

Financing Strategies for Staff Housing in Federal Universities in South-East Nigeria¹

Jovita N. Nnametu², Prof Charles C. Egolum²,

Prof Fidelis I. Emoh, PhD³ and Prof Dr. Kelvin C. Okolie⁴

Abstract

Purpose: The purpose of the study is to investigate housing finance strategies for the provision of staff housing in Nigerian Federal Universities. The aim is to investigate and analyze the effective and accessible housing finance strategies for provision of staff housing in Nigerian Federal Universities especially in the Southeast.

Design/methodology/approach: A review of related literature identified various housing financing strategies. A well-structured research questionnaire relevant to required variables was developed and administered to staff of the various institutions under study using convenience and Purposeful sampling techniques through physical delivery and electronically (Google form). The data were analyzed using descriptive statistics (frequencies, percentages, and mean) the Pearson correlation coefficient and the t-test of significance of the correlation coefficient were also used for the analysis.

Findings: The data analysis showed that the provision of staff housing has strong positive correlation with efficient and accessible financing strategies. The provision of staff housing is dependent on the efficiency and accessibility of available financing strategies. Existence of large undeveloped land and high credibility to access the finance are the major finance eligibility criteria for any university while revealing the Public Private Partnership as the best financing option.

Practical implications: The study could form the basis of policy document and decision for the university management. Can be a reference point to housing finance institutions, development

¹ How to cite this paper: Nnametu, J. N., Egolum, C. C., Emoh, F. I., Okolie, K. C. (2024). Financing Strategies for Staff Housing in Federal Universities in South-East Nigeria; *PM World Journal*, Vol. XIII, Issue VIII, August.

² Department of Estate Management, Nnamdi Azikiwe University, Awka, Anambra, Nigeria.

³ Department of Architecture and Planning, University of Botswana, Gaborone, Botswana

⁴ Department of Building, Nnamdi Azikiwe University, Awka, Anambra, Nigeria

agencies and other property providers on the best strategies that will be beneficial to them and the public universities according to their peculiarities. It serves as an added knowledge to researchers and students in the field of housing finance and housing development regarding the best options capable of achieving a credible staff housing delivery.

Originality/value: Discussions on financing strategies for staff housing especially as it affects the universities have not received much scholarly attention, this study offers an expository knowledge and recommendation expected to be utilized by the management in providing efficient financing for staff housing. It also established that staff unions, Cooperative Societies, Public-Private Partnership Options, National Housing Fund (NHF), Grants and subvention, Pension Commission Loans can be effectively harnessed to provide efficient financing for staff housing.

Keywords: Financing Strategies, Staff Housing, Federal Universities, South-East Nigeria

1. Introduction

Staff housing accommodation, in the context of multi-dimensional concept explain housing condition as that which meets the worker's physiological, psychological, security and economic needs (Ibem et.al,2015). It supports that homelessness or unacceptable housing conditions are primary factors that limit proper human functioning, hence establishing the strong link between difficult housing conditions and the increase of crime rate (Terminski, 2011). Other researchers describe housing as a major indicator or index to measure or equate ones living standard including the physical and mental stability (Nnametu and Emoh, 2020; Sanusi, 2003; Agbola and Olatubara 2007). As the social responsibilities of the government, in attainment of sustainable development goals, government in developing countries at several times institute Public Housing Programs to help curb the menace of housing accommodation, especially for public servants. This scenario is more visible in developing countries where large population of urban residents especially paid workers have difficulties in accessing decent and adequate housing, hence a continual challenge that elicit concern from government of the day, professionals, developers, and other individuals (Ibem & Amole, 2010). Although the concerted efforts of government in attending to the problem relating to provision of adequate, affordable, and sustainable housing have not yielded much desired success. Most tertiary institution-based housing related research is usually geared towards student housing with less emphasis on staff housing, which has shown that its provision has significant positive impact on students' overall academic performances (Adama, Aghimien and Fabunmi 2018; Maina and Aji, 2017). There is no gainsaying that housing need for staff especially in the public university can be overemphasized, owing to the exigency of their intellectual and administrative duties. Akinsanya et al. (2017) attests that staff housing is very essential for the

smooth and efficient running of the university, as the studies stressed that the crucial roles of the academics are best carried out in serene and peaceful environment which the university environment offers. Hassanain, et,al,2010) also affirm that accommodating staff and faculty within the university not only offer convenient access to the workplace but also establishes a moral link and sense of belonging essential for high calibre academic staff within their institutions.

Most of the public universities within the Southeast Nigeria were established between the late 70's and 80's, hence are regarded as Post Nigerian Civil War Universities except for University of Nigeria, Nsukka, which was first established in 1955 though was officially operational in 1960. None except University of Nigeria, Nsukka and Enugu campuses have well established staff housing. With the rate of increase in students' admission, the population of staff employed to cater for the increase have grown far beyond the existing staff housing. This has in no doubt elicited the quest for provision of more staff housing to accommodate the numerical increase in the staff population. The later federal universities within the zone with few or scanty staff housing are not so privileged to have them from inception while some of the universities were established as non-residential, thus no inclusion of staff housing on their masterplan. Although most of these later universities are fortunate to have enough expanse of land that can be developed into staff housing. With the present state of the economy, government monetization policy, reduction in university internally generated funds (IGR), coupled with the lean funding style experienced especially in the university system, the provision of staff housing seems quite challenging for the institutions. The allocation of available funds in the universities may not be channelled to housing since there are other competing development activities that could yield internal revenue for the university. Finance being the bedrock of housing delivery is highly volatile and usually pose some difficulties due to large or huge capital involvement associated with housing development. According to Adamu, Saduki, Danranka, Zaki and Aliyu (2020), without well organized and efficient housing finance mechanism, the goal of housing development policy will be largely unattainable. Ezimuo, Onyejiaka and Emoh (2014) also added that the capital intensive and complexity nature of real estate development and investment require adequate funding to make it realizable.

These assertions align with the United Nation's Habitat (2009) declaration that the global housing issues can only be overcome through appropriate housing finance strategies with peculiarities. Thus, the process of housing development especially in the public spectrum at various level of implementation is not usually financed from internal source alone, hence a crucial need for appropriate financing strategy for provision of staff housing in the University.

2. Staff Housing in the University

Housing tends to ignite improved productivity as it forms part of the scheme used by employers to motivate the employed towards higher productivity and achieving a desired goal. The provision of housing as an addition to one's employment gives a higher aura of satisfaction which motivates greater productivity. Nnametu and Emoh (2020), relates housing as that which exhibits an attribute as the most durable item that impacts on man's productivity but when it is not adequately provided can affect productivity, health and general well-being. Staff housing especially in the public owned universities can be likened to social housing which is referred in Oyebanji (2014) as the housing that is made available by governments or non-profit organizations through various assisted housing programmes, built with environmentally friendly and sustainable material. Hence such housing is expected to have a long-term economic, environmental and social benefits without an increased life cycle cost, and allowing not only the present but also the future generations to meet their housing needs on the overall social value basis. The provision of staff housing in the university ought to be considered a priority by the authorities due its contribution to the overall growth of the institution and improvement of staff welfare. Aside these contributions, university staff housing has notable advantage that are of immense benefits to the wider university community which include, access to university facilities, conducive environment, punctuality to classes, improved community life, retention of employees and enhanced security (Oluwunmi et al. 2012; Nnametu, Alaka and Okoronkwo 2015; Akinsanya, *et.al* 2017; Abdulkareem, *et al.*,2020). The university staff also need social unity, sense of community and belonging, better living standards, good infrastructure, relative security and better education facilities for their families. These conditions are in contrary to that of non-resident staff who are usually faced with challenges not limited to constant rent reviews by property owners, long distant travels and incessant security challenges. With the increasing demand and growth of university education across the nation, there has been gradual shift from staff housing need to development of more academic facilities, thereby creating a huge lacuna in the provision of university staff housing.

3. Financing Staff Housing

Finance has always been a major issue confronting the actualization of housing delivery especially as it concerns staff housing in federal universities due to the lean fund allocation, often taken up by other activities bordering on academic development. As the bedrock of housing delivery, its availability is usually in doubt owing to the large or huge capital/financial involvement associated with housing development. Research on financing staff housing in the universities is very evident especially now that the public universities are engaged with many activities that require huge

capital, coupled with high economic downturn and proliferation of private universities that could use staff housing as an incentive for attracting staff as an avenue to improve work productivity (Hassanain et.al, 2010). It is a task that requires broad stakeholder's involvement, with good deal of technical analysis and strong political leadership (UN-Habitat, 2009). Financing housing of this nature is usually determined by an existing or anticipated housing finance structure either through Direct project financing, shared capital financing (using any Public Private Partnership model), Self-help financing (formal and informal) and Mortgage financing. All these financing systems can be explored for the institutions but for the challenges in accessibility which may not be limited to; lack of credit information, insufficient mortgage liquidity, weak legal systems, unclear property right information, bureaucratic issues, collateral risks, income levels, lending requirements and many other challenges. The cost of housing which is usually expressed in terms of rents, cost of building materials or cost of house for outright purchase cannot be commensurate with university staff salaries whose incremental rate is usually on a very slow pace. This calls for urgent and enhanced discussion on finance strategies for provision university staff housing.

4. Financing Strategies

Housing development has physically and empirically proven to be capital-intensive and usually long-term venture irrespective of the quantum and size of the development at which the requirements are relatively difficult to meet. Adamu *et.al* (2020) acknowledges that housing development by its very nature is capital-intensive, which if financed through personal source alone will require slow and tedious accumulation of savings. Financing housing projects within the university setting could be a herculean and uphill task to embark on if a well-defined financing strategy that will accommodate the university's peculiarity is not considered. Financing strategies for housing can be in various forms and style not limited to formal and informal strategies. The formal financing strategies are public sector-controlled financing approaches usually sought externally. It is such that requires proper and formal documentations which can either be from government or any of her agencies and or corporate entities. Financing strategies from commercial and other banks, National Housing funds, Public Private Partnership, Pension funds, Insurance company, Real Estate Investment Trust and the likes operates under the guidelines enacted by government law (Amao and Odunjo, 2014). Informal financing strategies are housing finance organized, controlled or regulated mainly by the private sector. Informal housing finance strategy operates based on approved administrative principles especially if it concerns cooperative societies and association, while some are loans obtained from relations, friends, money lenders, among other means known as the non-conventional housing provision (Olumide,2015). Most research on housing finance have not been related to financing staff housing for the university. Abdulkareem, Ogunleye & Ajayi. (2020) in their study assessed the effectiveness of housing intervention

strategies of universities-based cooperative societies in Southwest Nigeria which is rather one of the financing strategies. While Ndukwe, Nnaji. & Nwuzo (2015) impact of Nigerian housing policy on university staff service delivery stressed on housing policy. Akinsanya and Adewusi (2017) also examined the staff housing needs of Nigerian University. Discussions on financing strategies for this aspect of housing has been very low and not quite encouraging. Hence, the choice of any financing strategy is dependent on the peculiarities of the university involved as will be reviewed in this study.

5. Materials and Methods.

The choice of this research design is rooted on positivism philosophy that anchors on deductive reasoning, which allows the adoption of quantitative data collection. The major instruments used for data collection was the questionnaire which provided for general information of respondents. Subsequently the other section allowed for close - ended questions relating to existing financing strategy for the provision of staff housing and the extent of its provision in the federal universities. The study used descriptive survey design, data analysis and other statistical analysis method to analyze data collected. The 5-point Likert scale was used in construction of close-ended questionnaire to facilitate easy interpretation, where 1 means the least critical scale and 5 is the most critical scale. Mean was used to represent the data on the general research questions where the criterion mean of 3.0 was selected. The adoption of 3.0 as the criterion mean is computed from the 5-point Likert scale as follows:

$$\text{criterion mean } \bar{x} = \frac{5 + 4 + 3 + 2 + 1}{5} = \frac{15}{5} = 3.0$$

Based on the mean of 3.0 computed above, any mean scores of 3.0 and above is regarded as depicting a *positive* decision on the question item while mean scores below 3.0 were interpreted as depicting a *negative* decision.

A pilot try-out reliability test of the instrument was conducted using staff representative from a state university to ascertain the questionnaire's accuracy, correctness and usefulness. Pilot testing is a face validity approach proposed to increase the accuracy and acceptability of research outcomes (Moores et al., 2012). At which suggestions from the pilot experts were incorporated into the questionnaire to improve it prior to its actual administration.

The validity test was conducted by the researcher's thesis supervisors as well as two experts in statistics and research in the school of sciences of the university. The reliability test was computed with items in section B of the questionnaire using the Cronbach alpha coefficient as follows:

$$\alpha = \frac{n}{n-1} \left[1 - \frac{\sum V_i}{V_t} \right]$$

(Source: Cronbach, 1951, p. 299 cited in Lee, 2017)

Where: A = Cronbach alpha reliability coefficient n = number of items 1 = constant $\sum V_i$ = average of inter-item covariance V_t = Item variances. The study population comprised of the members of the four staff unions of the federal universities in the five States within the Southeast geopolitical zone of Nigeria: Federal University of Agriculture, Umudike; Nnamdi Azikiwe University, Awka; Alex Ekwueme University, Ndufu Alike; University of Nigeria, Nsukka and Federal University of Technology, Owerri. The total population of staff union members of the institutions selected for this study using convenience and purposeful sampling technique was approximately Twenty-five thousand two hundred and seven (25,207). The population distribution also showed that University of Nigeria Nsukka had the highest staff union population with 10,025 while Alex Ekwueme Federal University Ndufu Alike had the least staff union population with 1,884. The sampling techniques were adopted due to the nature of the study. Taro Yamane method of calculating sample size was adopted to get the sample of five hundred and eighty-one (581) staff from the four-university based associations: Non-Academic Staff Union (NASU) Senior Staff Association of Nigerian Universities (SSANU), National Association of Academic Technologists (NAA) Academic staff Union of Universities (ASUU).

The formula states as follows: $n = \frac{N}{1+N(e)^2}$ Where N = 25,207 ; e = 4.1% error margin (we allow for an error margin slightly below the conventional 5% so as to allow for individual bias which may arise from the online and offline survey on the participants). $n = \frac{25,207}{1+25,207(0.041)^2} = 581$

Table 1: Participation and Responses

S/N	University	No. administered	No. returned	Response Rate (%)
1.	Federal University of Agriculture, Umudike.	78	57	73.1
2.	Nnamdi Azikiwe University, Awka.	127	83	65.35
3.	Alex Ekwueme University, Ndufu Alike.	43	39	90.7
4.	University of Nigeria, Nsukka.	230	142	61.7

5.	Federal University of Technology, Owerri.	102	80	78.43
	Total	581	401	69.02

Source: Researcher’s Computation (2023)

The administration of questionnaire was done through hardcopy self-administration to staff of the universities at the first stage which yielded good response. While the second stage data collection continued with electronic means (i.e., Google Form), and the response though quite slow but yielded impressive response too. Out of the total 581 questionnaires administered, only 401 were found to be dully filled and without errors after the cleaning up of the data in Microsoft Excel. This represents 69.02 per cent response rate.

6. Analysis and discussion of results

Presentation of the initial data was done using simple percentages, frequency distribution tables, graphs and charts.

Table 2: Basic information of Respondents

Variables	Classification	Freq.	%
Staff Category	Teaching	191	47.63%
	Non-Teaching	210	52.37%
	TOTAL	401	100.00%
Gender	Male	212	52.87%
	Female	189	47.13%
	TOTAL	401	100.00%
Age bracket	21-30 years	32	7.98%
	31-50 years	164	40.90%
	51-60 years	159	39.65%
	61 and above	46	11.47%
	TOTAL	401	100.00%
Years of experience	≤ 5 years	31	7.73%
	5-10 years	131	32.67%
	10-15 years	154	38.40%
	≥ 15 years	85	21.20%
	TOTAL	401	100.00%
Distance from home to school	Very Near	31	7.73%
	Slightly Near	57	14.21%
	Near	57	14.21%
	Slightly far	54	13.47%

Far	93	23.19%
Very far	109	27.18%
TOTAL	401	100.00%

Source: Field Survey (2023)

The above information was represented on the graphs below:

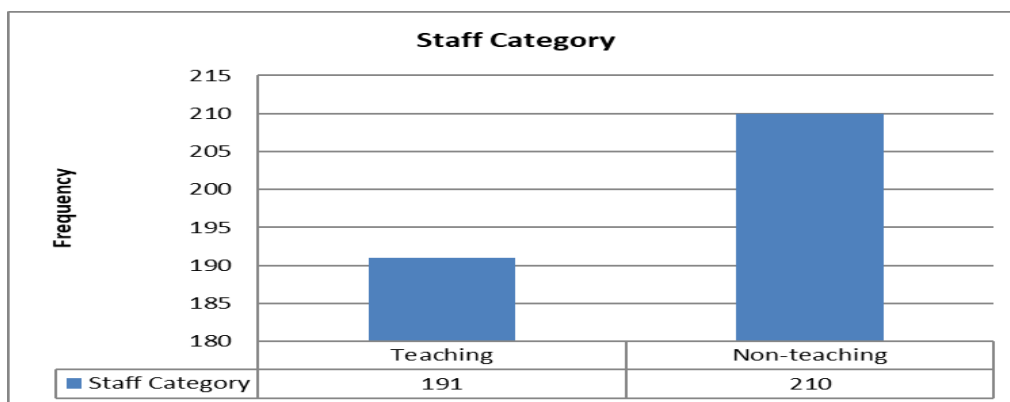


Fig. 1: Category of the Staff Studied

From the figure 1 above, about 191 representing 47.5 per cent are teaching staff while 210 representing 52.5 per cent are non-teaching staff.

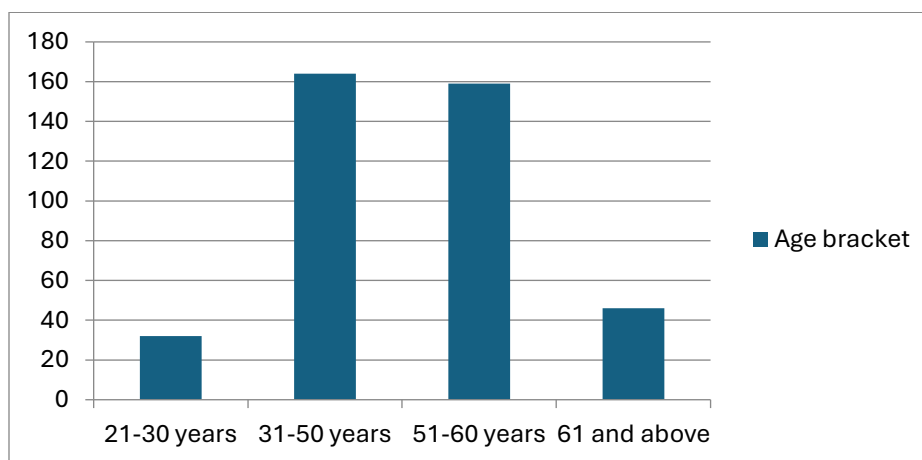


Figure 2 Age Bracket of Staff.

Respondent categorization based on their age bracket is shown in the figure 2 above. Majority of the respondents representing 42.5 per cent and 37.5 per cent belong to the age brackets of 31-50

years and 51 – 60 years. The least age bracket is 21-30 years with 32 respondents representing only 7.98 per cent.

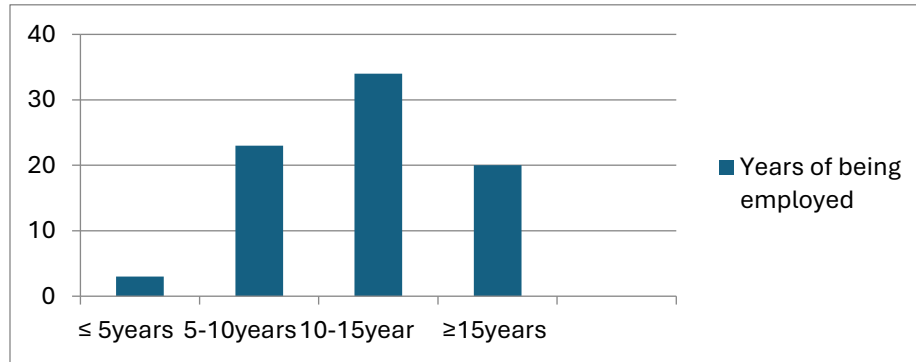


Fig. 3 Years of being employed

The figure above reveal that greater number of the respondent have more than 5-years' experience. Specifically, 131 and 154 respondents representing 32.6 per cent and 38.4 per cent have 5-10 years and 10-15 years of experience respectively. However, 21.2 per cent which represents 85 respondents have more than 15 years of experience.

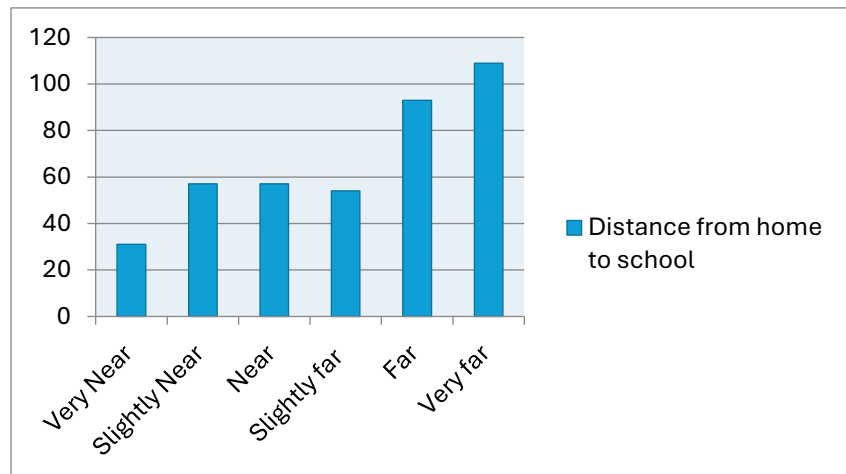


Fig. 4 : Distance from School

The figure 4 above shows that more than 60 per cent of the study participants live very far from the institution. The distribution by distance shows that 13.47 per cent live slightly far, 23.19 per cent live far and 27.18 per cent live very far. However, only 7.73 per cent said they live very near to the institution.

Table 3: Responses on Staff Housing Scheme in the Institution

b.	Factors	SA	A	N	D	SD	Mean	Decision	Ranking
1.	Housing is a commodity that reflects on human psyche and translates its effect into other activities to include improvement in job productivity.	223 (55.6)	133 (33.2)	37 (9.2)	8 (2.0)	0 (0.0)	4.42	<i>Positive</i>	
2.	Staff housing is a facility that contributes to the development of community life in an institution.	207 (51.6)	152 (37.9)	38 (9.5)	4 (1.0)	0 (0.0)	4.40	<i>Positive</i>	
<i>Non development of staff housing in the institution could be attributed any of these reasons</i>									
3.	i) lack of space.	9 (2.2)	29 (7.2)	43 (10.7)	101 (25.2)	219 (54.6)	1.77	<i>Negative</i>	<i>5th</i>
4.	ii) Lack of finance/funding	67 (16.7)	224 (55.9)	78 (19.5)	21 (5.2)	11 (2.7)	3.79	<i>Positive</i>	<i>2nd</i>
5.	iii) Lack of Management interest	135 (33.7)	176 (43.9)	57 (14.2)	33 (8.2)	0 (0.0)	4.03	<i>Positive</i>	<i>1st</i>
6.	iv) Lack of staff interest.	3 (0.7)	6 (1.5)	49 (12.2)	127 (31.7)	216 (53.9)	1.64	<i>Negative</i>	<i>6th</i>
7.	Development of more faculties are visible and rapid than improvement of staff welfare	78 (19.5)	126 (31.4)	108 (26.9)	72 (18.0)	17 (4.2)	3.44	<i>Positive</i>	<i>4th</i>
8.	Institutions could be discouraged due to huge cost involved in housing development.	70 (17.5)	168 (41.9)	114 (28.4)	41 (10.2)	8 (2.0)	3.63	<i>Positive</i>	<i>3rd</i>

SA = Strongly Agree, A = Agree, N = Neutral, D =Disagree, and SD = strongly disagree

In the Table 3 above, 223 respondents representing 55.6 per cent strongly agreed that housing is a commodity that reflects on human psyche and translates its effect into other activities to include improvement in job productivity with positive mean score of 4.42. Similarly, 51.6 per cent of the respondents strongly agreed that staff housing is a facility that contributes to the development of community life in an institution scoring a positive mean of 4.40.

However, lack of finance/funding and lack of management interest were among the factors that contribute to the non-development of staff housing in the institution since they returned positive mean values of 3.79 and 4.03 respectively. In other words, majority of the respondents agreed that lack of finance/funding and lack of management interest were among the factors. Majority opined that lack of space (mean = 1.77) and lack of staff interest (mean =1.64) did not affect non-development of staff housing in the institutions.

Table 4: Responses on the Status of Financing staff housing scheme in Federal University

.	Factors	SA	A	N	D	SD	Mean	Decision
1.	Staff housing development is a herculean task for my institutions to achieve without external funding.	141 (35.2)	90 (22.4)	100 (24.9)	50 (12.5)	20 (5.0)	3.70	<i>Positive</i>
2.	My institution has effective plans to provide and fund staff housing internally.	0 (0.0)	7 (1.7)	77 (19.2)	141 (35.2)	176 (43.9)	1.79	<i>Negative</i>
3.	Staff housing is not really a priority for my institution	60 (15.0)	88 (21.9)	96 (23.9)	96 (23.9)	61 (15.2)	2.98	<i>Negative</i>
4.	My institution has concluded arrangement with developers to fund staff housing.	14 (3.5)	36 (9.0)	122 (30.4)	101 (25.2)	128 (31.9)	2.27	<i>Negative</i>
5.	Staff unions and Cooperative societies in my institution will be willing to have an MOU with the institution's management on agreed funding model towards the developing staff housing scheme.	115 (28.7)	166 (41.4)	104 (25.9)	15 (3.7)	1 (0.2)	3.95	<i>Positive</i>

6.	Funding of staff housing can be achieved with the Institution’s subvention and IGR.	20 (5.0)	91 (22.7)	109 (27.2)	129 (32.2)	52 (13.0)	2.75	<i>Negative</i>
----	-------------------------------------------------------------------------------------	-------------	--------------	---------------	---------------	--------------	------	-----------------

SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, and SD = strongly disagree.

Excerpts from the Table 4 above show that the respondents strongly agreed that staff housing development is a herculean task for the institutions to achieve without external funding (mean = 3.77). they also strongly agreed that staff unions and cooperative societies in their institutions are willing to have an MOU with the institution’s management on agreed funding model towards the developing staff housing scheme (mean = 3.95).

However, more than 50 percent of the respondents disagreed that their institution has effective plan to provide and fund staff housing internally (mean = 1.79). This means that the institutions have no plans in place to provide staff housing. Majority of the respondents also disagreed that their institutions have concluded arrangement with developers to fund staff housing (mean = 2.27).

Interestingly, a combined percentage of 45.2 percent disagreed that funding of staff housing can be achieved with the Institution’s subvention and IGR (mean = 4.06). What this implies is that majority of the respondents believe that the institutions cannot fund staff housing from their subventions and IGR. Further analysis of the individual responses shows that development of more faculties is visible and rapid than improvement of staff welfare (mean = 3.44), and Institutions could be discouraged due to huge cost involved in housing development (mean = 3.63).

Table 5: Responses on financing mechanism for achieving staff housing scheme in Federal Universities

f.	Factors	MF	F	SF	UF	VUF	Mean	Decision	Ranking
1.	Grants and subvention	79 (19.7)	151 (37.7)	106 (26.4)	56 (14.0)	9 (2.2)	3.59	<i>Positive</i>	5 th
2.	National Housing Fund (NHF)	126 (31.4)	177 (44.1)	79 (19.7)	19 (4.7)	0 (0.0)	4.02	<i>Positive</i>	3 rd
3.	Mortgage financing Loan	149 (37.2)	172 (42.9)	73 (18.2)	7 (1.7)	0 (0.0)	4.15	<i>Positive</i>	1 st
4.	Public -Private Partnership Options	63 (15.7)	185 (46.1)	113 (28.2)	31 (7.7)	9 (2.2)	3.65	<i>Positive</i>	4 th

5.	Microfinance Loans	41 (10.2)	154 (38.4)	129 (32.2)	62 (15.5)	15 (3.7)	3.36	Positive	6 th
6.	Pension Commission Loans.	28 (7.0)	137 (34.2)	120 (29.9)	90 (22.4)	26 (6.5)	3.13	Positive	7 th
7.	Self- help groups (Staff Unions and Cooperative Societies)	129 (32.2)	187 (46.6)	74 (18.5)	11 (2.7)	0 (0.0)	4.08	Positive	2 nd
8.	Other Informal Sources	27 (6.7)	93 (23.2)	129 (32.2)	121 (30.2)	31 (7.7)	2.91	Negative	

MF = Most Familiar, F = Familiar, SF = Slightly Familiar, UF = Unfamiliar, VUF = Very Unfamiliar.

The Table 5 reveals the familiar financing mechanism in the following order Mortgage financing loan, Self- help groups (Staff Unions and Cooperative Societies) , National housing Fund, Public-Private Partnership Options, grants and subvention, Microfinance Loans and Pension Commission Loans are most familiar mechanisms for achieving staff housing scheme in Federal Universities based on the opinion of the study participants.

Table 6: Responses on accessibility of the financial strategies

g.	Factors	VHA	HA	AC	SAC	NAC	Mean	Decision	Rank
1	Funding staff housing with grant and subvention	50 (12.5)	121 (30.2)	131 (32.7)	79 (19.7)	20 (5.0)	3.25	Positive	3 rd
2	Financing housing through National Housing Funds.	52 (13.0)	95 (23.7)	130 (32.4)	95 (23.7)	29 (7.2)	3.11	Positive	4 th
3	Accessing Mortgage finance through Commercial and Mortgage banks.	30 (7.5)	74 (18.5)	173 (43.1)	105 (26.2)	19 (4.7)	2.98	Negative	
4	Financing housing Micro Finance for incremental housing.	22 (5.5)	104 (25.9)	183 (45.6)	73 (18.2)	19 (4.7)	3.09	Positive	5 th
5	Financing housing using any acceptable Public Private Partnership (PPP) Options.	96 (23.9)	138 (34.4)	124 (30.9)	40 (10.0)	3 (0.7)	3.71	Positive	1 st

6	Financing from Pension commission loans.	29 (7.2)	82 (20.4)	182 (45.4)	90 (22.4)	18 (4.5)	3.03	<i>Positive</i>	<i>6th</i>
7	Financing through Staff Unions and their Cooperative societies to develop based on agreed repayment model	30 (7.5)	171 (42.6)	147 (36.7)	49 (12.2)	4 (1.0)	3.43	<i>Positive</i>	<i>2nd</i>
8	Financing staff housing through other informal sources	6 (1.5)	69 (17.2)	162 (40.4)	139 (34.7)	25 (6.2)	2.73	<i>Negative</i>	

VHA = Very Highly Accessible, HA = Highly Accessible, AC = Accessible, SAC = Slightly Accessible, NAC = Not Accessible.

The Table 6 above provides responses on accessibility of the financial strategies for achieving effective staff housing. Majority of the study participants opined that funding staff housing is accessible in this order Public Private Partnership (PPP), financing through staff unions and their Cooperative societies, grant and subvention, National housing funds, micro finance for incremental housing and Pension commission loans. However, Accessing Mortgage finance through Commercial and Mortgage banks and financing staff housing through other informal sources were not highly accessible to the institutions since they returned negative mean values of 2.98 and 2.73 respectively.

4.1 Test of Hypothesis:

The Pearson correlation coefficient and the t-test of significance of the correlation coefficient were used in testing the hypothesis for the study. The correlation analysis: any correlation coefficient between 0.00 – 0.20 is regarded as a very low relationship, between 0.21 – 0.40 is seen as a low relationship, between 0.41 – 0.60 is moderate/fair relationship, between 0.61 – 0.80 is a high relationship while any correlation coefficient that is between 0.81 – 1.00 is regarded as a very high relationship.

Hypothesis: The provision of staff housing is not significantly related to efficient and accessible financing strategy

Table 7: Correlation between staff housing and efficient/accessible financing strategy

Variables	Mean	Std. Deviation	r	t-stat.	Decision
Staff Housing	40.43	8.261	0.810	71.539	Reject null hypothesis ($p=0.000$)
Efficient Financial Strategy	91.34	20.092			

Source: Extracted from SPSS Result

Since the probability value of the t-statistic (0.0000) is less than 0.05 critical value, we reject the null hypothesis and conclude that the provision of staff housing is significantly related to efficient and accessible financing strategy. The correlation is a strong positive correlation ($r=0.810$). This implies that the provision of staff housing has a strong positive correlation and significantly affected by efficient and accessible financing strategy. In other words, the provision of staff housing fully depends on the efficiency and accessibility of financing strategies available to the institution.

5. Conclusion and Recommendation

Provision of staff housing has been a major issue in most federal universities especially the ones under review. As one of the basic needs of man, its provision in federal universities in Nigeria is expected to one gain which they look forward to but has not been fully met in recent time. The study used convenience and purposeful sampling techniques to administer a structured questionnaire. The data collected were analysed with the correlation coefficient and the t-test of significance. Having analysed the extent of provision of staff housing and the available financing strategy, the study concludes that the financing strategies for the provision of staff housing in federal tertiary institutions in Nigeria using Southeast region as case study are easily accessible but not readily available to the institutions. The theories on the study lay emphasis on those financial strategies applicable to the university system in relation to their housing needs shall be dependent on the financial structure, instrument and/or system made available by the financial intermediaries. On the other hand, the capabilities of the unions in the university in accessing and converting finance (resources) collectively to the provision of housing for their members. The study observed that financing strategies such as grants and subventions, National Housing Fund, public-private-partnership, pension commission loans and microfinance loans are the most familiar housing financing strategies that could be accessible to the institutions, but the Public Private Partnership strategy prove to be the best approach. Based on the strong positive correlation between staff housing provision and efficient/accessible financing strategy, the university

management should exert more concerted effort towards accessing a workable, suitable and efficient financing strategy.

References

- Abdulkareem S., Ogunleye M.B & Ajayi M.A. (2020) Assessment of Effectiveness of Housing Intervention Strategies of Universities-based Cooperative Societies in Southwest Nigeria, *Environmental Technology & Science Journal* Vol. 11 No. 2.
- Adama J, Agbimien. D and Fabunmi. C (2018) Students' Housing in Private Universities in Nigeria: Influencing Factors and Effect on Academic Performance, *International Journal of Built Environment and Sustainability*. Faculty of Built Environment, Universiti Teknologi Malaysia. <https://ijbes.utm.my/index.php>
- Adamu, A. Sadauki, A. Mustapha. M.; Zaki, M.; and Aliyu, A (2020). Impact of housing finance on Self-built dwellings in a formal settlement: Case study of Kabama layout, Zaria. *International Journal of Environmental Design & Construction Management* Cambridge Research and Publications IJECM ISSN-2325-9884 Vol. 19 No. 4.
- Agbola, T. & Olatubara, C. O. (2007): "Private Sector Driven Housing in Nigeria: Issues, Constraints, Challenges and Prospects" in *Olugbenga Nubi, Modupe Moronke*
- Akinwunmi, A (2009) An Investigation into Factors Affecting Housing Finance Supply in Emerging Economies: A Case Study of Nigeria. A thesis submitted in partial fulfilment of the requirements of the University of Wolverhampton for the degree of Doctor of Philosophy
- Akinsanya. G and Adewusi. A. (2017) Staff Housing Needs of Nigerian University: A Case of Obafemi Awolowo Univeristy, Ile-Ife. *IIARD International Journal of Geography and Environmental Management* ISSN 2504-8821 Vol. 3 No.1 2017 www.iiardpub.org
- Amao.F and Odunjo.O (2014) Housing Finance in Nigeria *Journal of Economics and Sustainable Development* www.iiste.org ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) Vol.5, No.27.
- Ibem,E.O, Adeboye, A.B. and Alagbe, O.A. (2015) Similarities and Differences in Residents' Perception of Housing Adequacy and Residential Satisfaction. *Journal of Building Performance* ISSN: 2180-2106 Volume 6 Issue 1 2015. <http://spaj.ukm.my/jsb/index.php/jbp/index> .

Ezimuo P.N., Onyejiaka C.J and Emoh F.I.(2014) Sources Of Real Estate Finance And Their Impact On Property Development In Nigeria: A Case Study Of Mortgage Institutions In Lagos Metropolis British Journal of Environmental Research Vol.2, No.2, pp.35-58.

Hassanain, M. A., Sedky, A., Adamu, Z. A., & Saif, A.-W. (2010). A framework for Quality Evaluation of University Housing Facilities. *Journal of Building Appraisal*, Vol. 5(3), 213-221. DOI: 10.1057/jba.2009.15.

Ibem,E.O, and Amole, O.O (2010) Evaluation of Public Housing Programmes in Nigeria: A Theoretical and Conceptual Approach. *The Built & Human Environment Review*, Volume 3, 2010 <https://dev.humanitarianlibrary.org/sites/>

Maina, J and Aji, J.Y (2017) Influence of Accommodation on academic performance of Architecture Built Environment Journal Faculty of Architecture, Planning and Surveying Volume 14 No. 2 July 2017 ISSN 1675-5022. <https://www.researchgate.net/>

Moore, K.L., Jones, G.L. and Radley, S.C. (2012). Development of an instrument to measure Face validity, feasibility and utility of patient questionnaire use during health care: the QQ-10. *International Journal for Quality in Health Care*, 24(5), 517-524. Doi: 10.1093/intqhc/mzs051.

Nnametu J.N, Emoh F.I (2020,).An Evaluation of Rental Housing Affordability by Staff of Tertiary Institutions in Owerri, Imo State, Nigeria *Current Urban Studies*, 8, 1-23 <https://www.scirp.org/journal/cus>

Nnametu,J.N, Alaka,I.N and Okoronkwo,C (2015) Staff Housing: Panacea to Academic Productiv Proceedings: ERES2015 ERES 24-27 June 2015 ITU/ ISTANBUL https://eres.architecturez.net/system/files/P_20190116080107_0703.pdf

Ndukwe, C., Nnaji. I and Nwuzo C. (2015) Impact of Nigerian Housing Policy on University Staff Service Delivery In Ebonyi State: A Study Of Ebonyi State University (Ebsu), Abakaliki And Federal University Ndufu Alike Ikwo (Funai). *NG-Journal of Social Development*, VOL. 5, No. 1, ISSN: 0189-5958. www.arabianjbm.com/NGJSD_index.php

Oluwunmi, A.O, Akinjare, O.A and Izobo-Martins, O.O (2012) User’s Satisfaction with Residential Facilities in Nigerian Private Universities: A Study of Covenant University, *Transnational Journal of Science and Technology*: edition vol.2, No.11.

Omirin & Akintade Samuel Afolayan eds. *Private Sector Driven Housing Delivery. Issues, Challenges and Prospects*: Lagos, Department of Estate Management, University of Lagos.

Scholtens, B and Wensveen, C (2003) The Theory of Financial Intermediation an Essay on what it does (not) explain. The European Money and Finance Forum Vienna 2003

<https://www.suerf.org/docx/s>

Terminski, B. (2012) The Right to Adequate Housing in International Human Rights Law: Polish Mediterranean Journal of Human Rights, Vol. 16, (Double Issue), 2012, pp. 561-592.

<https://papers.ssrn.com/sol3/ki> , (2011).

About the Authors



Jovita N. Nnametu

Owerri, Imo State, Nigeria



ESV Jovita. N. Nnametu is a Lecturer in the Department of Quantity Surveying, Federal University of Technology, Owerri Imo State. She holds a National Diploma (ND) in Town and Regional Planning, B.Sc and M.sc Degrees in Estate management, PGD in Education and has concluded her PhD research at Nnamdi Azikiwe University, Awka Anambra State, Nigeria. Her research is on Real Estate Finance and Investment especially on Housing Finance Strategies. She has a career centered on teaching, training and mentoring students and young professionals. She has published many journal articles and presented papers in both local and international conferences, webinars. Jovita can be contacted at jnnametu@gmail.com or jovita.nnametu@futo.edu.ng



Prof Charles C. Egolum

Awka, Nigeria



Prof. Charles C. Egolum, is a Professor of Real Estate & Valuation in the Department of Estate Management, Faculty of Environmental Sciences, Nnamdi Azikiwe University, Awka, Nigeria.



Prof Fidelis Ifeanyi Emoh, PhD

Awka, Nigeria



Prof Fidelis Ifeanyi Emoh, PhD is a Professor of Real Estate & Valuation in the Department of Estate Management, Nnamdi Azikiwe University, Awka, Nigeria with over 40 years varied experience in teaching, research, administration and professional consultancy.



Prof Dr. Kevin Chuks Okolie

Awka, Nigeria



Prof. Kevin Chuks Okolie holds a Doctor of Philosophy Degree in Construction Management from Nelson Mandela Metropolitan University, Port Elizabeth South Africa. Prof. Okolie was formerly the Head of the Department of Building at Nnamdi Azikiwe University Awka, Anambra State Nigeria. His research interest lies in the development of Building Performance Evaluation Methodology, Health and Safety Management and Built Asset Management Systems. His published papers and articles on Construction and Facilities Management have appeared in many international conferences and peer reviewed journals. Prof Okolie can be contacted at kc.okolie@unizik.edu.ng or kevinokolie@rocketmail.com.