

## **An Evaluation of the Impact of Government Assisted Housing Programmes (GAHPs) in Bauchi State, Nigeria: A case study of Tambari and Dungal Housing Estates.**

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### **ABSTRACT**

*Housing investment has been considered as a major contributor to economic growth with many social and economic benefits. This research work was carried out to evaluate the impact of Government Assisted Housing Programmes (GAHPs) in Bauchi State. The methodology employed were Oral interview, Self-assessment, Checklist and Questionnaires. Two target groups were considered for this research: the first group was construction professionals such as Architects, Engineers, Quantity surveyors, Builders and Service Engineers involved in the construction of such housing programmes, while the second group was family heads/occupants of government housing programmes. The research was conducted using completed Tambari housing estate and 1000-units of two bedrooms semi-detached / three bedrooms under construction at Dungal as case studies. The information obtained from these case studies were analysed using relative index, linear correlation, regression and one - way ANOVA (Analysis of variance). The research revealed that the first five critical impact of housing programmes were employment for skilled and unskilled workers (RI = 0.77); increase demand for building materials market (RI =0.75); Generates income and employment in a number of related /non-related industry (RI = 0.75); increases income to land owners due to compensation paid for land acquisition (RI=0.74) and attracts infrastructural facilities to such localities (RI = 0.72). It also revealed that most of the respondents were satisfied with the impact of GAHPs within their vicinity.*

**KEYWORDS:** *Nigeria, Housing, Housing Programmes.*

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### **I. INTRODUCTION**

A buoyant housing sector is an indication of a strong programme of national investment and the basis of future economic growth. According to Ajanlekoko (2001), economic growth is a natural pursuit in any human set up as such improvement is expected to lead to increase wealth and prosperity both for individuals and the whole nation. Housing investment has been considered as a contributor to economic growth with many social and economic benefits. In recent years, policy makers and political leaders at the local and national level made stronger links between housing and economic development (Steve, 2008). Mimiko (2011) stated that, the multiplier effect of housing policy is enormous: the housing project is providing jobs for the local contractors, artisans, skill and unskilled labour. The business environment is also being revitalized as trading opportunities are being created for erstwhile unemployed people. In support of this view, Wardrip, Williams and Hague (2011) made it clearer that, housing is a domestic rather than an export commodity that makes an important contribution to local economies because during construction of affordable housing or any kind of housing the local economy benefits directly from the funds spent on materials, labour and the like. Also, Olotuah and Bodadoye (2009) strongly supported that massive housing intervention stimulates the economy of a nation and is a basis for guided urban development. Furthermore, Steven (2008) stated that the way in which housing markets can impact on sub-national economic performance can be summarized under three broad headings: labour markets, business/enterprise and infrastructure. Hendrickson (2009) maintained that, no expenditure of states funds will have a greater total economic impact than funding affordable housing programmes. What impact do expenditures on affordable housing programmes have on the communities where they are sited and on the state as a whole? What impact do investments have on neighborhoods and on important social needs? Against this backdrop, the study seeks to determine what impact affordable housing programmes have on their immediate social built up and natural environment?

### **1.1 Purpose/Objective of the Study**

The aim of this research is to evaluate the impact of Government Assisted Housing Programmes (GAHPs) in Bauchi State, Nigeria. The objectives of the study include: to identify the impact factors of housing programmes where they are sited, to analyze the impact of housing programmes where they are sited and identify the critical impact factors; and to determine the satisfaction level of the impact of housing programmes under construction and completed housing programmes.

## **II. REVIEW**

Housing is an economic activity with deep-rooted multiplier effects. According to Ibem and Amole (2010), the main reason for housing programmes is to ameliorate or improve on existing poor housing conditions of individuals or groups of persons, and thus enhance their quality of life. In the 1970s when the completion and occupation of many public housing schemes in the United States triggered a barrage of public complaints, housing authorities, policy makers and scholars have invested enormous interest in exploring methods of measuring the success and failure of completed housing projects, and applying findings in the development of new public housing schemes (Kantrowitz and Nordhaus, 1980 in Lux, 2005). The evaluation of public housing stemmed from the need to document the problems of public housing, develop solutions to them and make recommendations and guidelines for future public housing policies and programmes (Kantrowitz and Nordhaus, 1980 and Hsieh, 2008). Kaitilla (1993) however, reasoned that evaluation of public housing programmes identifies and examines what aspects of housing are considered important by a set of residents, and thus, uncovers how housing units relate to household priorities. Lall (2002), Apparicio and Seguin (2006) suggested that evaluation of public housing programmes is as a result of the desire to examine the level of accessibility to basic services and quality of life of residents of public housing. Also, the evaluation of public housing is necessary in understanding the various policies supporting public housing programmes. Some literatures specifically identified the reasons for evaluating public housing programmes to include the rationale of housing programme, its impacts and effects, achievement of objectives and assessment of cost-effectiveness of the programme. However, Arimah (2000), and Sengupta and Tipple (2007) viewed the evaluation of public housing as a way of developing parameters for assessing the performance of the public sector in housing delivery. In their standpoint, the examination of the process and product of public housing is vital in measuring the performance of public housing sub-sector. From the foregoing submissions, one can conclude that the rationale for evaluating public housing has been expressed in diverse ways. There appear to be an agreement among authors that the rationale for evaluating public housing programmes is to assess their effectiveness, improve housing design, and to ensure continuous improvement of design methods through the provision of feed back to programme designers on the effectiveness of their design. The evaluation of housing programmes addresses issues of whether public housing schemes are consistent with the purpose they were initiated, especially in the areas of programme rationale, implementation process, impacts as well as cost effectiveness. In general, most researchers tend to carry out evaluation studies on public housing programmes in order to identify what works and what does not as well as impact of such programmes on the life of beneficiaries and surrounding environment. In another vein, housing satisfaction has become the most widely used indicators to access the performance of housing (Paris and Kangari, 2005; Adriaance, 2007). Ogu (2002) defined housing satisfaction as the degree of contentment experienced by a household with reference to the current housing situation, and it is a non-economic and normative quality evaluation approach to assess the quality of housing units. User's satisfaction with dwelling units is a measure of the performance of residential building in meeting their needs and expectations (Eziyi et al., 2013).

The multiplier effect of housing describes how an increase in some economic activity starts a chain reaction that generates more activity than the original. The rate of economic growth is a function of investment through multiplier effects (Osinubi, 2003). During the construction of affordable housing, the local economy benefits directly from the funds spent on materials, labor, and the like. If the builder is purchasing windows and doors from a local supplier, the supplier may have to spend money on materials and hire additional help to complete the order. The construction workers are likely to spend a portion of their wages at the local grocery store or shopping mall, which illustrates induced effects. The indirect and induced impacts of housing construction on the local economy are often called "ripple" or "multiplier" effects (Wardrip, Williams and Hague, 2011). The direct economic impact of housing is achieved when money is spent on housing development or projects and pays for the labor and materials. The money spent on development also helps to keep the manufacturer of the materials in business as well as the consumer outlets where the laborers spend their money. This is known as indirect and induced economic impact. The combination of direct, indirect and induced expenditures also results in a phenomenon referred to as the multiplier effect. The business environment is also being revitalized as trading opportunities are being created for erstwhile unemployed citizen. Taking this a step further, in addition to job creation, house building generates additional income for existing residents, and additional revenues for local governments. A good housing programme provides substantial employment opportunities and builds up a reserve of skilled and unskilled labour that would be available and accessible for other related housing construction works.

### III. RESEARCH STRATEGY/METHODOLOGY

Physical survey, self assessment and oral interview were used to collect the data. The Physical survey and self assessment were used to inspect the spatial environment of existing government housing programmes and the ones under construction. A Checklist was used to ascertain the level of infrastructural development around such housing programmes. The Oral interview was also used to design questionnaires, which were administered to professional such as Architects, Engineers, Quantity surveyors, Builders and Service Engineers in the construction industry involved in the construction of such housing programmes and family heads/occupants of government housing programmes.

The research was conducted using existing Tambari housing estate and proposed 1000-units of 2-bedrooms semi-detached / 3-bedrooms at Dungal in Bauchi State. Professionals involved in government housing programmes and family occupants were the target groups. Relative index, linear correlation, regression and one - way ANOVA (Analysis of variance) were used to analyze the data.

### IV. RESULTS AND DISCUSSIONS

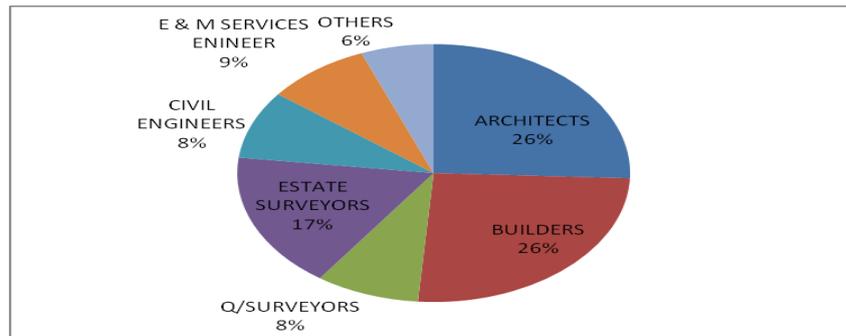


Figure1. Sample Sizes and Responses

Table1. Experience of Respondents in the Construction Field

YEARS	NUMBER	X	XF
0 – 2 Years	13	1	13
2- 5 Years	16	3.5	56
5-10 Years	31	7.5	233
10 -15 Years	17	12.5	213
15-20 Years	3	17.5	53
	<b>80</b>		<b>568</b>

$$\bar{X} = \frac{XF}{F}$$

$$\bar{X} = \frac{568}{80} = 7.1 \text{ Years}$$

Figure 1 shows the respondents composition and responses while Table 1 indicates that, the respondents have an average of seven years of experience in the construction industry. The above information therefore suggests that the data provided by the respondents can be relied upon for the purpose of the analysis.

Table 2. Responses on the Impact of Housing Programmes (Under construction and Existing GAHPs)

Impact	Strongly Agree	Agree	Un decided	Disagree	Strongly Disagree	Score R.I
1. Increases income to land owners due to compensation paid for land acquisition	30	23	9	10	8	0.74
2. Increase cost surrounding landed properties	6	25	14	7	28	0.71

3. Creates local employment for skilled and unskilled labour	29	27	19	19	4	0.77
4. Improving skill level of work force of such localities	29	22	19	9	1	0.66
5. Generates income and employment in a range of related / non-related industries	29	22	19	9	1	0.75
6. Stimulates investment opportunities	30	24	11	6	9	0.64
7. Stimulating new construction	31	22	9	10	8	0.67
8. Generates tax revenue for material and local government	6	29	13	20	12	0.59
9. Increase demand for the building materials markets	17	30	6	14	13	0.75
10. Attract infrastructural facilities to such localities	22	28	12	11	7	0.72

Table 2 indicates the impact of government housing programmes under construction. The study identifies creating local employment for skilled and unskilled labour (RI = 0.77); increases demand for the building materials market (RI = 0.75); generates income and employment in a number of related /non-related industry (RI = 0.75); increases income to land owners due to compensation paid for land acquisition (RI = 0.74) and attracts infrastructural facilities to such localities (RI = 0.72) as the most critical impact factors of housing programmes under construction. From the forgoing, the first three impacts have an element of job creation; this outcome is in no doubt connected to the fact that the total economic activity associated with housing production far exceeds the value of the housing built.

**Table 3. Respondents Level of Satisfaction with Infrastructure around completed Government Housing Programmes.**

S/N	Rating	Frequency	Percentage (%)
1.	Very satisfied	19	23.75
2	Satisfied	33	41.25
3	Just satisfied	14	17.50
4	Dissatisfied	7	8.75
5	Very dissatisfied	7	8.75

Table 3 shows respondents rating of infrastructure built around existing government housing programmes. A good number of respondents (23.75 & 41.25%) claimed they are satisfied with the infrastructure around the GAHPs.

**Table 4. Respondents Rating of the Impact of Housing Programmes Under Construction within the Locality.**

S/N	Rating	Frequency	Percentage (%)
1	Very good	38	47.50
2	Fairly good	14	17.50
3	Neither good or bad	15	18.75
4	Fairly bad	8	10
5	Very bad	5	6.25
		<b>80</b>	

Table 4 shows respondents rating of the impact of housing programmes under construction within their locality, and a good number of the respondents (47.50 and 17.50%) claimed the impact of housing programmes is very good and fairly good respect

**Table 5. Check List of Infrastructure Built around Tambari Housing Estate Bauchi (Completed).**

S/N	ITEM	YES	NO	COMMENTS
1	Public & Private Corporate organization		✓	
2	Schools	✓		
3	Markets	✓		
4.	Recreation/facilities		✓	
5	Police post	✓		
6	Shopping mall		✓	
7	Business establishment		✓	
8	Hotels	✓		

From table 5, Schools, Markets, Police Post and Hotels are all part of infrastructure available some few kilometers away from Tambari Housing estate.

**Table 6. Check List of Infrastructure Built around Dungal Housing Estate (Under construction).**

S/N	ITEM	YES	NO	COMMENTS
1	Public & Private Corporate organization		✓	
2	Schools	✓		Proposed Alpharia University and Mai keke Academy Bauchi
3	Markets	✓		
4.	Recreation/facilities		✓	
5	Police post		✓	
6	Shopping mall		✓	
7	Business establishment		✓	
8	Hotels		✓	

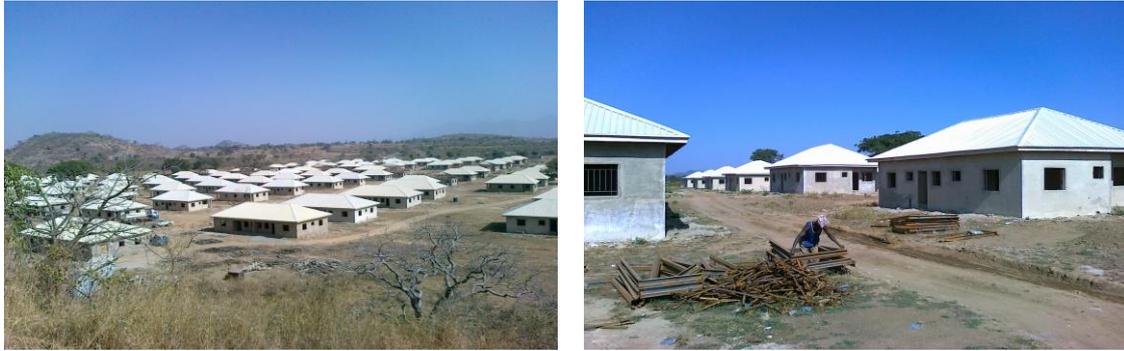


PLATE 1. Dungal Housing Estate under Construction.

From table 6 and plate 1, it was observed that Dungal housing estate is under construction and has a proposed university and Secondary School (Alpharia University and Mai-keke Academy) within the area.



PLATE 2. Existing Tambari Housing Estate.

From table 5 and plate 2, it was observed that Tambari housing estate has more residential housing land marks which include: Bauchi local government maternity clinic, Ultra-modern college, Amana International School (AIB), Forte and Oando fuel stations, and other infrastructure within the area.

## V. CONCLUSION

The research revealed a good number of Infrastructural facilities within an existing housing programme. The housing programme under construction has already attracted two significant infrastructural facilities and most of the respondents were satisfied with the impact of GAHPs within their vicinity. This outcome is in no doubt connected to the fact that the total economic activity associated with housing production is invaluable. Hence, one can infer that housing programmes contributes to the process of bringing redundant sites back into use and improving the overall urban environment thereby reducing the growth of slums and shanties within cities. The availability of adequate neighborhood infrastructure and social amenities could also possibly influence occupants' satisfaction level.

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