубликована в авторской редакции и отражает точку зрения автора(ов) по рассматриваемому вопросу.

Источник

Альманах современной науки и образования

Тамбов: Грамота, 2010. № 12 (43). С. 61-67. ISSN 1993-5552.

Адрес журнала: www.gramota.net/editions/1.html

Содержание данного номера журнала: www.gramota.net/materials/1/2010/12/

© Издательство "Грамота"

Информация о возможности публикации статей в журнале размещена на Интернет сайте издательства: www.gramota.net

Вопросы, связанные с публикациями научных материалов, редакция просит направлять на адрес: almanac@gramota.net

МАТЕМАТИКА, ФИЗИКА, СТРОИТЕЛЬСТВО, АРХИТЕКТУРА, ТЕХНИЧЕСКИЕ НАУКИ

УДК 69.003.13

*Itam Ekpenyong B.**Volgograd State University of Architecture and Civil Engineering**Archibong A. E., Ita Ekpe E.**Cross River University of Technology, CRUTECH, Calabar, Nigeria***THE PROBLEMS OF ACCESS TO AFFORDABLE HOUSING FOR URBAN DWELLERS IN NIGERIA
AND THE CHALLENGE OF THE 21ST CENTURY[©]****Introduction - the concept of affordable housing**

Affordability of housing is a policy issue that has engaged governments in various parts of the world, since the 19th century. It has, in recent times, reemerged again in Great Britain and also in other parts of the world [4; 11; 17; 31; 32]. Great Britain is notable as one country that began taking bold initiatives towards the provision of affordable housing since the 19th century; the council flats constitute the major testimony of these efforts. More than one-third of the housing stock of Great Britain was publicly subsidized by the 1970s [19]. The recent reemergence, over the past 20 years, of the theme of affordable housing in Great Britain and other European countries (where national populations have stabilized for a good part of the second half of the 20th century) emphasizes one significant fact about affordable housing; it is a subject that must be revisited from generation to generation.

Affordability of housing is reckoned, in the first instance, with the ability of people to procure housing that is commensurate with their wages. Housing is considered to be commensurate with household income, if the household does not have to pay more than 30-35 percent of its aggregate income as housing costs. Within this context, the carrying cost of housing includes the rent and utility costs (in the case of rental housing) or mortgages, insurance, utility costs and taxes (in the case of privately owned housing) [1].

Diverse indices have been adopted for the determination of the affordability housing. In general terms, the concept of affordability of housing is applied to the costs of procurement of housing within the median-income bracket; but it is also often applied to all other income brackets. Within a specific geographical region, affordability of housing is related to the access that is available to affordable housing to people, whose household wages are located on the median-income bracket. By this concept, housing is considered to be affordable in the given region, if persons located within the median-income bracket could procure housing within 30-35 percent of their household wages [Ibidem]. This concept does not properly reflect the situations of group of people located below the median-income bracket. In countries in which the members of this group constitute the vast majorities of city dwellers, their access to affordable housing becomes the most dominant parameter. There is thus another concept of determination of the affordability of housing, by focusing on the housing problems on persons living in relative poverty; i.e. persons whose wages fall below 60 percent of the median-income bracket. Under this concept the availability of affordable housing is measured by the access to housing for persons earning below 60 percent of the median-income bracket [Ibidem]. This concept is more suitable for Nigeria and several other countries of sub-Saharan Africa.

Calabar (in Nigeria) is an old but relative small city by Nigeria standards; the population of the city is considered to about 0.4 million by 2010 estimates (projecting from the 2006 national census figures). In Calabar, the major employer of labour is the civil service; and the median-income bracket falls between salary grade level 08 and 09 of the civil service income structure. This corresponds with the income level of a fresh college or university graduate. The present situation in the city is that persons, whose wages fall within this median-income bracket, do not have access to appropriate housing, within 30-35 percent of their household income. Most of such persons have to continue living in their family houses; or, in other circumstances, must have to share apartments with other persons. For persons who earn less than 60 percent of the median income bracket, the situation is very desperate. The situation is worse in the larger Nigerian cities. In some of the larger cities in Nigeria, persons who earn well above the median-income bracket still do not have access to affordable housing. Thus it can be deduced that access to affordable housing is very limited in many Nigerian cities.

The problem of nation-wide deficiency in housing stock has afflicted Nigeria for several decades. In 1975, when the national population was estimated at 70 million, the total number of dwelling units in Nigeria was estimated at 3 million. Based on the presumed household size of 7, the total number of dwelling units to cater for that population should have been 10 million [23; 25]. Thus, in 1975, the housing deficit in Nigeria stood at 7 million dwelling units. While the population of the country kept rising rapidly, government's intervention in housing remained very insignificant. From 1984, government interventions in housing declined very sharply as the population continued to rise very rapidly. The situation has not changed since the beginning of the 21st century. By the 2006 national census, the national population was placed at 140 million.

Reckoning from the position of the housing sector in 1975 (and a family size of 7), the country ought to have embarked upon the construction of a total of 10 million dwelling units in order to meet up with the population increase; in addition to the 7 million housing units needed to make up for the deficit recorded in 1975 (a total of 17 million additional housing units). These computations do not include depreciation of existing stock. Studies have shown that no concrete actions were taken during that period of 31 years to address the gross housing deficit of the nation.

Some of the peculiarities of the housing situations in Nigerian cities were explored at a recent housing forum organized by the Nigerian Society of Engineers (NSE), Calabar Branch (August 24, 2010) [26]:

- about 98 percent of the housing stock of Nigeria is privately developed housing without any support in the form of mortgage finance or direct government interventions;
- the estimated housing stock in Nigeria is about 11 million housing units, and the present deficit is estimated at 17 million housing units.

The United Nations estimate for Nigeria's population for 2009 was 154.7 million [24]. Reckoning with an average family size of 5.5, it would take a total about 28 million housing units to accommodate this population, i.e. 17 million in addition to the present estimated housing stock of 11 million. This corresponds with the computations made at the NSE housing forum [Ibidem].

Thus the huge deficits in housing stock in Nigeria are the result of the lack of consistent government policies and interventions in the Nigerian housing sector over the last 50 years. Several persons, located well above the median-income bracket, are now without easy access to affordable housing in virtually all the major cities of Nigeria.

Population, housing and the city

Housing is about location of people in their places of permanent abode; it cannot be separated from two fundamental parameters: the population and the national space that is available. According to L. G. Brown et al [5], the 20th century was the period of the most dramatic growth of populations in human history; and the increase that occurred in human populations in the second half of the 20th century exceeded the experience of the world over the preceding 4 million years.

The changes that occurred, during the post-industrial age of the 20th century, in the distribution of human populations between urban dwellers and rural dwellers, have also been similarly phenomenal. According to T. Deelstra and H. Girardet [6], in the course of the 20th century alone, "global urban populations have expanded from 15 to 50%" (reckoned on the actual increase in global populations of from 1.5 to 6 billion people). Similarly, according to M. O'Meara [24], between 1900 and 2006, a 20-fold increase occurred in global urban populations (from 160 million to 3.2 billion people); resulting in the location of half the world's population in cities by 2006. These increases in urban populations have resulted in diverse urban social and ecological problems; especially in the developing world. UN demographers have projected that the further increase in the world's population by 2.8 billion, in the first half of the 21st century, will occur in the developing countries [24; 29]; and this will result in further exacerbation of diverse urban social and ecological problems. According to L. G. Brown et al [5], "homelessness is already a serious problem in most large Third World cities". Of the 2.05 billion people that demographers expect would be added to the world's population between 2000 and 2030, Africa's share is expected to be about 1.4 billion [29]; and a good share of this addition will occur in Nigeria (the country which holds about one-fifth of the continent's population and has one of the highest rates of population growth in the continent). The housing situation is poised to deteriorate even further with the addition of more urban dwellers. The end result of all these scenarios will be the "combination of environmental degradation and social shortfalls", which would ultimately hinder the progress of these nations [5].

Scholars consider the processes of dramatic shifts of populations from rural to metropolitan regions as inevitable and irreversible. They are driven by the quests of rural people for a fuller life in the cities; which is a portrayal of the process of civilization, since civilization itself is inconceivable without cities [3]. The fuller life in cities demands the maintenance of urban social services in a state that is conformable to the contemporary concepts of civilization; and this is the contemporary challenge of urban development. The urban social service that is directly of relevance to this paper is urban housing together with its associated problems: homelessness, slums and squatter settlements; and also Nigeria's positioning within these unfolding scenarios.

Within a sovereign national space (923,768 km²) that has remained fairly constant at slightly less than one-thirtieth of the land area of Africa (about 30 million km²), Nigeria has been experiencing a phenomenal population growth over the last half century. It has been estimated that by 2050 (with a projected population of 244 million), Nigeria would be having a larger population than the whole of Africa had one century earlier [5]. By the 2006 national census, the national population was declared as 140 million people. The UN estimate of Nigeria's population for 2009 was 154.7 million people; with the distribution of: 51.7 rural and 48.3 urban dwellers [22]. By the year 2020, Nigeria would be contending with an estimated national population that would be fast approaching the figure 200 million people (some estimates project the country's population at 206.4 million by 2025) [Ibidem]. By the 1998 estimates, Nigeria, with an estimated population of 122 million was ranked as the 10th largest country, by population size in the world. With an estimated population of 244 million people by the year 2050 (same as Brazil), Nigeria, by population size, will be ranking at the 7th position in the world [5]. In comparison, by 2050, Brazil would be contending with the same size of national population as Nigeria, on a total land area (8,547,404 km²) that is more than eight and a half times larger than that of Nigeria [Ibidem].

These factors of rapidly expanding national population and limited national space suggest that housing should rank topmost on the national development agenda of Nigeria today. They also suggest that housing in Nigeria ought to be based on two fundamental parameters: land economy and consistency in housing policies. Both have been consistently absent from the conduct of urban housing in Nigeria throughout the last fifty years of political independence; yet, within a couple of years, more than half of all Nigerians will be living in cities.

For the most part of the past half century of national independence, the de-facto housing policy in Nigeria has been to allow people to build their own houses by their own means. Far less than one out of every forty Nigerians lives in a house that has been specifically developed for the public, under any form of government policy, in most Nigerian cities. A very vast majority of Nigerian urban dwellers live in houses that have been privately developed on individual plots of lands. In many cities (for example, Calabar) the average building height in housing development is below 1.5 storeys. This de-facto housing policy is associated with three principal urban problems: land-extravagance, resource-extravagance and also the inevitability of the emergence of slums and squatter settlements [21].

Housing development in the form of individual homes spread all over the city results in urban sprawl [Ibidem]. In such circumstances government actually loses control of the urban development processes; resorting only to following up the physical manifestations on the urban landscape. Urban sprawl increases the total lengths of urban roads, electric power lines, water-supply lines and also waste collection and disposal routes. The maintenance of all these unnecessarily over-extended urban infrastructural services lines adds up to become permanent financial burdens on city authorities. Furthermore, when electric power lines are grossly extended over the city landscape, as a result of urban sprawl, some percentage of the electrical energy is converted into heat (during transmission). This ends up affecting the efficiency of electric power supply in the city; city dwellers are forced to pay for some amounts of electrical energy that they actually do not consume [9; 24; 28; 29]. Extended transportation routes in cities result in increases in demands for transportation fuel, escalation of urban transportation costs, and increases in urban air pollution problems associated with automobile transportation [24; 29]. According to the report of a medical journal cited by M. O. Sheehan [29], it has been established that the number of deaths resulting from particulate substances emitted from motor vehicles (in Austria, France and Switzerland) is about twice the number of deaths from road accidents [Ibidem]. The economic losses arising from the time lost by urban dwellers in transportation, by reason of urban sprawl, have also become focus of attention and the subject of research in recent times. These researches have shown, for example that daily, Atlanta (in USA) loses over 6 million US dollars in traffic delays, while Bangkok (in Thailand) loses 4 million US dollars daily for the same reason [Ibidem]. Over the last two decades, Nigeria has experienced various scenarios of problems that are associated with urban sprawl, and that have arisen from inappropriate national housing policies: increases in demands for automobile vehicles, high costs of fuel and fuel scarcity, unacknowledged economic losses arising from time lost in urban transportation in large cities, and also breakdown of urban infrastructures (roads, water and electricity). All these problems demonstrate the wisdom of government interventions in the urban housing sector (in the form of cluster developments).

The propensity for the sporadic eruption of slums and squatter settlements in the urban space constitutes another major problem associated with this de-facto housing policy. Slums and squatter settlements represent the types of housing that the urban poor can afford for themselves, without government intervention. In the case of the developed countries, the principal factor that initiated the massive migrations of rural people to cities was the access to jobs that Industrial Revolution generated. To combat this, governments in the developed countries had to intervene directly in public housing beginning from the 19th century in Great Britain, from 1933 in USA, and also in the socialist countries of Eastern Europe etc. D. Ghirardo [12] has observed that, in the post-industrial era of Europe, "the most troubling feature of the Industrial Revolution was the squalor created wherever factories were found" [Ibidem]. This motivated reformers, throughout the 19th century, to struggle "to change laws and customs in order to improve working conditions and provide decent and sanitary housing for the new urban masses" [Ibidem].

In the case of Nigeria, the initial inducing factor for massive rural/urban migrations was the availability of job opportunities in cities, following national independence in 1960. The same is also true of many African countries and other developing countries. As these trends in massive rural/urban migrations remained unaddressed through appropriate government policies that would have made housing more affordable for the urban poor, slums and squatter settlements emerged as the foremost urban development problems of the developing world since the second half of the 20th century. According to M. O'Meara [24]: "at least 220 million people in cities of the developing world lack clean drinking water; 420 million do not have access to the simplest latrines, 600 million do not have adequate shelter, and 1.1 billion choke on unhealthy levels of air pollution" [Ibidem].

Slums and squatter settlements constitute an affront to human dignity. They also portray some elements of protest and contest: protest against a government that is not doing sufficiently to address the issues of affordable housing for the poor; and democratic contest for the urban space, which the poor believe should also rightly belong to them, since they form the majority [8; 18; 27]. Abandoning the poor to perpetual existence in slums curtails the rights of the majority of city dwellers to the city: 1) the right to appropriate the urban spaces; 2) the right to participate centrally in the urban space and 3) the right to diversity [Ibidem]. It creates another urban problem: segregation of the urban poor, leading to the concentration of poverty. Concentration of poverty has diverse ills in the urban space: high crime rates, violence, unemployment and poor health [7; 8; 10]. These problems end up affecting the rich; and they are already emerging in most Nigerian cities.

This understanding has given impetus not only to slum clearance, but also to the contemporary advocacies for mixed housing developments in medium- and high-density neighbourhoods for modern cities [4; 8; 13]. Studies have shown that relocations from urban districts of concentrated poverty to more affluent communities have positively affected families: better economic opportunities, better schools for children and reduction in crime rates [4; 7; 8; 10; 13; 18; 27; 33-35].

The essential problem, therefore, is not simply slum clearance; it is the development of housing for the poor within the urban perspectives of mixed housing tenures (also known as tenure diversification) [8; 13]. The Nigerian situation demands urgent government interventions towards the development of cluster housing projects, by which means people would purchase apartments and not the land. Cluster developments, not exceeding 3-4 floors in building heights, would be most appropriate for housing in most Nigerian cities, at the present technological level of the country; because at such building heights, additional services such as installation and regular maintenance of lifts would be excluded. Appropriate emphasis must be placed on tenure diversification, in order to address the problem of concentration of poverty. This method of housing development would be more appropriate for the contemporary Nigerian situation, for several reasons [21], among which are:

- it liberates more urban space for the development of green areas, playgrounds and amenities (which are all very deficient in the Nigerian cities of today);
- it curtails the tendencies towards urban sprawl and thus reduces the expenditures borne by governments and municipal authorities on the distribution and maintenance of urban infrastructural services;
- it reduces the ecological impacts of housing developments on the urban landscape (reduction of impervious cover, total amounts of stormwater runoffs etc);
- it addresses the problems of poverty concentration, by creating neighbourhoods in which the urban poor could apply themselves to gainful employment, without the needs to make long and expensive journeys across cities.

Urban housing and housing policy environment

The problems of affordability of housing have been explored in the work of M. Meyerson et al. [20]:

1. Few families can afford to make direct cash payments for houses.
2. Few builders are capable of raising the capital needed for building rental houses for the public.
3. Few investors are willing to place their money in housing investments, because investments in the housing sector are slowly amortized and are “subject to the vagaries and uncertainties of taxation, maintenance, operation and the business cycle” [Ibidem].

It is significant to observe the similarities between the American housing situations of 1962 and the present day Nigerian situation. Today in Nigeria, few families can afford the cost of a house. Several persons located well above the median-income bracket cannot afford the costs of rental housing or of procurement of personal houses. The organized private sector is reluctant to invest in housing, because housing investment is “slowly amortized”. Only government has the capacity to intervene in circumstances such as this. Thus, there is the need for comprehensive studies of the Nigerian housing situation, in order to determine the appropriate directions for government policies towards the facilitation of the participation of private sector financial institutions in urban housing sector.

According to S. Angel [2], the absence of a very clear, precise and generally acceptable definition of what constitutes housing policy makes it more appropriate to talk about housing policy environment, which consists of “the set of government interventions that have a critical and measurable effect on the performance of the housing sector” [Ibidem]. Housing problems are indeed peculiar with respect to the countries within which they manifest; and therefore there can never be a clear definition of what should constitute housing policy. Another aspect of the complexities and contradictions that surround housing policy is time or generation. A housing policy that is appropriate for one generation in one country or city may not be sufficient in resolving the housing needs of the immediately succeeding generation; and this again emphasizes the need for specific studies. Thus, within the concept of “housing policy environment” the search is essentially for “government interventions” that have “critical and measurable effects” on the “performance of the housing sector”. In this work, the concept of “housing policy environment” as well as the yardstick of its evaluation has been adopted.

Scholars have distinguished two approaches in the housing policy environments: the interventionist agenda and the enabling paradigm [Ibidem]. The interventionist agenda is based on the concept of government intervening directly in the housing sector; by playing the major role in the determination of the housing delivery processes and assuming direct responsibility for housing. The enabling paradigm is based on the concept that there is a housing market that should be allowed to determine the processes of housing delivery; and the role of government is to make laws and regulations that are essential for enabling the housing market to perform efficiently [Ibidem].

The interventionist agenda was applied very widely in the socialist countries of Eastern Europe in the form of a state policy; and this has created the misconception that it is fundamentally a product of socialist ideology. Within the premise of this fundamental misconception, it is presumed that, with the collapse of the socialist regimes of Eastern Europe in the early 1990-s, the concept of housing delivery by direct government intervention, has been proven to be obsolete. This view became entrenched in the African concepts of housing following the structural adjustment programmes that were prompted in the continent, by the World Bank and the International Monetary Fund (IMF), beginning from the 1980-s. In this paper, it will be demonstrated that this view is incorrect; and does not have a foundation in urban housing history.

The enabling paradigm is promoted by the “argument advanced by the liberalization school”, to wit “that the role of the state is to create an enabling environment for markets to work by relinquishing control over the economy” [Ibidem]. The contradiction in this argument is that it is presumed that the housing sector of the African countries is operating in a steady state, within which the housing markets could assume control. On the contrary African countries are experiencing acute stages of urban housing crises; and within the state of housing crises the housing markets are only potential or virtual. It has already been shown that the Nigerian urban housing sector is in its crisis phase; in virtually all Nigerian cities (Abuja and the state capitals); as people located well above the median-income bracket are unable to procure housing within 30-35 percent of their household incomes. Within this state of housing crises, private sector financial institutions are unwilling to invest. Another problem has been identified in the work of S. Angel [Ibidem]. Most of the major role players in these private sector financial institutions, in Africa, are not indigenous. Within the conceptual framework of globalization, the preferences of such non-indigenous private sector financial operators would not be in the direction of the housing sector, where investment “is so slowly amortized, and so subject to the vagaries and uncertainties of taxation, maintenance, operation, and the business cycle” [20]. Thus the arguments of the supporters of the interventionists agenda for Africa are more valid for the contemporary urban housing situations in sub-Saharan Africa; and have been summarized S. Angel [2]: “failure of the market to meet basic needs, the inability of the private sector to raise sufficient capital or to compete in international markets, and the domination of national markets by foreign concerns” [Ibidem].

Historical evidences of the attitudes and policies adopted by the capitalist governments of USA, Great Britain and other European countries towards the resolution of housing crises of their respective countries would testify to the fact that labeling the interventionist agenda as socialist ideology is fundamentally fallacious. The capitalist governments (of USA and Great Britain), for instance, did resort to making regulations and laws (aimed at motivating the housing markets to perform efficiently) when their respective countries were facing the most critical phases of their housing crises; they actually intervened massively for several decades.

During the years of the Great Depression (certainly a time of national inconvenience), Franklin Delano Roosevelt (President of USA: 1933-1945) began to institute “dramatic federal housing programs” beginning from 1933 [19]. In 1939 alone: “30,000 slum dwellers were offered decent housing at low rents”; 5,916 dwelling units “were constructed with the aid of the United States Housing Authority” by some state housing authorities”; and “local housing authorities throughout the country placed under construction 150 USHA-aided projects providing 54,941 additional dwelling units” [15]. In 1940: “FHA insurance reached a figure of \$4,076,264,676”; and “at least one-half of the new homes financed by FHA-insured loans were being purchased by families with annual incomes ranging from \$1,000 to \$2,500”, in “recognition of the importance of homes for lower income families” [16]. According to C. F. Sirmans [30], the policy direction of the US government was also geared towards the goal of generating confidence, on the parts of the private sector lending institutions, in private housing finance. This was achieved through the Federal Housing Administration (FHA) mortgage insurance schemes that effectively lessened the risks borne by lenders: “If the borrower defaults, the FHA will compensate the lender should the house sell for less than the amount of the mortgage debt” [Ibidem]. Britain began to intervene in the urban housing sector in the late 19th century; and by 1970 “approximately one-third of Britain’s housing was publicly subsidized” [19].

By 1962, the successive governments of USA had already been battling with the housing crisis of the nation, by intervening massively and directly in the urban housing sector, for nearly three decades (from 1933). The benefits that have accrued to the national economy (of USA) from the consistent government interventions in the US housing sector have been explored by Meyerson et al [20]: the housing industry “is of major importance to the national economy ... Nationally the value of residential land and buildings is well over twice of the country’s 500 biggest manufacturing companies” [Ibidem].

In Nigeria, the failure of the market to meet the basic housing needs has long become evident. The enabling paradigm was experimented in Nigeria in the early 1990-s, through the enactment of laws by which private mortgage institutions were established. The Cross River State Government’s version of these institutions was Buildahaus Ltd. In several instances, these mortgage institutions folded up without enabling the development of one single dwelling unit for the public. By the end of the century all these institutions had fizzled out of existence; without satisfying the fundamental criterion of a successful housing policy environment: producing “critical and measurable effects” on the “performance of the housing sector” [2]. In contradistinction to this failure of the enabling paradigm in Nigeria, the direct interventions of governments (from 1970-1979 and also 1979-1983) produced some aspects of “measurable effects” on the urban housing sector of Nigeria (in the form of federal and state government housing estates for low- medium- and high-income earners), particularly in the cities that were state capitals at that time. However, these impacts have now been overwhelmed by reason of the rapid growths of national and urban populations that have occurred since 1983; in the absence of further government interventions.

Presently also, it has been observed that, in spite of the interventionist/enabling debate, several developed nations have been combating the problems of affordable housing over the last 20 years by devising and applying various forms of government interventions; in order to prevent the reoccurrence of the previous experiences of housing crises. Their strategies have included: direct government interventions in social housing, housing subsidies for the poor, etc. [4; 11; 14; 17; 30-33].

Thus, history and contemporary circumstances have shown that (irrespective of political ideologies) the first step in the resolution of housing crises has always been the interventionist agenda; and thereafter the enabling paradigm follows as the next phase of the evolutionary trends in the urban housing sector. It has also been demonstrated that whenever there has been a decline in the stock of affordable housing, it has always been the duty of governments to intervene in order to forestall the possibilities of the emergence of housing crises.

Towards the resolution of the present housing crises in Nigerian cities, therefore, it is essential to accept housing as an essential urban infrastructure that has been abandoned by government for nearly three decades, and that needs urgent and massive government interventions. The failure of the housing market to resolve the housing crises of Nigeria (and also of Africa) is not a strange occurrence; history has repeatedly shown that the housing crises that occurred in the developed countries in the late 19th century and a good part of the 20th century were resolved, not by market forces, but by massive government interventions.

The Nigerian context of urban housing

The effects of the interventionist-enabling debate have become apparent in the Nigerian housing sector. The last nation-wide housing programme in Nigeria was the housing programme of the government of President Shehu Shagari (1979-1983); nearly three decades ago. After that era, subsequent governments have been promoting “site-and-services” schemes, as an alternative to direct government interventions in the housing sector. The contradiction in this scheme is that it cannot provide housing for the public; it is only suitable for the rich, who have the money, but lack the site upon which to erect their houses in the urban area. The only condition in which “site-and-services” schemes could provide housing for the public would be if they would be tied up with access to housing loans, made available to the public by direct government interventions, through government-sponsored mortgage insurance schemes (a variant of the interventionist agenda) [30]. In essence, for a period of 26 years (since the end of 1983), no nation-wide programmes have been executed in Nigeria, towards the resolution of the wide-spread scarcity of affordable housing in all Nigerian cities. The result has been the nation-wide accumulation of huge deficits in housing stock.

The interpretation of the basic indicators reveals that Nigeria is indeed passing through a very acute phase of housing crises in the early 21st century. The first indicator is the propensity for sporadic growth of slums and squatter settlements in the suburbia of most Nigerian cities. The city development authorities of Abuja have been battling with developers of squatter settlements (by demolition of illegal structures), for the greater part of the city’s existence over the last two decades; and the situation is worse in many other Nigerian cities. The second indicator is access to housing. The average college or university graduate, who enters public service at the medium-income bracket in Nigeria, may spend more than the ten years sharing apartments with other people; and upwards of 20-25 years of the working life, without any credible hope of commencing construction on a privately owned apartment out of his or her wages. When this situation is extrapolated down the line to the low-income bracket (where the majority of Nigerian urban dwellers are located) then the picture that emerges is that of an urban housing crisis in its most critical phase. The third indicator is the urban housing perspective that has resulted from the de-facto national housing policy; the average housing height in most Nigerian cities is less than 2. This has generated high dimensions of urban sprawl [24; 29], with diverse associated problems:

- high costs of fuel and urban transportation, and also occasional nation-wide fuel scarcity;
- breakdown of urban infrastructural services of roads, electric power and water supply;
- breakdown of urban waste management systems;
- dysfunctional urban stormwater and wastewater management systems;
- other ecological problems.

All these demonstrate the need for timely and massive government interventions in the urban housing sector (in the form of cluster developments) in the first instance. In the contrary situation, the sheer magnitude of Nigeria’s population growth rate and the inevitability of rural/urban migrations would result in the eruptions of diverse urban social, economic and ecological crises in the Nigerian cities of the 21st century [2; 3; 5; 24; 29].

Conclusion

This review of the performance of the Nigerian housing sector, fifty years after national independence, has led to the following conclusions.

- 1) Affordable housing is not available to a vast majority of Nigerian city dwellers; since people located well above the median-income brackets do not have access to affordable housing within the cities.
- 2) There has been an accumulation of very huge deficits in housing stock in Nigerian cities, as a result of inconsistent and inappropriate government policies towards urban housing over the last fifty years.
- 3) The de-facto policy, which allows people to develop houses by their own means, has resulted in the emergence of slums and shanty settlements in several parts of many Nigeria cities.
- 4) In a country in which the national space is very limited, the said de-facto policy has also resulted in very extravagant use of land and other urban resources; manifesting in consequences such as urban sprawl, and also overstretched and dysfunctional urban infrastructural services.
- 5) It would take up the next fifty years of very consistent and massive government interventions to rectify the present problems in the Nigerian urban housing sector; and for that reason it is pertinent for government to urgently address these situations beginning from the present time.
- 6) It is recommended that urban housing development in present day Nigeria should be in form of cluster developments of 3-4 storeys in height; at which height the costs of installation and maintenance of lifts would be eliminated.

References

1. **Affordable housing** [Electronic Resource]. URL: http://en.wikipedia.org/w/index.php?title=Affordable_housing&oldid=389775947 (retrieved from 17.10.2010).
2. **Angel S.** Housing policy matters: a global analysis. New York, USA: Oxford University Press, 2000.
3. **Aronovici C.** Housing the masses. New York, USA: John Wiley & Sons, Inc., 1939. 294 p.
4. **Aurand A.** Density, housing types and mixed land use: smart tools for affordable housing? // *Urban studies*. 2010. Vol. 47. No. 5. P. 1015-1036.
5. **Brown L. R., Gardner G., Halweil B.** Beyond Malthus: nineteen dimensions of the population challenge // *The worldwatch environmental alert series*. New York - London: W. W. Norton and Company, 1999. 167 p.
6. **Deelstra T., Girardet H.** Thematic paper 2 - Urban agriculture and sustainable cities // *Growing cities - growing food*. RUAF Foundation, 2005.
7. **Delang C. O., Lung H. C.** Public housing and poverty concentration in urban neighbourhoods: the case of Hong Kong in the 1990s // *Urban studies*. 2010. Vol. 47. No. 7. P. 1391-1413.
8. **Duke J.** Mixed income housing policy and public housing residents' "right to the city" // *Critical social policy*. 2009. Vol. 29. P. 100-120.
9. **Dunn S.** Micropower: the next electrical era // *Worldwatch paper*. 2000. No. 151.
10. **Ellen I. G., Turner M. A.** Does neighborhood matter? Assessing recent evidence // *Housing Policy Debate*. 1997. No. 8 (4). P. 833-866.
11. **Fingleton B.** Housing supply, housing demand and affordability // *Urban studies*. 2008. Vol. 45 (8). P. 1545-1563.
12. **Ghirardo D.** Modern architecture // Microsoft Encarta reference library. 2005.
13. **Graham E., Manley D., Hiscock R., Boyle P., Doherty J.** Mixing housing tenures: is it good for social well-being? // *Urban studies*. 2009. Vol. 46 (1). P. 139-165.
14. **Hall J., Berry M.** Making housing assistance more efficient: a risk management approach // *Ibidem*. 2006. Vol. 43. No. 9. P. 1581-1604.
15. **Housing Developments (1939)**: archives article from Collier's year book // Microsoft Encarta reference library. 2005.
16. **Housing Developments (1940)**: archives article from Collier's year book // *Ibidem*.
17. **Kristensen H.** Social housing policy and the welfare state: a Danish perspective // *Urban studies*. 2002. Vol. 39. No. 2. P. 255-263.
18. **Lefebvre H.** Writings on cities / transl. and ed. by E. Kofman and E. Lebas. Cambridge, MA: Blackwell, 1996.
19. **Listokin D., Burchell R. W.** Housing (shelter) // Microsoft Encarta reference library. 2005.
20. **Meyerson M., Terrett B., Wheaton W. L. C.** Housing, people and cities. New York: McGraw-Hill, 1962.
21. **Nebel B. J., Wright R. T.** Environmental science. 4th ed. New Jersey, USA: Prentice-Hall, Inc., 1993. 630 p.
22. **Nigeria** [Electronic Resource]. URL: <http://en.wikipedia.org/w/index.php?title=Nigeria&oldid=391256109> (retrieved from 19.10.2010).
23. **Nigeria. Federal Republic of Nigeria**: fourth national development plan. Lagos: National planning office; Federal Ministry of national planning, 1981-1985. Vol. 1.
24. **O'Meara M.** Reinventing cities for people and the planet // *Worldwatch paper*. 1999. No. 147.
25. **Olotuah A. O., Ajayi M. A.** Repositioning women in housing development in Nigeria // *Indian journal of gender studies*. 2008. Vol. 15. P. 101-113.
26. **Provision of affordable housing for the public**: communiqué on 1-day interactive forum / Nigerian society of engineers. Calabar Branch, 2010.
27. **Purcell M.** Citizenship and the right to the global city: reimagining the capitalist world order // *International journal of urban and regional research*. 2003. No. 27 (3). P. 564-590.
28. **Sawin J. L.** Mainstreaming renewable energy in the 21st century // *Worldwatch paper*. 2004. No. 169.
29. **Sheehan M. O.** City limits: putting the brakes on sprawl // *Ibidem*. 2001. No. 156.
30. **Sirmans C. F.** Mortgage // Microsoft Encarta reference library. 2005.
31. **Turner B.** Social housing finance in Sweden // *Urban studies*. 1999. Vol. 36. No. 4. P. 683-697.
32. **Van Kempen R., Priemus H.** Revolution in social housing in the Netherlands: possible effects of new housing policies // *Ibidem*. 2002. Vol. 39. No. 2. P. 237-253.
33. **Varady D. P., Walker C. C.** Housing vouchers and residential mobility // *Journal of planning literature*. 2003. No. 18 (1). P. 17-30.
34. **Whitehead C. M. E.** The provision of finance for social housing: the UK experience // *Urban Studies*. 1999. Vol. 36. No. 4. P. 657-672.
35. **Wilson W. J.** The truly disadvantaged. Chicago: University of Chicago Press, 1987.

УДК 517.95

Андрей Анатольевич Акимов

Стерлитамакская государственная педагогическая академия им. З. Бишшевой

ОБ ОДНОЙ ТЕОРЕМЕ ЕДИНСТВЕННОСТИ РЕШЕНИЯ ЗАДАЧИ МОРАВЕЦ[©]

Рассмотрим уравнение

$$Lu = K(y)u_{xx} + u_{yy} = 0, \quad (1)$$

где $yK(y) > 0$ при $y \neq 0$, $K'(y) > 0$ при $y > 0$, в области D , ограниченной кривой Γ из класса Ляпунова, лежащей в полуплоскости $y > 0$ с концами в точках $A(0,0)$ и $B(1,0)$, а при $y < 0$ – кусочно-гладкой кривой $AC: dx + \sqrt{-K(y)} \geq 0$ и характеристикой $CB: dx - \sqrt{-K(y)} = 0$ уравнения (1), исходящими из точки C ; $x = x(s)$, $y = y(s)$ – параметрические уравнения границы ∂D , s – длина дуги границы ∂D , отсчитываемая точки B границы против часовой стрелки.