

Assessing the Impact of Users' Needs on Housing Quality in Ado-Ekiti, Nigeria

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ABSTRACT

This paper examines the relationship between users' needs and housing quality. It appraises the influence of the needs of the user population on housing quality. The paper reports a research on housing an aspect of which is housing quality and variables impinging on it. Two public housing schemes in Ado-Ekiti, the capital city of Ekiti State, Nigeria, namely, the Federal Low Cost Housing Estate and the State Housing Estate were studied. There were 87 semi-detached houses and 5 single-family houses on the Federal Low-Cost Housing Estate; while on the State Housing Estate, there were 10 semi-detached houses, and 44 single family houses. All the buildings were investigated and thus no sampling was done. Forty-one variables were investigated. Observed outcome of variables investigated constituted the data for the survey. The data obtained show that public services and infrastructure are inadequate in the housing estates. The findings further show that housing quality is significantly correlated with a number of variables such as quality of design and construction, provision and quality of facilities and amenities and users' needs. The paper asserts that users' housing needs should be taken into due consideration in the design of housing schemes.

Keywords: Housing, Needs, Quality, Relationship, Users.

INTRODUCTION

Housing quality is often evaluated in terms of the quality, building materials, standard of construction, and the provision and performance of public services and amenities. For housing to be functional and of desirable quality the needs of the end users have to be met. Housing quality, thus,

has a human angle with socio-cultural and physical dimensions¹.

The satisfaction of the user population with housing and its environment, which exude a general sense of well-being, is an important determinant of housing quality. The real test of success in housing is the ultimate satisfaction of the

user population². It has been argued that the efforts of governments in housing provision, particularly direct house construction, have largely been unsuccessful because the real needs of the target group (most times the poor) have often been misunderstood by government and thus are not catered for³⁻¹⁰. Research has also shown that housing quality is grossly deficient in urban centres in Nigeria¹¹⁻²¹. An important criterion in evaluating housing quality is meeting the needs of particular families and therefore the value of a house is determined by the extent by which it satisfies or frustrates the needs of its users²². Three basic needs of all families are identified, whether low, middle or high income as opportunity (proximity to work), security (home ownership) and identify (high quality standards of design and construction), which could be traded off against one another. These needs supposedly have impact upon quality of housing. In this regard this paper appraises the influence of these users' needs on quality of housing using the public housing schemes at Ado-Ekiti, Nigeria as case studies.

Users' needs

The needs of the user population differ from one income group to the other; for example, the low-income group prefers housing in close proximity to city centre and centre of employment. Such needs as security and identity are appreciated by middle and high income earners who tend to occupy larger dwellings with higher design quality and better facilities²³. The priorities of the user population are, thus, different. The match between these priorities and the procedures and products involved in achieving them is the only and real way of assessing housing^{24,25}.

Users' needs are dependent on the socio-economic circumstances of individuals, their cultural backgrounds and world views, and the politico-economic

situation of the country at large. These factors are, often, subject to considerable changes and modifications which is why users' needs are basically dynamic in nature and character. For instance, the family size of an individual can change with a change in marital status while the income increases with vertical mobility in employment status. The order of importance of his needs (space requirements, aesthetics, locational factor, home ownership), expectedly, would change as his circumstances change. These social factors are paramount in the evaluation of housing quality by residents in addition to the quality of the physical environment. Meeting the needs of users therefore significantly influences the level of their satisfaction with their housing situation and thus their perception of its quality.

Users' needs can broadly be divided into three groups²⁶⁻²⁸ viz; physiological, protective (safety and security) and social. Social needs of users can further be sub-grouped into; affection and belonging; esteem (pride of social and home ownership); self-actualization and identity; and locational factor.

RESEARCH METHODOLOGY

The research involves the study of two public housing schemes in Ado-Ekiti, the capital city of Ekiti State, Nigeria. The housing schemes are the Federal Low Cost Housing Estate and the State Housing Estate, Oke-Ila, Ado-Ekiti.

User opinion survey was conducted by the use of questionnaire as research instrument. The questionnaire was administered by 40 research assistants, who had been earlier tutored for the exercise. There were 87 semi-detached houses and 5 single-family houses on the Federal Low-Cost Housing Estate, while in the State Housing Estate, there were 10 semi-detached houses, and 44 single family houses. All buildings on the two estates

were studied and therefore the survey was a census as no sampling was done. The research instrument (questionnaire) was administered on household heads as respondents. However, there were instances when the household heads who were supposed to complete the questionnaire were unavailable. In such situations the most elderly persons (often times the wives) served as the respondents.

The research adopted a data matrix of 41 variables to investigate residents reaction, attitude and opinion on; various components of the housing environment (including access to work, public and private facilities and services); qualitative adequacy and livability of the housing schemes; users' needs and aspirations, and their influence on quality of housing; and the current government housing policies and alternatives to them.

Data obtained from fieldwork was subjected to descriptive and inferential statistics. Descriptive summary measures (measures of central tendency and dispersion) were obtained while relationships between variables were investigated with the Chi square test of independence. Frequency distribution analysis was carried out to ascertain the behaviour of the variables.

Research findings

The data obtained show that public services and infrastructure are hardly adequate in the housing estates. For instance, potable water rarely flows in the pipes laid by the water corporation (Table 1). The residents have to rely on shallow wells for their water supply. In the federal estate 89 % obtain their water from wells, while it is 55 % in the state housing estate. The wells often dry up in the harmattan period and the residents resort to streams for water supply. Tanker service is available, albeit irregularly.

Electricity supply in the estates is very much erratic. It is hardly available 12 hours a day (Table 2). When there is electricity supply voltage is often so low that it cannot energize domestic electrical and electronic equipment. The estates are often in blackout at nights. Data obtained show that space standards are inadequate for the users' convenience. The bedroom sizes range from 9.0m² to 12.96m². The average household size is 5.6 in the federal housing estate and 6.28 in the state housing estate. The occupancy rate in 1-bedroom apartments in the federal housing estate is thus 5.6pers/room with 2.31m²/per. This is an indication of overcrowding experienced in the estate.

The examination of the three aspects of users' needs reveal that less than 40 % of the residents on both estates are satisfied on their physiological needs. This indicates that such comfort conditions as natural lighting and ventilation are hardly satisfactory in the buildings. Their protective needs (safety and security against building collapse, fire hazard, human vices) were better met, with 59 and 50 % of residents of the federal and state housing estates attesting to these respectively. The social needs of users in terms of affection and belonging, on the one hand, and esteem and self-actualization on the other were more satisfactorily met.

The data on the perception of residents on the quality of their immediate surroundings and neighbourhoods are quite revealing. Over 75 % of the residents of both estates were very much satisfied with their neighbourhoods, and 77% and 80 % of the residents of the federal and state estates respectively consider these as either satisfactory or fair. This is in spite of the observed shortcomings in the provision and performances of essential public and social services. This suggests that the residents' satisfaction with their environment stems from their satisfaction with some other

factors such as users' social and protective needs, which induce general well-being and thus ensure housing quality.

Chi square test of independence was used to investigate significant relationship between users' need and housing quality. The results of the chi-square tests are shown on table 3. These show that the relationship is significant at 95 percent confidence level ($\alpha=0.05$).

Table 4 shows the results of chi-square tests performed on other variables. These was done to examine significant relationship between quality of housing and the provision and performance of amenities and social services; type of toilets, type of kitchen, source of water supply, mode of refuse disposal, mode of waste water discharge; and evacuation of smoke from kitchen. The results show that quality of housing has no significant relationship with the types of toilets and kitchens, and the source of water supply at 0.05 significant level ($\alpha = 0.05$). This may not be unconnected with the fact that the type of toilets in the buildings is mainly water closet (WC) with pit latrines available in some buildings. The WCs are difficult to keep tidy because water does not run in taps inside the houses. Furthermore, kitchens are provided in the houses but they are so small in size (4.32m^2) that most residents have built shacks behind their houses for outdoor cooking.

The results further show that the quality of housing has significant relationship with refuse disposal mode and waste water discharge mode at $\alpha=0.000$, and smoke evacuation from kitchen at $\alpha=0.05$, which are all significantly correlated with users' housing needs, even, irrespective of the poor provision and performance of basic amenities and social services.

RECOMMENDATIONS

The results obtained from the field survey conducted show that the satisfaction of

the user population with their housing is informed mainly by the extent at which their needs are met. Sometimes, this is without regard to the standard of design and construction of the buildings, and the presence of infrastructural facilities.

In this connection, public housing schemes must be conceived with due regard for the special and peculiar needs of the target groups for which they are planned. Attention has to be paid to the social needs of the users, since these are the basic parameters by which they evaluate their housing environment. Accessibility of the residents in housing schemes to their work places is a major factor to be considered, and therefore good roads to the city centres should be built as an integral part of housing programmes. This will facilitate the development of other socio-economic activities on the housing estates. Schools, markets and other communal facilities should also form a part of the housing programmes to ensure that the neighbourhoods meet the physical and material needs of their residents.

The needs of users are essentially dynamic, which calls for flexibility in the design of the houses in public housing schemes. The designs of the buildings must be such that they can be modified to meet the changing needs of the users. The 1-bedroom core houses built in the federal housing estate were designed to accommodate more rooms if the need for expansion arises. This has, however, led to indiscriminate modifications of buildings on the estates. Management agencies should be placed on estates in future programmes to regulate the modifications to be done on the buildings. This is to ensure that these meet certain minimum architectural standards to ensure comfort and functional use and further to disallow the conversion of the buildings for uses incompatible with housing on the estates.

Home-ownership impacts the pride of self-actualization in residents and encourages

affection and belonging. The low-cost houses should be sold exclusively to the needy groups (low and middle income earners) on terms that are within their capability to meet. Rental opportunities should be available which could lead to home-ownership upon long stay. This will enable those who cannot purchase the buildings at the outset to have access to them and on the long run be owner-occupiers.

CONCLUSION

Quality of housing is a function of the general well-being and satisfaction of the user population. Users' housing needs are multi-dimensional and exert considerable influence on the success of housing schemes. The effects of these needs on housing quality have been investigated in two housing schemes in this paper. The paper asserts that housing quality is significantly influenced by users' housing needs and thus should be taken into due consideration in the design of housing schemes. .

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Table 1. Source of water

Source	Federal Housing Estate (%), Ado-Ekiti, Nigeria	State Housing Estate (%) Ado-Ekiti, Nigeria
Tap water inside	6.00	9.00
Public tap outside	0.00	0.00
Tanker service	2.00	26.00
Borehole	3.00	5.00
Well	89.00	55.00
None	0.00	5.00
Total	100.00	100.00

Source: Fieldwork, 2008

Table 2. Performance of electricity supply from public mains

	Federal Housing Estate (%)	State Housing Estate (%)
24 hours service	6.00	0.00
12-24 hours service	44.00	46.33
6-12 hours service	29.00	37.00
Less than 6 hours service	3.00	10.00
Uncertain	18.00	6.67
Total	100.00	100.00

Source: Fieldwork, 2008

Table 3. Chi-square result

Variables users' need	Variables housing quality	Chi-square χ^2	Degree of Freedom	P value
V21	V25	37.21202	20	0.0110

Source: Computation, 2009

Table 4. Chi-Square results on relationship between housing variables

Variables		Chi square	DF	p value
Quality of housing	Type of toilet	2.64264	4	0.6193
Quality of housing	Type of kitchen	7.25800	12	0.1401
Quality of housing	Source of water supply	21.05609	20	0.3938
Quality of housing	Mode of refuse disposal	49.64628	16	0.0000***
Quality of housing	Mode of waste water discharge	116.51413	20	0.0000***
Quality of housing	Evacuation of smoke from kitchen	27.304429	16	0.0382*

Note * - Significant at $\alpha = 0.05$;

*** - Absolute significance (100%)

DF- Degree of freedom