

### **Prospect of Low-Cost Housing Delivery for Middle Income Earners in Nigeria**

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------ABSTRACT------

The paper intends to investigate the prospects of low cost housing (LCH) delivery on middle income earners in Nigeria, its prospect, challenges and solutions were discussed. Housing is essentially one of the basic needs of man. After food and clothing, it constitutes the third necessity of life. This study takes into cognizance of the causes of housing shortage for low cost housing (LCH) delivery for middle income earners in Nigeria. The study examines the effects of a lack of affordable housing and the solutions to improve the housing crisis for low cost housing (LCH) delivery for middle income earners in Nigeria. A total number of ninety (90) respondents participated in the survey. It shows the causes of housing shortage for low cost housing (LCH) delivery for middle income earners in Nigeria as more people want to live in the city ranked first with RSI value of 0.849 (84.90%) followed by good job opportunities with RSI value of 0.804 (80.40%), minimum green space requirements have to be met which ranked third with RSI value of 0.780 (78.00%). It shows the effects of a lack of affordable housing for low cost housing (LCH) delivery for middle income earners in Nigeria. Homelessness ranked first with RSI value of 0.747 (74.70%) followed by lack of affordable housing ranked second with RSI value of 0.716 (71.60%), high property prices ranked third with RSI value of 0.704 (70.40%). Furthermore, it shows ways to improve the housing crisis for low cost housing (LCH) delivery for middle income earners in Nigeria. Governments have to buy land and real estate ranked first with RSI value of 0.738 (73.80%) followed by availability of fund via bond elections ranked second with RSI value of 0.733 (73.33%), limitation of land speculation ranked third with RSI value of 0.691 (69.10%). Conclusion and recommendation are drawn from the study.

KEY WORDS: Prospect, low-cost, housing, effects, middle income earners

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#### **INTRODUCTION** I.

Housing is indeed one of the basic needs of human. Housing finance has been regarded as the most limiting factor in housing provision, a number of housing finance options have been considered in the past, little have been said about the use of pension fund for housing finance[1, 2].

Housing the masses is an important agenda for nations over the world, thus, the right to housing as a basic need cannot be overemphasized. A residential home is the second indispensable need for every human being after food [3, 4, 5, 6]. The physical survival of mankind depends on housing, besides food and clothing [7, 8]. Adequate and comfortable housing influences the physical, social, and moral health, and contributes to the works' stability, efficiency, and development [9].

Housing, or more generally living spaces, refers to the construction and assigned usage of houses or buildings collectively, for the purpose of sheltering people — the planning or provision delivered by an authority, with related meanings. The Healthy People 2020 Social Determinants of Health topic area is organized into five place-based domains and they are economic stability, education, health and health care, neighborhood and built environment and social and community context. Quality of Housing is a key issue in the Neighborhood and Built Environment domain [10].

A low cost housing is designed and constructed just like any other house in regards to the strength, foundation and structure. Low cost housing refers to housing units that are affordable and a lot cheaper to execute compared to traditional houses. In Nigeria, demand for housing outstrips the supply. The nation's housing deficit is variously put between sixteen to twenty million housing units. Compounding an already bad situation is the lack of affordability by a large segment of the citizenry where access is made possible.

Housing quality refers to the physical condition of a person's home as well as the quality of the social and physical environment in which the home is located [11]. Aspects of housing quality include air quality, home safety, space per individual, and the presence of mold, asbestos, or lead [11].

Housing quality is affected by factors like a home's design [12, 13] and age [14, 15. Poor-quality housing is associated with various negative health outcomes, including chronic disease and injury and poor mental health [16, 17]. The quality of a home's neighborhood is shaped in part by how well individual homes are maintained, and widespread residential deterioration in a neighborhood can negatively affect mental health [17]. Both home design and structure significantly influence housing quality and may affect mental and physical health [18, 19].

Steps, balconies, and windows are features of home design that may present a threat to safety, especially for individuals with physical disabilities [20]. Breakable glass, low windowsills, and poorly constructed stairs may increase the risk of injury from a fall [18].

The inability of many Nigerian workers to afford good housing has grown to a greater dimension, the implication resulting in low morale and productivity. However in view of significance of housing delivery it is pertinent that the issue of housing delivery be properly addressed.

### **II. LITERATURE REVIEW**

Low cost housing also known as affordable housing or subsidized housing is housing which is deemed affordable to those with a median household income or below as rated by the national government or a local government by a recognized housing affordability index. Most of the literature on affordable housing refers to mortgages and number of forms that exist along a continuum from emergency shelters, to transitional housing, to nonmarket rental (also known as social or subsidized housing), to formal and informal rental, indigenous housing and ending with affordable home ownership. Rapid population growth and increasing urbanization have led to overcrowding in urban housing, homelessness and overstretching of existing infrastructure and services [21].

The problem of housing has become an everyday discussion in all quarters of the public and private services of Nigeria. It has become increasingly glaring that most of the urban population live in dehumanizing housing environment while those that have access to average housing do so at abnormal cost. Rent in major cities of Nigeria is about 60% of an average workers disposable income. This is far higher than the 20-30% recommended by United Nations [22].

The synergy built through public private partnership should be able to address the issue of low cost housing delivery. Some key cost components of a building include cost of land, infrastructure, materials and labor. Strategies for delivery of low cost housing will therefore have to address these issues. The nature and challenges of low income housing on middle level income earners confronted in Nigeria includes number of new houses being built affects housing delivery, availability of land affects delivery of low income housing, dampness of walls and floors, low cost housings have faulty designs and low cost housings do not have access to public services. The problem of LCH provision is an increasing social and economic issue in the world, most hit in the developing countries [23].

The prospect of low income housing delivery as it affects the middle level income earners among others are to reduce interest rates, security of both the lives and properties of the occupants, population growth, Mortgage availability to occupants, economic growth and real incomes and to reduce the cost of renting[24].

Research revealed thecauses for housing shortage to involvedmore people live alone in their homes, fewer people marry than centuries ago, population growth, cost of land increased, land speculation, construction costs increased significantly, permission for construction projects take quite a long time, it takes quite long to finish a construction project, good job opportunities, more people want to live in the city, cheap money, local shortages in construction workers, land is simply a scarce resource, minimum green space requirements have to be met, many housing projects focus on the luxury segment, migration, and competing land use.Low-income families may be more likely to live in poor-quality housing that can damage health [25]. These homes may be under insulated, lack air conditioning and cost more to heat, leaving homes either too hot or too cold, which has been linked to poorer health outcomes [26]. For example, spending time in a cold home may raise blood pressure or even lead to a heart attack [27, 28].

In addition, residents of overcrowded homes may be at risk for poor mental health, food insecurity, and infectious diseases [29, 30]. Additionally, the homes of low-income families are more likely to have water leaks; these leaks are associated with mold growth [15], which has been shown to affect respiratory health [31] and increase the likelihood of asthma, coughing, and wheezing [32]. The high demand for low cost housing and non-availability of finance hindered the non-profit organisations progress in tackling the housing deficit in Nigeria [33]. The construction of low cost housing by the non-profit organisation is possibly one of the panaceas to solving the Nigerian housing dilemma [34].

It was observed that effects of a lack of affordable housing involves development of slums, people can no longer afford rent, people may no longer afford electricity, homelessness, hard to find a home for people who want to move to big cities, lack of affordable housing for students, high property prices, overall risk of poverty increases, pollution, unhygienic conditions, and health problems. Investigations among other solutions to the housing crisis to include provision of social and public housing, building smaller homes, rent control, governments have to buy land and real estate, focus on the construction of affordable housing instead of luxury homes, limitation of land speculation, higher taxes on returns from real estate investments, government support for renters in case of financial crisis, more efficient use of space and living in rural areas has to become more attractive. Therefore, it was added that the private sector is critical in making housing available and affordable in Nigeria, as the government cannot do it alone [35].

### III. RESEARCH METHODOLOGY

Ninety (90) questionnaires were distributed among the respondents which were chosen at random for the purpose of achieving the objectives of this prospect of low cow cost housing delivery for middle income earner in Nigeriawere distributed for collection of data. Data were obtained from both the primary and secondary sources which include interview, questionnaire, textbooks journal publications and internet facilities. The statistical tools used for this study include percentage, mean, and relative significance index (RSI). The relative significance index ranking (RSI) was used for ranking of the factors studied. These methods had been used in construction research by authors such as[36, 37].

The Likert scale involving rating on interval scale of 5 and 1 developed for application in social sciences and management researches for quantification of qualitative variable were used. The responses of the items on the questionnaire were obtained on a 5-point scale ranging from 1 to 5. "extremely important and perfectly known" were scored 5, "very important and partially known" were scored 4, "somewhat important and known" were scored 3, "not very important and partially unknown" were scored 2 and "not important and perfectly unknown" were scored 1.

$$RSI = \frac{\sum \mu}{AN} = \frac{5a + 4d + 3c + 2d + 1e}{5j} (0 < index)$$

Where  $\mu$  is the weighting given to each factor by respondents;

A is the highest weight (i.e. 5 in this case);

N is the total number of respondents = 90

Where: a = number of respondents 'strongly agree'',

b = number of respondents "agree"

c = number of respondents "less agree"

d = number of respondents ''disagree''

e = number of respondents "strongly disagree"

### IV. DATA ANALYSIS AND RESULTS

This research work was based on the main challenges facing public private partnership modalities especially build, operate and transfer in the provision of hostels in Nigeria.

The data were presented using tables for clarification and better interpretation. The analysis tools included both descriptive and inferential statistics.

#### 4.1.1 RESPONDENTS PROFILE

	Table 1	: Sex	
Sex	Frequency	Percentage	
Male	60	66.67	
Female	30	33.33	
Total	90	100.00	

Table 1 showed the gender of the respondents. It showed that 66.67% (60) are male and 33.33% (30) are female. The result shows the representation of genders in the construction industry in the study area.

### 4.2 OCCUPATIONAL STATUS OF THE RESPONDENTS

Occupation	Frequency	Percentage (%)		
Self employed	42	46.67		
Unemployed	20	22.22		
Professional	28	31.11		
Total	90	100		

Table 3 represents the occupational status of the respondents. 46.67% (42) were self-employed, while 22.22% (20), represents unemployed and 31.11% (28) represents professionals.

## 4.3 CAUSES OF HOUSING SHORTAGE FOR LOW COST HOUSING (LCH) DELIVERY FOR MIDDLE INCOME EARNERS IN NIGERIA

Table 3 identified the causes of housing shortage for low cost housing (LCH) delivery for middle income earners in Nigeria and the ranking of the factors through the use Relative Significance Index (RSI).

Table 3: Causes of housing shortage for low cost housing (LCH) delivery for middle income earners	s in
Nigaria	

			1	Niger	la					
S/N	FACTORS	5	4	3	2	1	TOTAL	TWV	RSI	RANK
1	More people want to live in the city	56	15	8	7	4	90	382	0.849	1
2	Good job opportunities	51	14	8	10	7	90	362	0.804	2
3	Minimum green space requirements have to be met	47	11	14	12	6	90	351	0.780	3
4	Migration	44	12	10	15	9	90	337	0.749	4
5	Many housing projects focus on the luxury segment	43	14	8	16	9	90	336	0.747	5
6	Competing land use	41	12	14	14	9	90	332	0.738	6
7	Poor Electrical Fittings	37	18	14	10	11	90	331	0.736	7
8	Permission for construction projects take quite a long time	43	8	14	15	10	90	329	0.731	8
9	It takes quite long to finish a construction project	37	17	12	14	10	90	327	0.727	9
10	Population growth	42	13	10	9	16	90	326	0.724	10
11	Fewer people marry than centuries ago	40	14	13	7	16	90	325	0.722	11
12	Low Cost Housings Have Faulty Designs	36	14	13	17	10	90	319	0.709	12
13	Cost of land increased	38	10	14	17	11	90	317	0.704	13
14	Construction costs increased significantly	36	10	19	15	10	90	317	0.704	13
15	Land speculation	41	8	14	10	17	90	316	0.702	14
16	Availability of Land	27	20	24	8	11	90	314	0.698	15
17	The Number of New Houses Being Built	26	23	20	9	12	90	312	0.693	16
18	More people live alone in their homes	37	11	14	12	16	90	311	0.691	17
19	Land is simply a scarce resource	37	9	10	22	12	90	307	0.682	18
20	Local shortages in construction workers	35	9	11	21	14	90	300	0.667	19
21	Cheap money	34	9	13	19	15	90	298	0.662	20
22	Dampness of Walls and Floors	31	11	14	12	22	90	287	0.638	21

It shows the causes of housing shortage for low cost housing (LCH) delivery for middle income earners in Nigeria. More people want to live in the city ranked first with RSI value of 0.849 (84.90%) followed by good job opportunities with RSI value of 0.804 (80.40%), minimum green space requirements have to be metwhich ranked third with RSI value of 0.780 (78.00%). Dampness of walls and floors ranked least with RSI value of 0.638 (63.80%) followed by cheap money with RSI value of 0.638 (63.80%) and local shortages in construction workers with RSI value of 0.667 (66.70%) in ascending order.

# 4.4 EFFECTS OF A LACK OF AFFORDABLE HOUSINGFOR LOW COST HOUSING (LCH) DELIVERY FOR MIDDLE INCOME EARNERS IN NIGERIA

Table 4 showed the effects of a lack of affordable housing for low cost housing (LCH) delivery for middle income earners in Nigeria and the ranking of the factors through the use Relative Significance Index (RSI).

### Table 4: Effects of a lack of affordable housingfor low cost housing (LCH) delivery for middle income earners in Nigeria

			carne		- inger	14				
S/N	FACTORS	5	4	3	2	1	TOTAL	TWV	RSI	RANK
1	Homelessness	32	26	14	12	6	90	336	0.747	1
2	Lack of affordable housing	29	27	10	15	9	90	322	0.716	2
3	High property prices	26	27	14	14	9	90	317	0.704	3
4	Hard to find a home for people who want to move to big cities	28	20	17	16	9	90	312	0.693	4
5	Unhygienic conditions	27	28	10	9	16	90	311	0.691	5
6	Pollution	25	29	13	7	16	90	310	0.689	6
7	Health problems	23	25	14	17	11	90	302	0.671	7
8	Overall risk of poverty increases	22	26	14	12	16	90	296	0.658	8
9	People may no longer afford electricity	22	24	10	22	12	90	292	0.649	9
10	People can no longer afford rent	20	24	11	22	13	90	286	0.636	10
11	Development of slums	19	24	14	19	14	90	285	0.633	11

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It shows the effects of a lack of affordable housing for low cost housing (LCH) delivery for middle income earners in Nigeria. Homelessnessranked first with RSI value of 0.747 (74.70%) followed by lack of affordable housing ranked second with RSI value of 0.716 (71.60%), high property prices ranked third with RSI value of 0.704 (70.40%). Development of slums ranked least with RSI value of 0.633 (63.30%) followed by people can no longer afford rent with RSI value of 0.636 (63.60%) and people may no longer afford electricity with RSI value of 0.649 (64.90%) in ascending order.

## 4.5 SOLUTIONS TO IMPROVE THE HOUSING CRISIS FOR LOW COST HOUSING (LCH) DELIVERY FOR MIDDLE INCOME EARNERS IN NIGERIA

Table 5 identified the solutions to improve the housing crisis for low cost housing (LCH) delivery for middle income earners in Nigeria and the ranking of the factors through the use Relative Significance Index (RSI).

			earne	ers in	Nige	ria				
S/N	FACTORS	5	4	3	2	1	TOTAL	TWV	RSI	RANK
1	Governments have to buy land and real estate	31	27	13	11	8	90	332	0.738	1
2	Fund via Bond Elections	31	27	13	9	10	90	330	0.733	2
3	Limitation of land speculation	31	18	12	19	10	90	311	0.691	3
4	Economic growth and real incomes	26	24	14	16	10	90	310	0.689	4
5	Building smaller homes	26	24	14	16	10	90	310	0.689	4
6	Higher taxes on returns from real estate investments	31	18	12	10	19	90	302	0.671	5
7	Availability of land	19	22	19	21	9	90	291	0.647	6
8	More efficient use of space	20	22	16	21	11	90	289	0.642	7
9	Rent control	19	22	18	19	12	90	287	0.638	8
10	Revitalize Neighborhoods	18	21	18	23	10	90	284	0.631	9
11	Limitation of land speculation	18	21	18	23	10	90	284	0.631	9
12	Security of lives and properties	18	24	11	27	10	90	283	0.629	10
13	Focus on the construction of affordable housing instead of luxury homes	21	19	14	21	15	90	280	0.622	11
14	Create affordable Housing Trusts	21	19	14	21	15	90	280	0.622	11
15	Reduction in cost of renting	20	18	16	17	19	90	273	0.607	12
16	Offer Incentives, Tax Breaks	24	11	19	16	20	90	273	0.607	12
17	Social and public housing	20	17	16	18	19	90	271	0.602	13
18	Availability of mortgages	20	17	16	18	19	90	271	0.602	13
19	Living in rural areas has to become more attractive	23	11	20	14	22	90	269	0.598	14
20	Government support for renters in case of financial crisis	21	11	19	16	23	90	261	0.580	15
21	Access to public services	21	11	16	18	24	90	257	0.571	16

Table 5: Solutions to improve the housing crisis for low cost housing (LCH) delivery for middle income
earners in Nigeria

It shows ways to improve the housing crisis for low cost housing (LCH) delivery for middle income earners in Nigeria. Governments have to buy land and real estate ranked first with RSI value of 0.738 (73.80%) followed by availability of fund via bond elections ranked second with RSI value of 0.733 (73.33%), limitation of land speculation ranked third with RSI value of 0.691 (69.10%). Access to public services ranked least with RSI value of 0.571 (57.10%) followed by Government support for renters in case of financial crisis with RSI value of 0.58 (58.00%) and living in rural areas has to become more attractive with RSI value of 0.598 (59.80%) in ascending order.

### V. CONCLUSION

This research work investigates the prospect of low cost housing (LCH) delivery on middle income earners in Nigeria. Housing is essentially one of the basic needs of man. After food and clothing, it constitutes the third necessity of life [1]. The causes of housing shortage for low cost housing (LCH) delivery for middle income earners in Nigeria, its effects of a lack of affordable housing and the solutions to improve the housing crisis for low cost housing (LCH) delivery for middle income earners in Nigeria were analysed. Housing shortage is a serious problem, not only in the Nigeria but also in many other countries around the world. The causes and effect of lack of affordable housing for low income earners in Nigeria were identified and its probable solutions to solve these identifiable problems were discussed. Housing is the job of providing houses for people to live in. and housing is the activity of enclosing something or providing a residence for someone while house is a structure serving as an abode of human beings. Generally, housing, or more generally living spaces, refers to the construction and assigned usage of houses or buildings collectively, for the purpose of sheltering people that is, the planning or provision delivered by an authority, with related meanings. Importance of affordable housing are for the provision of decent, reduces stress, toxins, and infectious disease, which leads to improvement in both physical and mental health. Affordable housing also frees up funds within families' tight budgets to spend on health care and food. Housing can also refer to as an accommodation, accommodations, dwelling, dwellings, habitation, and habitations.

### VI. RECOMMENDATIONS

Based on the investigation made so far on the prospect of low cost housing (LCH) delivery for middle income earners in Nigeria the following recommendations were made:

- 1. Governments have to set a proper framework so that the incentive to construct affordable housing opportunities to increases significantly.
- 2. There should be availability of mortgages
- 3. To create affordable Housing Trusts
- 4. Revitalization of neighborhoods to reduce rural-urban migration
- 5. Provision of land at subsidized rate to encourage middle income earners to own house.
- Effort should be geared towards research into the use of locally sourced building materials. Only then we can provide enough affordable housing for the poorest among us who would end up homeless otherwise.

#### REFERENCES

- [1]. Agbola. S. B. (2007): "Housing and Health: A book of readings": Housing Development and Management, Department of Urban and Regional Planning, University of Ibadan. Malijoe Softprint, Ibadan, Oyo state. pp 499-537 Delivery [2]. Nubi. T. 0. (2002): "Affordable Housing in Nigeria: Thus Far and а
- [2]. Nubi, T. O. (2002): "Affordable Housing Delivery in Nigeria: Journey Thus Far and a RoadMap".<u>http://www.sahf.org.za/Images/Docs/Papersadobe2008/ppt/Nubi,20Timothy%20</u> Retrieved on 20/06/2021.
- [3]. Maslow, A. H. (1943): A theory of human motivation. Psychological Review, 50(4), 370-396.
- [4]. United Nations Habitat 11 (1996):Report of the United Nations conference on human settlements (Habitat II). Istanbul: United Nations.
- [5]. Ebekozien, A., Abdul-Aziz, A-R., and Jaafar, M. (2017): Comparative analysis of low-cost housing policies in Malaysia and Nigeria. International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies, 8(3), 139-152.
- [6]. **Ebekozien, A. (2019):** Root cause analysis of demand-supply gap to low-cost housing in Malaysia. PhD thesis submitted to Universiti Sains Malaysia, Malaysia
- [7]. Kremer, William, Claudia H. (2013): Abraham Maslow and the pyramid that beguiled business. BBC (2013, Sep. 1). Available at https://www.bbc.com/news/magazine-23902918/ [accessed 20 June 2020].
- [8]. Adegboye K. (2012): 52 years of homelessness: experts proffer solutions to dearth of affordable housing-Nigerian Vanguard news, 2012. Available at https://www.vanguardngr.com/2012/10/52-years-of-homelessness-experts-proffer-solutionsto-dearth-ofaffordable-housing/ [accessed 25 April 2020].
- [9]. Baumeister, Roy F, Mark R L. (1995): The need to belong: desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 1995, 117(3), 97-529.
- [10]. Sarah Jeong (2020): The Healthy People 2020. Housing Shortage: Causes, Effects and Solutions. "Gentrification and housing shortages are complex issues." <u>https://environmental-conscience.com/housing-shortage-causes-effects-solutions/</u> Retrieved Thursday, May 20<sup>th</sup>, 2021.
- [11]. Bonnefoy, X. (2009):Inadequate housing and health: An overview. Int J Environ Pollut. 2007;30(3):411-429. 2. Krieger J, Higgins DL. Housing and health: time again for public health action. Am J Public Health. 2002;92(5):758-68.
- [12]. Krieger J., Higgins D. L. (2002): Housing and health: time again for public health action. Am J Public Health. 2002;92(5):758-68.
- [13]. Mitchell C. S., Zhang J. J., Sigsgaard T., Jantunen M., Lioy P. J., Samson R., Karol M. H. (2007): Current state of the science: health effects and indoor environmental quality. Environ Health Perspect. 2007;115(6):958-64. doi: 10.1289/ehp.8987
- [14]. Hwang S., Fuller-Thomson E., Hurlchanski J. D., Bryant T., Habib Y., Regoeczi W. C. (1999): Housing and population health: a review of the literature. Sociology and Criminology Faculty Publications. 1999;126.
- [15]. Adamkiewicz, G., Zota A. R., Fabian M. P., Chahine T., Julien R., Spengler J. D., and Levy J. I. (2015): Moving environmental justice indoors: understanding structural influences on residential exposure patterns in low-income communities. Am J Public Health. 2011;101 Suppl 1:S238-245. doi: 10.2105/AJPH.2011.300119
- [16]. Office of the Surgeon General (2009):. The Surgeon General's Call to Action to Promote Healthy Homes. Rockville (MD): Office of the Surgeon General; 2009.
- [17]. Kruger, D.J., Reischl, T.M., and Gee, G.C. (2007): Neighborhood social conditions mediate the association between physical deterioration and mental health. Am J Community Psychol. 2007;40(3-4):261-71.
- [18]. Bonnefoy, X.R., Braubach, M., Moissonnier, B., Monolbaev, K, and Robbel, N. (2003): Housing and health in Europe: preliminary results of a pan-European study. Am J Public Health. 2003;93:1559-63.
- [19]. Weich S, Blanchard M, Prince M, Burton E, Erens B, Sproston K. (2002): Mental health and the built environment: crosssectional survey of individual and contextual risk factors for depression. Br J Psychiatry. 2002;180:428-33.
- [20]. American Academy of Pediatrics (2001):. Falls from heights: windows, roofs, and balconies. Pediatrics. 2001;107:1188-91.
- [21]. Gabriel Fadairo and Abiodun Olukayode Olotuah (2013): Low-Cost Housing for the Urban Poor in Akure, Nigeria: Materials and Techniques of Construction. Journal of Environment and Earth Science ISSN 2224-3216 (Paper) ISSN 2225-0948 (Online) Vol. 3, No.9. www.iiste.org
- [22]. Nubi, T. O. (2002): "Housing Finance in Nigeria- Need for Re-Engineering" ResearchPaperprepared for Ideal Habitat Cooperative Housing Initiatives, Nigeria.
- [23]. Ebekozien, A., Abdul-Aziz, A-R, B., and Jaafar, M. (2019): Housing finance inaccessibility for low-income earners in Malaysia: Factors and solutions. Habitat International, 87, 27-35. doi.10.1016/j.habitatint.2019.03.009
- [24]. Olanrewaju, S.B.O. and Oyebiyi, S.A. (2016): Role of Mortgage Bank in Housing Production. International Journal of Engineering and Innovative Technology (IJEIT), Volume 6, Issue 2, ISSN: 2277-3754. www.ijeit.com

- [25]. Hotez P. J. (2008): Neglected infections of poverty in the United States of America. PLoS Negl Trop Dis. 2008;2(6):e256.
- [26]. Evans J., Hyndman S., Stewart-Brown S., Smith D., Petersen S. (2000): An epidemiological study of the relative importance of damp housing in relation to adult health. J Epidemiol Community Health. 2000;54:677-86.
- [27]. Shaw M. (2004): Housing and public health. Annu Rev Public Health. 2004;25:397-418. doi: 10.1146/annurev.publhealth.25.101802.123036
- [28]. Lloyd E. (1991): The role of cold in ischaemic heart disease: a review. Public Health. 1991;105:205-215.
- [29]. Cutts D. B., Meyers A. F., Black M. M., Casey P. H., Chilton M., and Cook J. T. (2011): US housing insecurity and the health of very young children. Am J Public Health. 2011;101(8):1508-14.
- [30]. Stein L. (1950): A study of respiratory tuberculosis in relation to housing conditions in Edinburgh: I.-the Pre-War Period. Br J Soc Med. 1950;4(3):143-69.
- [31]. Fisk W. J., Lei-Gomez Q., Mendell M. J. (2007): Meta-analyses of the associations of respiratory health effects with dampness and mold in homes. Indoor Air. 2007;17(4):284-96. doi: 10.1111/j.1600-0668.2007.00475.x
- [32]. Mendell M. J., Mirer A. G., Cheung K., Tong M., Douwes J. (2011): Respiratory and allergic health effects of dampness, mold, and dampness-related agents: a review of the epidemiologic evidence. Environ Health Perspect. 2011;119(6):748-56. doi: 10.1289/ehp.1002410
- [33]. Raschke, C. (2016): Best practices: Affordable housing in Nigeria. Bonn, Germany: Inclusive Business Action Network
- [34]. Andrew Ebekozien, Abdul-Rashid Abdul-Aziz, and Mastura Jaafar (2020): Low-Cost Housing Provision in Nigeria: Lessons From The Malaysia Experience. Journal Of Surveying, Construction And Property (JSCP) Volume11, 2020 Issue 1, ISSN:1985-7527. Https://Ejournal.Um.Edu.My/Index.Php/JSCP/Article/View/24567/11723
- [35]. Oyebisi S., Ede A., Afolayan O., Oladeji S., Oniemayin B., and Lazarus J. (2020): Assessing the low-cost buildings in Nigeria using Hydraform blocks as walling materials: the journey so far. IOP Conf. Series: Materials Science and Engineering 1036 (2021) 012044 IOP Publishing, doi:10.1088/1757-899X/1036/1/012044
- [36]. **Bakhary, N. (2005):** "Arbitration in Malaysia Construction Industry" Retrieved 12th January, 2008 from http://www.efka.utm.my/thesis/images/4MASTER/2005/2JSBP/Part1/CHOOTZERCHING MA011138D03TT1.doc, 2005
- [37]. Kangwa, J. and Olubodun, F. (2003): "An investigation into Home Owner Maintenance Awareness, Management and Skill-Knowledge Enhancing Attributes", Structural Survey, 21(2) 2003,70-78.

Olanrewaju Sharafadeen Babatunde Owolabi, et. al. "Prospect of Low-Cost Housing Delivery for Middle Income Earners in Nigeria." *The International Journal of Engineering and Science (IJES)*, 10(07), (2021): pp. 48-54.