

Low-cost Technology and Mass Housing System in the Nigerian Housing

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Abstract: The Nigerian housing question is basically that of crisis situation, manifesting and expressing itself in quantitative and qualitative forms. The spatial product of this problem is rapid emergence and deployment of slum and squatters of various topologies but also in the proliferation of these types of settlement in the metropolitan suburbs. The federal and some state government intervened by providing mass housing which only the rich and privilege can afford. Also the local construction technology was not developed and utilized. In this study, mass-housing policy is looked into in order to unravel the causes of its collapse and to uphold the need for low-cost technology and mass participation in mass housing policies and program.

Key words: Low-cost technology, mass housing, local materials, policy guideline

INTRODUCTION

Some issues on housing problems in Nigeria: Okkunu^[1] observed that Nigeria was once a country where not less than 95% of the population occupied substandard homes and neighbourhoods. Dwyer^[2] had earlier cautioned that to avoid the controversy on what is substandard or good enough for occupation it will be generally agreed that the cities and urban areas of the world have far from adequate housing with the exception of a very few. The worst housing in slums and spontaneous settlements have been well documented for some South America, Africa and Asian countries.

Current discussions and debates on the Nigerian housing situation have always been anchored on the need for participation by individuals, corporate organizations in solving the crisis. The question is usually casually and spontaneously addressed by the various past military and civilian governments. It is a case of absence of institutionalized housing policy, with an organized stable mechanism of decision-making and implementation processes.

Appraisal of past Nigerian government policies on housing: Ogunsakin^[3] noted that the deplorable urban housing situation has long been a major concern of the Federal and state government. Such responses include the five-yearly economic and development plan periods embarked upon after independent. The first three periods up to 1975 saw varied but very significant attempts by the state in housing provision. Various bodies were formed and certain policies enacted but to little impact. It was the third National Development plan of 1975-1980 that introduced the most comprehensive and active

intervention by the government. The plan aimed at increasing the housing supply to a substantial degree. Specific measures taken were as follows:

- the creation of a specific ministry of housing, urban development and environment.
- the formation of the federal housing authority.
- the establishment of the federal mortgage bank of Nigeria to replace the Nigeria building society.

The government decided to subsidize the housing cost of low-income groups by directly constructing housing units. It also took specific measure to minimize bottlenecks in the construction industry, such as investment in the domestic production of cement and burnt bricks while also importing other building materials. Housing and urban development issues formed as much as 12% of expected expenditure under the plan period. There was a planned target of 202,000 dwelling units comprising 8,000 units in each of the 19 states and 50,000 in Lagos, the capital. State governments were to launch their own housing programmes each providing 4,000 units with the federal housing authority supplying the infrastructure.

With the establishment of a civilian government in 1979, a new plan on housing was announced. There was a target of 200,000 dwelling units to be provided annually by both public and private sector effort. The Federal Government itself undertook to build 2,000 dwelling units in each of the 19 states of the country with another 2,000 in the designated new Capital Territory, Abuja. This latest programme was subjected to political abuse and shoddy workmanship in the main. The more serious and somewhat unpardonable error was the repetition of the

same house type throughout the whole country in spite of climatic and socio-cultural differences that are bound to prevail. To date over 24 years of the completion of the project, well over 50% are not in use either through lack of basic infrastructure of access roads, water and electricity. Naturally most of such houses have deteriorated or been vandalized. They are sad legacies dotted all over the country.

Problems associated with official housing policies in Nigeria: The mass housing programmed of the Federal and State Governments were conceived with good intention but unfortunately the formulator of the policy did not spell out the direction, neither did they take into consideration the amount to be involved. One of the slogans was “housing for all Nigerians”. At the inception of the policy, ordinarily the statement might have assumed that all families in Nigeria would be provided with adequate housing regardless of who needed one. There was no data to show the housing stock in any of our various towns and state capitals.

The objective of the Federal Government mass housing programmed among others was to reduce housing need with the view to making housing available to all at affordable prices. The executors of this policy over-politicized the whole issue to the extent that they made nonsense of the programmed. Land was not made available in some state and where they were, they were too far from existing infrastructure like road, water and electricity.

There were no master plan and money for infrastructure in these new locations. The socio-cultural behaviors of the people were not considered at the design stage. The houses were designed to grow with the household income but this idea was not considered during the execution of the project.

A substantial percentage of the housing stock are still not occupied up till the present moment, and have been vandalized, therefore government money has been wasted, and can never be recovered.

The need for new policy approaches

Mass housing and low-cost technology application: The post-independent plan has such ambitious target under the peculiar circumstances of the country it was no surprise that not more than 25% of the target was achieved. In realization of past failures, government has begun less ambitious and more pragmatic programmes.

Site and services: There are some site and services project in the country where individual will be left to develop plots after government had provided the layout

and basic amenities like road, water, sewerage and electricity. Individual with assured income could then build more economically houses constructed in conformity with officially set standards helped by government-sponsored and organized loan schemes, this would be much cheaper, quicker and socially more beneficial.

Community-based production housing or self-built housing: Zubairu^[4] noted the importance of community-based production of housing or self-built housing which have been used in some developing countries where 50% of the existing housing stock has been built by owner-occupiers. Potential house-builders will however have to be properly trained and supervised by building professionals to ensure that the structure is safe and healthy for human habitation.

Upgrading squatter settlement: Where the squatter settlements are designated for residential purposes, then the government should ensure that the buildings are structurally sound and then to provide the necessary infrastructure services for the area.

Establishment of building materials and cooperative societies: This building material co-operatives would be like the existing ones which will be giving loans to their members on their laid down rules and regulation. The building material co-operative society on other hand will be mainly to buy building material directly from the manufacturers and give as loan to their members. They could also sell these materials in the open market to make more profit for the society

Low-cost technology: The low-cost technology is the one which can utilize the abundant local raw materials and labor and respond favorably to the nation's level of technological and socio-economic development. Cheap and affordable building material which can compete favorably in the international market are to be produced so as to enhance mass housing and also earn the country more dollars.

The required low-cost technology and local materials: After more than a quarter of a century of political independent although there is a scattered examples here and there, Nigerians are right in asking for a purposeful and widespread evidence of indigenous character in our modern architecture. By the intrinsic quality of our designs, by the use of locally available building materials,

by the evolution and promotion of simple and appropriate construction technology especially for use in our country, the importance of low-cost technology and mass participation cannot be over-emphasized.

The required low cost technology should have low energy consumption and also be portable and easy to master by unskilled labor. They should be technology already available to a particular locality or region of the country that is cheap, affordable and can be improved upon for construction through research.

There are many traditional building materials available everywhere in the country. New ways of protecting them and elongating their life span have already been found, but there is not enough financial capacity for individual to venture into their uses. Government can ensure this by soft loan through the National Housing Fund and the money can be paid back over a period of 25-30 years.

Proposed guidelines for the organized low-cost technology and mass housing: For the low-cost technology and mass-housing to have the desired impact, the following guidelines propose by Okusanya^[5], are necessary:

- In the face of a population explosion that put tremendous demands on limited resources the challenge is in providing housing which retains the features and amenities of the single family house at high densities through standardization of materials and mass-production methods. The objective is in the reduction of waste through efficiency of means resulting in maximization of productivity with its inherent reduction in cost and availability of descent housing for everyone.
 - We should provide housing that would never need to be demolished, which their owners will take delight in upgrading as their means improve and which they would be proud to pass on to their children: housing which will promote stable community.
 - In pursuit of this, we have to develop housing form that is a sensitive interpretation of the needs and aspiration of the nation and to achieve this in eloquent architectural statement for how we live will affect how we feel about ourselves. And how we feel about ourselves will affect our collective psyche and hence our collective will as a nation.
- We need to evolve a housing form based on the premise of the highest common multiple rather than the lowest common denominator and perfect it by mobilizing the resources of materials and manpower available within the framework of a technology we have absolute control over.

Given the magnitude of the housing shortage, compounded by an annual incremental requirement and the need for replacement of dilapidated stock, we can only begin to achieve any substantial net gain in the provision of housing for the masses through low-cost technology and mass-production methods. What that means is, the distinction between housing the poor and the rich must be in the extent and quality of services and level of luxury, comfort must not be negotiable. The difference must be in terms of those who can afford and choose air conditioning in addition to fresh air. Air and light are God-given and therefore non-negotiable. The distinction must be in terms of those who can elect for marble instead of brick or P.V.C. flooring. The fact of poverty does not reduce the number of rooms needed by a family. The poor would, in this society still need at least a three bedroom house, so we should stop building one bedroom houses for anyone, because the differential in cost does not justify them in the long term.

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