



Assessment of Housing Quality and Beneficiaries Satisfaction on Post-Conflict Housing Scheme in Borno State-Nigeria

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Abstract: Nigeria has over the years witnessed its share of conflicts as a result of Boko Haram crisis. As a result, many people have been displaced. The internally displaced people in Nigeria are faced with different problems ranging from lack of clean water, food, medicine, clothes among others, but the biggest challenge these people are facing presently is lack of housing, the vast majority of IDPs are presently domiciled in makeshift camps spread across the metropolis. Most of these camps are breeding grounds for inhumane and undignified conditions which in turn give rise to a multitude of appalling factors ranging from lack of the bare social amenities needed to survive to rape and death from exposure and malnutrition. Lack of adequate housing has exposed the IDPs especially women and children to all sorts of environmental and manmade dangers. Housing reconstruction should be a more prominent element in post-conflict and post-disaster programming. Where reconstruction programmes are attempted, the challenges tend to be underestimated while planning is often poor, opportunities to enhance post disaster recovery efforts or introduce mitigation measures are usually overlooked, and little or no distinction is made between the provision of physical shelters and the provision of homes, lack of experience leads to assessments that do not provide the relevant information, and projects that are impractical and inappropriate neither to what beneficiaries need, nor to what they want. As a result, housing reconstruction projects are often unsustainable; at best, houses are remodeled by their occupants; at worst, they are simply rejected and abandoned. Consequently, Housing interventions face significant challenges that cannot simply be wished away. But if government agencies are going to continue to do housing reconstruction in the aftermath of conflict and disaster, then there is a clear need to find ways of doing it better. Therefore, Provision of housing to this group of people will play a significant role in their rehabilitation by improving their living condition.

Key words: Housing Quality, Beneficiaries satisfaction, Internally Displaced People, Adequate Housing, Housing Reconstruction

1.0 INTRODUCTION

Post conflict housing reconstruction plays an important role in establishing the country's development and prospect, however conflict lead to damage and destruction of housing (Barakath, 2003; Carlowitz, 2005; Leckie, 2005), limited housing production (Malpass, 2003) and lack of maintenance (Wegelin, 2005). Hence, countries experience a housing shortage at the end of most conflicts. Therefore, housing reconstruction can be identified as a significant

intervention within post-conflict reconstruction. Post-conflict housing reconstruction contributes to the social and economic well-being of conflict affected people and peacekeeping. For instance, it enables the rapid return of people to their home communities and the resumption of their livelihood and income generating activities (Barakath, 2003). Therefore housing interventions face significant challenges that cannot simply be wished away. But if government agencies are going to continue to do housing reconstruction in the aftermath of conflict and disaster, then there is a clear need to find ways of doing it better. The aim of this research is to determine the effect of housing quality and beneficiaries satisfaction on post conflict housing scheme in Borno state.

1.1 Statement of Problem

This study is intended to validate the extent to which the housing reconstruction programme undertaken by Ministry of Reconstruction, Rehabilitation and Resettlement in Borno state has met the needs of the beneficiaries. The study was motivated by the numerous concerns raised by the beneficiaries about the compromised quality of houses, inadequate provision of infrastructure and amenities and maladministration in the implementation of the programme. The research will be quantitative and descriptive because it will use numerical data and also administer structured questionnaire in order to measure the level of satisfaction experienced by the beneficiaries (respondent) and to show the magnitude of their problems and challenges.

1.2 Objectives of the Study

- i To determine the perception of housing quality on the post-conflict housing scheme in Borno State
- ii To identify the level of beneficiaries satisfaction on the post-conflict housing scheme in Borno State
- iii To determine the effect of housing quality and beneficiaries satisfaction on post-conflict housing scheme in Borno State

2.0 LITERATURE REVIEW

2.1 Housing Quality

The Oxford Advanced Learner's Dictionary (2005) and Adeleye, Azeez and Yusuff(2014), defines quality as the acceptable level (standard) of something when compared to other things like it; how good or bad something is, while MicrosoftEncarta Dictionary (2009) defines it as the general standard or grade of something. To Heravitorbati *et al* (2011), quality is the ability of products and processes to conform to established requirements, stating further that quality, as well as project success, in construction projects should be capable of being regarded as fulfillment of expectation of those contributors and stakeholders involved in such projects. Invariably, quality is an attribute of standard, (Adeleye and Anofojie, 2011). Furthermore, Afon (1998); Adeleye and Anofojie, (2011) and Adeleye, Azeez and Yusff (2014) asserts that quality cannot be considered differently from the process by which it is considered.

While Jiboye (2008) and Adeleye and Anofojie (2011) further affirm that, standards in housing are a measure of acceptability at a given time, place, in a given set of cultural, technological and economic conditions. Consequently, the need for good housing quality is imperative. In a study UN – Habitat (2006); Anofojie, Adeleye and Kadiri (2014), indicate that over an estimated billion of the world’s city residents live in insufficient quality housing, mostly in the sprawling slums and squatter settlements in developing countries. Probably, this might not be far from the submission by Mctarnaghan & Collazos, (2016) on the Global housing Research Initiative on American and Caribbean country that established a preponderance evident gaps in their study to include absence of common standard for housing quality globally or in the region, and thus indicate limited methods of assessing housing quality that can be used to measure impacts across national programs or to serve as enforced targets.

However, Anofojie, Adeleye and Kadiri (2014) concluded on the study of housing quality that housing, in Nigeria, is in short supply, poor quality and expensive for the generality of the populace. It suffices to say that housing quality is just one of the preferences to satisfying the resident need and requirement in housing estate. Therefore, measuring the housing quality through regular tenant satisfaction surveys has become an important tool. Ayodeji, (2013). The essence of this measurement is to assess the level of, and ensure that households are satisfied with the provided housing and its services (Varady and Carrozza, 2000).

2.2 Housing Satisfaction

Satisfaction studies cut across a wide range of disciplines in the management and social sciences as well as the built environment. Generally speaking, satisfaction is a subjective evaluation of the performance of products or services in meeting the needs and expectations of users or customers (Parker and Mathews, 2001; Ueltschy et al, 2007 and; Hanif et al, 2010 and Ibem, Opoko, Adeboye and Amole, 2013). Researchers have come to define housing satisfaction as an individual's subjective assessment of whether or not his/her needs are being met (Danes and Morris, 2006; Morris and Winter, 2005; Park, 2008 and Strickland, 1990). Similarly, Ebiaride and Ume (2015) opined that Studies on residential satisfaction promote better understanding of the key sources of satisfaction and dissatisfaction among residents; factors influencing their satisfaction levels; as well as how residents are most likely to react in the event of dissatisfaction with the housing conditions. Further examining satisfaction, Abramson(2010); Ajayi, Nwosu and Ajani (2015), explained that satisfaction in housing means the sentiments of satisfaction and happiness to the housing place which creates these feelings. According to Curley (2003); Ajayi, Nwosu and Ajani (2015), housing is often viewed as an entity involving a large number of units displaying aspects such as physical quality, location, standard of services offered by the government and private owners as well as neighbourhood characteristics. Residential satisfaction has been used as a measure to examine the success in housing development projects. Resident satisfaction has been in use since the early 1960s as the basis for optimizing the architectural design of large housing developments, where feedback was collected from residents of housing projects with regard to resident’s views on

the physical features of proposed housing developments and then feeding those views back into the design process.

2.3 Housing Quality and Satisfaction

Given the fact that Individual households differ in their perception and consideration of parameters that satisfy their needs and aspiration on qualitative housing, certain criteria were imperative in determining to what extent an individual household derive satisfaction from quality of the end product. As observed by Turner (2002); Olotuah and Taiwo (2015), meeting the needs of particular families is an important criterion in evaluating housing quality and therefore the value of a house is determined by the extent to which it satisfies or frustrates the needs of its users. They further stated that Housing quality is often evaluated in terms of the quality of design, building materials, standard of construction, and the provision and performance of public amenities. Accordingly, the satisfaction of the user population with their housing and its environment is an important determinant of housing quality

3.0 RESEARCH METHODOLOGY

The research methodology adopted is quantitative. Questionnaire were developed and administered to the respondents. The Sample frame for the study were beneficiaries of Herwa Peace Housing Estate, the population of beneficiaries is 475 while the sample size of 220 out of the population was chosen. The sampling method adopted For the purpose of this research is simple random sampling because it gives advantage of a greater possibility of participation in selecting respondents from the population. After considerable collection of data, the method of data analysis employed to analysed the data gathered from the field was frequency tables, weighted mean score and percentage analysis using SPSS Version 22.

THE STUDY AREA

This research was conducted in Maiduguri, Borno state, Nigeria. Maiduguri is the capital city of Borno state, located in the northeastern part of Nigeria. The city is located between latitudes 11⁰46'18"N and 11⁰53'21"N and longitudes 13⁰02'23"E and 13⁰14'19"E. Maiduguri is adjudged the largest and most populous city in northeast, Nigeria with a landmass of 50,778 km² and a population of 621,492. Helwa Peace Housing Estate was built during Kashim Shettima led-administration, located adjacent to Flour Mills Company, off Baga Road, Maiduguri Borno state it constitutes 475 two bedroom housing units specifically constructed for displaced victims of boko haram attacks whose houses were destroyed at Bulabulin Garnam in the state capital

4.0 PRESENTATION AND DISCUSSION OF RESULTS

Table 1: Analysis of Questionnaire Administration

Questionnaire	Number	Response rate
Administered	220	-
Collected	205	93%
Valid	200	90%

Source: Field Survey, 2021

The field survey questionnaire was administered after restructuring the questions in the pre construct and demography as required by pilot survey results. The questionnaire were administered and retrieved in four weeks’ time. The 220 sets of questionnaires were administered to occupants of Herwa Peace Housing Estate in Maiduguri Metropolis (Table 1) A total number of Two Hundred and five (205) questionnaires with 93% response rate were retrieved. A total number of 200 were used in the analyses after removing incomplete ones and data screening for outliers. The overall response rate after data screening was 90%.

Research question 1: What is the perception of beneficiaries with housing quality in the post-conflict housing scheme in Maiduguri? **Table 2: This present the analyses for research question 1. The results were presented accordingly.**

Housing Quality	N	Mean	Std. Deviation	Quality (Level)	Ranking	Overall Quality (Level)
Condition of toilets	200	4.5600	.80601	Very Good	1	3.6191 Good
Condition of floor	200	4.4300	.86536	Very Good	2	
Condition of living room	200	4.4050	.75753	Very Good	3	
Condition of bedroom	200	4.3550	.70102	Very Good	4	
Condition of ceiling	200	4.3350	.73175	Very Good	5	
Condition of store	200	4.1700	1.29595	Very Good	6	
Condition of plumbing facilities	200	4.0400	.94491	Very Good	7	
Condition of kitchen	200	3.1500	.86093	Good	8	
Condition of roof	200	3.0800	.84687	Good	9	
Condition of doors and windows	200	2.4600	1.68601	Fair	10	
Condition of fence	200	2.2400	1.59849	Fair	11	
Condition of electric facilities	200	2.1850	1.28805	Fair	12	

Source: Field Survey, 2021

4.1 Level of perception of beneficiaries on housing Quality in post-conflict housing scheme in Maiduguri

Descriptive statistics based on mean ranking was carried out to assess the perception of housing quality in the post-conflict housing scheme in Maiduguri. The results showed the ranking, mean and standard deviation for each Item. Table 2 above shows the perception of housing quality that were highest, based on five point measurement scale, were condition of toilets with mean score of 4.5600 ranked 1 among the housing quality, condition of Floor with mean score of 4.4300 ranked 2, condition of living room with the mean score of 4.4050 ranked the 3, Condition of bedroom ranked the 4 with the mean score of 4.3550 and condition of ceiling ranked the 5 with mean score of 4.3550, while condition of store ranked 6 with mean score of 4.1700, followed by other housing condition which are condition of plumbing facilities, condition of kitchen, condition of roof, Condition of doors and windows, condition of fence, and condition of electric facilities with mean scores of 4.0400, 3.1500, 3.0800, 2.4600, 2.2400, and 2.1850 ranked the 7, 8, 9, 10, 11, and 12 respectively. However, the overall mean score for the level of perception of housing quality was 3.6191, which is Fair.

Research question 2: What is the level of beneficiaries’ satisfaction with the post-conflict housing scheme in Maiduguri? **Table 3: This present the analyses for research question 2. The results were presented accordingly.**

Satisfaction	N	Mean	Std. Deviation	Quality (Level)	Ranking	Overall Quality (Level)
Condition of bedroom	200	3.6300	.95796	Satisfied	1	3.2662 Satisfied
Condition of toilets	200	3.5250	.86784	Satisfied	2	
Condition of doors and windows	200	3.5050	.82668	Satisfied	3	
Condition of plumbing facilities	200	3.4250	.96906	Satisfied	4	
Condition of electric facilities	200	3.3650	.96250	Satisfied	5	
Condition of ceiling	200	3.3600	.87420	Satisfied	6	
Condition of living room	200	3.2250	.91573	Satisfied	7	
Condition of floor	200	3.1700	.75095	Satisfied	8	
Condition of roof	200	3.1000	.67993	Satisfied	9	
Condition of fence	200	3.0500	.80044	Satisfied	10	
Condition of kitchen	200	2.9150	.52837	Neutral	11	
Condition of store	200	2.8550	.56174	Neutral	12	

Source: Field Survey, 2021

4.2 Level of occupants’ satisfaction with the post-conflict housing scheme in Maiduguri?

Descriptive statistics based on mean ranking was carried out to assess the occupants’ satisfaction with the post-conflict housing scheme in Maiduguri. The results showed the ranking, mean and standard deviation for each Item. Table 3 above shows the occupants’ satisfaction with the housing components in the study area. It shows that the occupants’ satisfaction with the highest, based on five point measurement scale, are satisfaction with Condition of bedroom, Condition of toilet, Condition of doors and windows, Condition of plumbing facilities, Condition of electric facilities and Condition of ceiling with the mean scores of 3.6300, 3.5250, 3.5050, 3.4250, 3.3650 and 3.3600 and ranked the 1 , 2 , 3 , 4, 5 and 6 respectively, other occupants’ satisfaction with the post conflict housing scheme are Condition of living room, Condition of floor, condition of roof, condition of fence, condition of kitchen and condition of store with the mean value of 3.2250, 3.1700, 3.1700, 3.0500, 2.9150, and 2.8550 ranked the 7, 8, 9, 10, 11, and 12 respectively. The overall mean score for assessing the level of occupants’ satisfaction with the post-conflict housing scheme in Maiduguri metropolis was 3.2662, indicating Neutral

Research question 3: What is the effect of housing quality and beneficiaries’ satisfaction with post-conflict housing scheme? **Table 4 present the analyses for research question 3. The results were presented accordingly.**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	.323 ^a	.105	.095	.43409	11.495	.000 ^b

a. Predictors: (Constant), satisfaction, quality

4.3 Effects of housing quality and beneficiaries satisfaction in the study area

A regression analysis was carried out to assess the effects of housing quality on satisfaction in the study area. The result was presented in table 4 above. The model produced overall R value of 0.323 and R square value of 0.105 with F-statistics of 11.495 which are significant as indicated by p value of 0.001 far below the recommended maximum of 0.05 (Pallant, 2011). This means that the independent variable housing components quality has large significance (p<0.001) effect size on housing components Satisfaction in the study area.

CONCLUSION

It has been a worthwhile academic task of conducting a research on the assessment of housing quality and beneficiaries satisfaction with a view to improve the performance of post-conflict housing reconstruction in Borno state through a case study of Herwa Peace housing Estate in Maiduguri, The emerging perceptions and satisfaction levels that were discovered from the quantitative findings of data analysis validated the necessity of carrying out a study of this nature. This study was nevertheless a springboard to encourage robust participations and commitments by private and public sectors as well as policy making bodies in making the project a more pragmatic instrument of meeting the needs of targeted beneficiaries. The

theoretical frames also diabolically guided the study in understanding how theoretical constructs of the basic needs, human rights and social developmental theory that supports these projects can be used to evaluate the perceptive and satisfaction levels of beneficiaries to make a meaningful project.

RECOMMENDATIONS

Based on the findings from the responses of occupants living in the housing estate and information reviewed in literature, it is essential to make some viable recommendations on the way of improving the building quality, satisfaction and performance of post-conflict housing reconstruction provided in the study area. This is to suggest viable strategies that can enhance their satisfaction and occupancy to live. Hence, the following recommendations were made:

- i. The study recommend Government to give more emphasis on condition of doors and windows, condition of fence and condition of electric facilities in order to meet the satisfaction of the beneficiaries of the housing estate. Hence, the researcher calls for a total repackaging of the contracting criteria between the government and the contractors to avoid the poor quality of houses.
- ii. Beneficiaries should be integrated into the design and development of housing estate. This will ensure that the satisfaction of the beneficiaries are well co-opted in the development and therefore lead to higher satisfaction and functionality of the estate.
- iii. In addition, provision of facilities and amenities in the housing estate should be based on beneficiaries' requirements. This will lead to optimal utilization of the estate after development.
- iv. Finally, there should be synergy in between the building teams such as developers, designers, and occupants right from the design stage so as to accommodate the beneficiaries' requirements.

REFERENCES

- Ahmed, K.I. (2008). Challenges and opportunities of post-disaster shelter reconstruction: the Asian context publications.
- Adewale, S. (2016). Internally displaced persons and the challenges of survival in Abuja. *African Security Review*, 25(2), 176-192.
- Amaratunga, R. et.al (2011). Lifelong learning needs for disaster management education in the built environment.
- Barakat, S. (2003). Housing Reconstruction After Conflict and Disaster. Humanitarian Practice Network, Humanitarian Policy Group, Overseas Development Institute (ODI), London.
- Cuny, F . C.; Tanner, V. (1995). Working with communities to reduce levels of conflict: "Spot reconstruction", *Disaster Prevention and Management* 4(1): 12–20.

- Florence, Italy. Green, R., Bates, L.K. and Smyth, A. (2007). Impediments to recovery in New Orleans' Upper and Lower Ninth Ward: one year after Hurricane Katrina. *Disasters*, 31(4), 311–335.
- Gharaati, M. (2006). An overview of the reconstruction program after the earthquake of Bam, Iran. Paper presented at the I-Rec 2006 International Conference on Post-Disaster Reconstruction, 'Meeting Stakeholder Interest
- Gopalan, K., & Venkataraman, M. (2015). Affordable housing: Policy and practice in India. *IIMB Management Review*, 27(2), 129-140.
- Harris, S. (2006). Disasters and dilemmas: aid agency recruitment and HRD in post-tsunami Sri Lanka. *Human Resource Development International*, 9(2), 291–298.
- Hussain, I., and Malpass, P. (2003). Wartime planning for post war housing in Britain: the Whitehall Debate, 1941- 5, *Planning Perspective* 18: 177–196.
- Olotuah, A. O. and Taiwo, A. A, (2015). Housing Strategies and Quality of Housing in Nigeria: What lessons from Wales In Developing Country Studies- Retrieved from citeseerx.ist.psu.edu/pdf On 12 July, 2017.
- Shettima, A. G. (2016). *SEEDS of Famine: The Boko Haram Insurgency and Agricultural Production in North- Eastern Nigeria*. Paper presented at the Third ISA Forum of Sociology (July 10-14, 2016).
- Varady, D.P. and Carroza, M.A. (2000). Toward a Better Way to Measure Customer Satisfaction Levels in Public Housing: A Report from Cincinnati, *Housing Studies*.
- Walker, G. (1995). Discussion on physical reconstruction. Paper presented at 'After the Quake: The Challenges of Rebuilding Cities', Wellington, New Zealand, Earthquake Commission,