



QUANTITATIVE ANALYSIS OF SOCIO-ECONOMIC DRIVERS OF HOUSING AND URBAN DEVELOPMENT PROJECTS IN MEGACITIES

Afolabi, Adedeji, Ojelabi, Rapheal, Tunji-Olayeni, Patience and Omuh, Ignatius

Department of Building Technology, Covenant University, Ogun State, Nigeria

Afolabi Adesola

Department of Economics and Development Studies,
Covenant University, Ogun State, Nigeria

ABSTRACT

The exponential growth in the world population, coupled with the high rural-urban migration is leading to the graduation of ordinary cities to Megacities. With the status of mega-cities comes their special need in terms of housing and other urban development infrastructures. The study aimed to carry out a quantitative analysis of socio-economic drivers of housing and urban development projects in Megacities. The research design used a cross-sectional survey through a questionnaire instrument. Out of two hundred (200) questionnaires distributed to policy makers and construction professionals employed in government agencies, a total of one hundred and fifty seven (157) questionnaires were retrieved. Using Statistical tools of Principal Component Analysis (PCA) and Categorical Regression the Housing and Urban Development project crucial for the sustenance of Megacities were grouped while the socio-economic drivers that engender investment towards housing and urban development projects were identified. It is important that population growth in megacities are properly controlled as to forestall pressure on available infrastructures. Politics and the supply of necessary housing and urban development projects should not mix, as they are separate entities. In project financing, government should intensify adequate taxation policies to effectively fund different classes of housing and urban development projects in megacities.

Keywords: Construction Industry, Housing, Investment, Mega-Cities, Socio-Economic

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1. INTRODUCTION

The world as at 2017 has over forty-seven (47) mega cities and intends to graduate many other cities to this status soon due to high urban migration. Mega cities due to their uncontrollable population are plagued with high slum dwellers, high crime, homelessness, urban sprawl, traffic congestion, gentrification, air pollution, high energy and material consumption leading to uncontrollable waste generation. A crucial element affecting Mega cities is the exponential increase in world population. In the last fifty (50) years, the world population has increased in double figures especially in developing countries due to lack of control. Matawal (2011) reported that as the world progresses further into the nearest future, more of the rising population would be experienced in urban centres in developing countries. Already, the population of urban dwellers in developed countries is already saturated. These figures increased from 20 percent as at fifty (50) years go to a staggering 40 percent as at 2010.

According to the United Nation's standards of megacities, Lagos state in Nigeria can be classified as a megacity, although, with the growing population, the infrastructural base cannot be assumed to be standard. The pressure on the available infrastructure can be evident through the undocumented immigrants migrating into the state from neighboring states within Nigeria and other countries. Ilesanmi (2010) recorded that the uncontrollable population growth and the infrastructural dearth has resulted in over hundred (100) slums in the last decade. Lagos State, popularly regarded as the 'centre of excellence' Lagos is reputed to be one of the most urbanized and densely populated cities in sub-Saharan Africa and as a result, has a fair share of the global housing crisis to contend with (Adebamowo, 2011). The situation is made even more complicated with the massive rural-urban migration it experiences because people from all parts of the country consider Lagos as a place to be and as a result move into the city daily. This is not strange considering its status as both a commercial nerve centre which plays host to most administrative and commercial activities as well as being the former capital city of Nigeria. Moreover, economic pressures in large cities such as Lagos are likely to accelerate the rate of transformation, thus making it possible to see and feel the effect. The new status as a megacity is now sort of a burden as Lagos struggles to meet the housing and infrastructural demands of its teeming populace (Aworemi *et al.*, 2011).

According to Ademiluyi and Raji (2008), the deficiencies in the available housing and urban infrastructures should focus more than the available quantities to the quality of the products in megacities. A focus on quantities of housing and urban facilities has led to issues of congestion and dilapidated structures that have become death traps due to lack of maintenance. In trying to satisfy the quantity need in the aspect of housing, building collapse has become an unfriendly companion in this megacity. Although, housing challenges can be said to be a global phenomenon that the world tries to deal with, every megacity has its unique nature towards dealing with these challenges. While some have dealt with it through public housing some have partnered with the private sector in order to tackle the deficiencies in the housing sector (Oyeyipo *et al.*, 2016).

The provision of adequate housing and urban infrastructures needs to be given urgent attention in urban and rural centres so as to curtail some of the dire world challenges that may cause imbalance in the ecosystem. In order to arrest the different challenges posed by the over population of Lagos, there is need to probe into the socio-economic drivers of investment in housing and urban facilities for urban centres which can help alleviate some of the problems faced within the date such as environmental pollution, high volume of traffic and insufficient housing structures. Based on the need to carry out a quantitative analysis of socio-economic drivers of housing and urban infrastructures in megacities, the objectives of the study are to;

- Assess the crucial areas of infrastructural deficiencies in the housing and urban facilities in the urban centres in megacities.
- Evaluate the socio-economic drivers of housing and urban development projects being invested in megacities.

2. RESEARCH METHOD

This section briefly explains the procedure used in carrying out the survey and subsequent analysis of the data obtained. The study used a cross-section survey research design. The population for this study was limited to policy makers including relevant and appropriate professionals in the construction industry in the Ministry of Physical Planning and Urban Development in Lagos State, Lagos State Physical Planning and Development Authority (LSPPDA) and Lagos State Development and Property Corporation (LSDPC). The respondents included government/public servants, educational institutes, and the construction professionals includes builders, architects, quantity surveyors, civil engineers, service engineers and urban and regional planners, all involved in the built environment and any other profession related to construction delivery services in housing and urban development projects. Since the researcher could not cover all the construction professionals in Lagos State involved in housing and urban development projects, therefore a sample was chosen. The sample size was randomly selected using the convenience sampling technique due to the unavailability of a sample list for the respondents. The sample chosen for this research work were two hundred (200) respondents to justify the questionnaires to be administered. The main data instrument adopted for this study is the questionnaire. The questionnaires were personally administered and were given to individuals and professionals involved in the housing and urban development projects.

Out of the two hundred administered data instrument, one hundred and fifty-seven (157) were returned, scrutinized and deemed free of errors to be used in the study which represented a 79% response rate. The data collected was coded and analyzed using SPSS v.21, while the statistical tools of charts, Principal Component Analysis (PCA) and Categorical Regression (CATREG) were used. The PCA was used to categorize the housing and urban infrastructures while the CATREG was used to decipher the significant socio-economic drivers influencing investment in housing and urban development projects.

3. RESULT AND DISCUSSION OF FINDINGS

The study was aimed at assessing the socio-economic drivers of housing and urban infrastructures in mega-cities. This section presented the result and the discussion of the research objectives. The results analysed are based on the crucial areas of infrastructural deficiencies in the housing and urban infrastructural sector and the socio-economic drivers of housing and urban development projects in mega cities.

3.1. Infrastructural deficiencies in the housing and urban facilities sector

This section assessed the crucial areas of infrastructural deficiencies in the housing and urban infrastructure sector in a megacity from the perception of the government agencies and construction professionals. From Ilesanmi (2010), infrastructural needs of the population in mega-cities range from Housing, Civil construction, Transport systems, Renewal urban designs, Waste disposal systems, Health care facilities, Potable public water systems, Security infrastructures and Power generating, distribution and supply facilities. The crucial areas were grouped using statistical tool of Principal Component Analysis (PCA). From the PCA test, Figure 2 showed the object points for the crucial areas of infrastructural deficiencies in the

Quantitative Analysis of Socio-Economic Drivers of Housing and Urban Development Projects in Megacities

housing and urban infrastructure sector in the megacity under study. The object point showed that the crucial areas of the housing and urban infrastructures grouped into three (3) categories. Table 1 showed the component analysis breakdown of the object points shown in Figure 1.

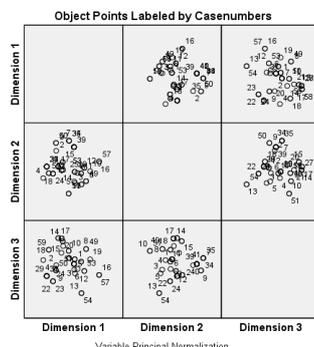


Figure 1 Object points for the crucial areas of housing and urban infrastructures

In Table 1, component 1 showed Civil construction: Road redesign, construction, upgrading and rehabilitation (0.773), Waste disposal and functional drainage systems (0.742), Transportation: Integrated transportation systems and traffic management (0.666) and Energy and regular power generation, distribution and supply (0.595). These variables have been termed Integrated Civil Engineering Structures due to the components that are mainly based on civil engineering designs. Component 2 comprised of Potable water supply and environmental sanitation (0.900) and Urban design: greening, landscaping, open space beautification, recreational facilities (0.883). Component 2 is more concerned about sustainability and resilient designs for the environment. In Component 2, the urban planning considers for water supply, sanitation and urban designs in order to make other components 1 and 3 function effectively. This component was termed Water/Environmental Planning Structures/ Design. Component 3 comprised of Housing (-0.768), Health care delivery: at the primary, secondary and tertiary health care levels (0.618) and Infrastructure for Security of lives and property (0.531). These variables have been termed Primary Building Structures. These buildings have to do with the everyday life of the population. The buildings supplied in this component comprises of public residential apartments, health care centres and buildings for security agencies to protect lives and properties. This means that as housing deficit increases, the infrastructural deficit in terms of health care systems and security infrastructures would increase.

Dekolo and Oduwaye (2011) reported that the ranking of Lagos State among the group of megacities has come with its woes of reducing the standard of living to about nineteen (19) percent. The unusual population growth within the states has resulted in a pressure on available land within the state with only above 3000 square kilometres to provide housing for its over 20 million occupants. The demand for land to accommodate the housing needs of Lagos has led to the development of some cities of the outskirts of Lagos to put up with the deficiencies in the housing sector (Oloto and Adebayo, 2011). With a population density second only to Bombay in India, other infrastructures such as roads, health care systems have become inadequate in spite of the enormous investment from past and present governments (Adeoye, 2009). In order to quickly meet the demands of the growing population, it can lead to uncontrolled and unorganized developments, if proper urban planning is not put in place and enforced. With over 20 million people residing in this megacity and several influx on a daily basis, the components 1-3 identified in this study needs dire investment from both private and the public sector. Although, the authorities in the megacity are trying, the

overwhelming populations put more pressure on the existing and newly completed facilities. A pictorial scenario where in the health care system, there are twenty six (26) registered General Hospitals (public hospitals) and two hundred and fifty-six (256) public healthcare centres to service over 20 million citizen within the megacity has led to crowded emergency wards, endless waiting to secure shared congested rooms, frustrated health workers and so on. For other housing and urban components identified in the study, the scenarios are similar, even with several public projects springing up monthly. The study posits that until the socio-economic drivers of housing and urban development projects are carefully controlled, the pressure of an insufficient and deficient infrastructure may persist.

Table 1 PCA for crucial housing and urban infrastructures

	Housing and Urban Development Projects	Component 1	Component 2	Component 3
Component 1	Civil construction: Road redesign, construction, upgrading and rehabilitation.	0.773	-	-
	Waste disposal and functional drainage systems	0.742	-	-
	Transportation: Integrated transportation systems and traffic management.	0.666	-	-
	Energy and regular power generation, distribution and supply	0.595	-	-
Component 2	Potable water supply and environmental sanitation.	-	0.900	-
	Urban design: greening, landscaping, open space beautification, recreational facilities.	-	0.883	-
Component 3	Housing	-	-	-0.768
	Health care delivery: at the primary, secondary and tertiary health care levels.	-	-	0.618
	Infrastructure for Security of lives and property.	-	-	0.531

3.2. Socio-economic drivers of housing and urban infrastructures

The study posits that there are socio-economic drivers in the engagement of funds to carry out housing and urban development projects. Crucial variables identified from literatures include Growing urbanisation, Increasing population growth, Limited land supply, Climatic conditions, Availability of funds, Accessibility to funds, High interest rate, Lack of collateral security, High bureaucracy in processing loans, Type of government, Government laws and policies, Political factor, Change in government, Vandalism of available infrastructure, Poor maintenance culture, Availability of technical know-how, Availability of Manpower, Availability of technology and efficient designs, Availability of ICT, High cost of building materials, Economic state of the nation, Inflation, Poverty, Social status of the people, Regeneration of slum, Congestion, Environmental pollution and Physical planning of the environment. The statistical tool of categorical regression (CATREG) was used to test the influence of these socio-economic drivers on the housing and urban development components in Table 2. Table 3 showed the categorical regression of the socio-economic drivers of housing and urban infrastructures. In Table 3, the socio-economic drivers influence the housing and urban infrastructures with the R square values at 67%, 84% and 96% in the three (3) housing and urban development components respectively. In component 1 – Integrated Civil Engineering Structures, the significant socio-economic drivers that can influence the investment in them by policy makers includes – growing urbanisation, population growth rate, availability of funds and availability of technology and efficient design. This revealed that

Quantitative Analysis of Socio-Economic Drivers of Housing and Urban Development Projects in Megacities

increasing population growth which had a beta factor of 75% had more effect on investment in integrated civil engineering structures in mega cities. This means that with growing population in mega cities, more investment and consideration is given to road networks, transport systems, waste systems and generation of power. In component 2 – Water/Environmental Planning Structures/Design, the influencing socio-economic drivers that can influence the investment in them by policy makers includes population growth rate, poverty, physical planning of the environment and economic state of the nation. Component 2 was mostly influenced by the economic state of the nation which contributed a beta factor (effect size) of 120%. This means that policy makers in order to provide portable water systems and other urban designs such as landscaping etc. considered the economic state of the nation I in order to provide such amenities. In Component 3 – Primary Building Structures, these components were influenced by socio-economic drivers such as urbanisation, population growth rate, political factor and poverty. This component was mostly energized by growing urbanisation which had a beta factor (effect size) of 69%. This translates to mean that provision of housing facilities, health care facilities and other infrastructures to ensure security of lives and properties were hinged on the growing urbanisation in mega cities.

Table 2 Socio-economic drivers of housing and urban development projects

	Beta Component 1	Sig.	Beta Component 2	Sig.	Beta Component 3	Sig.
R square	0.674		0.838		.955	
F	8.490	0.000	4.521	0.020	9.751	0.000
Growing urbanisation	.194	0.017	1.161		.688	0.003
Increasing population growth	-.746	0.040	-.319	0.028	-.274	0.032
Limited land supply	.623	0.982	.463	0.051	.748	0.111
Climatic conditions	.408	0.301	.468	0.229	.332	0.300
Availability of funds	-.070	0.021	.616	0.060	-.051	0.910
Accessibility to funds	-.675	0.209	-.013	0.851	.179	0.452
High interest rate	.249	0.824	1.129	0.842	.143	0.990
Lack of collateral security	.326	0.583	.006	0.333	.389	0.616
High bureaucracy in processing loans	-.919	0.410	-1.430	0.060	-.126	0.565
Type of government	.379	0.098	.458	0.499	.171	0.844
Government laws and policies	.086	0.871	.040	0.082	-.518	0.572
Political factor	.305	0.060	.565	0.313	-.007	0.032
Change in government	.369	0.360	1.436	0.051	.212	0.066
Vandalism of available infrastructure	-.221	0.411	.842	0.919	.631	0.089
Poor maintenance culture	-1.105	0.082	-1.949	0.069	-.624	0.120
Availability of technical know how	-.106	0.060	-.567	0.381	.334	0.692
Availability of Manpower	.096	0.572	-.695	0.682	.102	0.090
Availability of technology and efficient designs	-.269	0.033	-.025	0.450	-.148	0.432
Availability of ICT	.392	0.059	.149	0.560	1.686	0.939
High cost of building materials	.825	0.111	.290	0.058	-.347	0.054
Economic state of the nation	-.944	0.929	-1.244	0.014	-.377	0.054
Inflation	.508	0.081	-.280	0.211	.123	0.871
Poverty	-.032	0.209	.991	0.009	.093	0.000
Social status of the people	-.662	0.412	-.436	0.880	-.792	0.852
Regeneration of slum	1.443	0.500	1.624	0.412	.270	0.212
Congestion	.307	0.072	-.326	0.062	-.468	0.560
Environmental pollution	-.242	0.320	-.785	0.360	.279	0.300
Physical planning of the environment	.147	0.569	.007	0.001	.071	0.248

Individuals in the mega city under study are confronted with myriads of housing problems, which are essentially connected with the hardships they face in securing and

retaining a residence. Some of the socio-economic drivers of spurring investment in housing and urban development projects as highlighted in the result are discussed further.

3.2.1. Growing Urbanisation:

It should be noted that the problem of urbanization in Nigeria is not necessarily that of level but that of rate. For example, while the level of urbanization in Nigeria is put at 36%. This rapidity in the rate of urbanization is so overwhelming that it generally far exceeds the speed with which government are able to respond to the dynamics of urbanization due to inadequate facilities, resources and capabilities at their disposal (Yusuff, 2011). This is one of the problems that led to the development of residential slums in Nigerian cities (Olusegun, 2009). According to Ilesanmi (2010), fuelled by the oil-boom in the 1970s in Nigeria, the enduring by-products of rapid urbanization include: slums, overcrowding, poor sanitation, air and water pollution, clogged sewers, solid-waste contamination, staggering urban traffic, illegal conversion of land-use and unbridled physical development without appropriate legislation, regulation and enforcement, inability to march the housing needs with available resources and inadequate physical infrastructure to accommodate the population explosion have impinged negatively on social infrastructure.

3.2.2. Population growth rate

Higher rates of in-migration exacerbated many urban population problems such as unemployment, inadequate housing, food and water supply, pollution, and traffic problems (Ilesanmi, 2010). Provision of transportation and other infrastructure constitute major planning issues. According to Akinmoladun and Oluwoye (2007), housing inadequacy originated from the exponential population growth rate experienced in the city, which far exceeds the rate of economic development. Increase in the urban population has resulted in the proliferation of slums and shantytowns. Oduwaye (2009) opined that the proliferation of these shantytowns results in the unwieldy expansion of the urban centres, which poses a major planning problem as the provision and management of roads, drainage and sewage systems among other infrastructure, proves very difficult.

3.2.3. Political factor

Undue political interference and poor coordination of government policy have a negative influence on government projects including the development of road infrastructure (Adeoti, 2009). For instance, the negative attitude of successive government to complete the predecessor project has led to the abandonment and uncompleted projects in several states in Nigeria. Instances of lack of continuity and poor implementation of public housing programs are the increasing number of abandoned public housing schemes across the length and breadth of Nigeria including the Shagari's Low-Cost Housing Schemes between 1979-1983 (Ibem, Anosike and Azuh, 2011). Although, in Lagos a successive government of the same party (Action Congress of Nigeria, ACN)/ All Progressives Congress (APC) has ensured continuity of housing and urban development projects such as the Rent-To-Own (RTO) housing schemes, Bus Rapid transit (BRT) system, the Light rail systems and other mega infrastructures.

3.2.4. Project Financing

The issue of finance in housing is an important factor that determines the success or failure of the project (Tunji-Olayeni *et al.*, 2017). It also determines whether the idea, no matter how important it may be, will take off at all or die at the drawing board. According to Olusegun (2009), finance is perhaps the most important driver in the ultimate success of any type of

Quantitative Analysis of Socio-Economic Drivers of Housing and Urban Development Projects in Megacities

housing delivery, no matter how simple or sophisticated a project may be and whether it is a private dwelling or a vast estate development project, without the solid financing arrangement it will either remain on the drawing board as monumental graveyard of uncompleted project (Oyeyipo *et al.*, 2016). The word “financing” refers to the process of obtaining funds or capital, generally for the purpose of developing and/or investing by gaining control over assets. Ibem *et al.* (2011) observed that scarcity of housing finance has become more critical now that fiscal and budgetary constraints have forced government to reduce drastically the level of financial support given to its agencies to execute public housing projects. Ilesanmi (2009) noted that the last two decades have witnessed substantial cuts in funding to operate, improve and maintain public housing in Lagos State. Ajanlekoko (2001) stated that without an effective finance system, no housing and urban development policy can be effectively implemented.

3.2.5. Poverty

This is clearly manifested in the growing number of largely unskilled, unemployed and homeless migrants from the rural areas of the country into Lagos, who find it convenient and affordable to live in existing slum communities or create new ones that are un-serviced by basic urban facilities, services, utilities and amenities (Abosedo, 2006). Poverty creates slum and change the pattern of houses which cause the appearance of informal activities, which in turn change the land use pattern of the community (Aluko, 2012). According to Aluko (2012) these changes in land use have an impact on physical structures, infrastructural facilities and services, socio-economic values and even the psyche of the residents of the area. No responsible government will tolerate a situation where majority of the governed not only live below the poverty level but also remain as perpetual slum dwellers.

3.2.6. Planning of the environment

Buildings are poorly laid out with inadequate roads between them and inadequate drainage and provision for refuse evacuation. There is a high incidence of pollution (water, solid waste, air and noise) and inadequacy of open spaces for other land uses (Olotuah and Bobadoye, 2009). Without planning any government cannot successfully carry out housing and urban development projects (Ogunde *et al.*, 2017). According to Oduwaye (2009); Ibem (2014) and Ibem and Alagbe (2015), physical planning like other areas of human endeavor has a credible role to play if sustainable physical development is to be achieved in any society. This provides a plan-document to be used for physical development of the human habitat. Oduwaye (2009) reports that by implication urban planning provides the led system for “building” the environment which is fundamental for the attainment of sustained control and development of the environment. Physical planning documents are vehicles for environmental development in the immediate term and set the direction of future growth. Therefore, sustainable physical development and management of human settlement hinges greatly on the effectiveness of physical development plans (Afolabi and Dada, 2014). This involve the reconciliation of land uses, provision of the right site for the right use, control of development, provision of facilities, services and public goods, preservation, protection and conservation of resources, preservation of heritage among others (Oduwaye, 2009).

3.2.7. Economic state of the nation

According to Olotuah and Bobadoye (2009), massive housing intervention stimulates the economy of a nation and is a basis for guided urban development. This is within the stride of the government to accomplish if considered against the background of high cost of housing and its national economic implications. Until the current decade, economic growth posed

significant challenges to the Nigerian economy, especially during the decades of the 1980s and 1990s (FGN, 2010). However, between 1999–2008, the performance of the Nigerian economy improved significantly. With the current economic recession in most countries, it would affect the degree to which new housing and urban development projects are implemented and the completion of those projects that have started, leading to abandonment. Human Settlements Reference Group (2005) budget constraints impact on the scale of delivery and on the quality of delivery – as a result there are increasing numbers of people living in inadequate housing conditions and without access to basic services or facilities.

3.2.8. Availability of technology and efficient designs:

Modern technology leading to efficient and cost-effective designs have spurred private developments to delve into invest in sustainable projects. The uses of technology have streamlined construction activities making it less laborious to deliver (Afolabi *et al.*, 2017; Afolabi *et al.*, 2017). With technology, governments can tap into effective delivery of mega structures in various cities. According to Ilesanmi (2010), the problem of public housing is closely tied to the economic conditions of the users and to the question of how to build a house that the urban low-income can afford. This calls for practical solutions to low-cost housing design and construction through the use of locally-sourced building materials and culturally-sensitive designs (Ilesanmi, 2010). This includes the development of building methods and technologies that are both appropriate to the resources and skills available, and which offer flexibility while reducing cost. The imperative is for architects and planners to re-examine conventional standards, to explore new roles for professionals in the housing and urban development processes, and develop innovative delivery strategies.

4. CONCLUSION AND RECOMMENDATION

This research examined the socio-economic drivers that can influence investment in housing and urban development projects in megacities. The study assessed the crucial areas of infrastructural deficiencies in the housing and urban development sector in megacities. The crucial areas were grouped into component 1 - Civil construction: Road redesign, construction, upgrading and rehabilitation, Waste disposal and functional drainage systems, Transportation: Integrated transportation systems and traffic management and Energy and regular power generation, distribution and supply. These variables were termed Integrated Civil Engineering Structures due to the components that are mainly based on civil engineering designs. Component 2 - Potable water supply and environmental sanitation and Urban design: greening, landscaping, open space beautification, recreational facilities. This component was termed Water/Environmental Planning Structures/ Design. Component 3 - Housing, Health care delivery: at the primary, secondary and tertiary health care levels and Infrastructure for Security of lives and property. This component was termed Primary Building Structures. In evaluating the socio-economic drivers of housing and urban development projects being invested in Megacities, the study identified drivers such as growing urbanisation, population growth rate, availability of funds, availability of technology and efficient design, poverty, physical planning of the environment, economic state of the nation and political factor. These socio-economic drivers are significant influencers in housing and urban development projects that are constructed in mega-cities. In future studies, the indices of each of the socio-economic drivers can be investigated against the available mega structures in megacities. It is highly recommended that levels of control be put in place to curtail the socio-economic drivers of uncontrolled population growth and growing rural-urban migration in mega-cities in order to reduce the unhealthy pressure on available infrastructures in megacities. In order to sustain the infrastructural growth in megacities, politics should not be a factor in what

Quantitative Analysis of Socio-Economic Drivers of Housing and Urban Development Projects in Megacities

housing and urban development projects to invest in. There should be high levels of continuity in projects among successive governments. Politics and the supply of necessary housing and urban development projects should not mix, as they are separate entities. Housing and urban development infrastructures require funds in terms of availability and accessibility. Therefore, policy makers in megacities should partner private stakeholders and international funding bodies on accessing low-risk funds to finance mega infrastructures for their citizenry. Adequate and quality checks should be put in place to ensure high returns on internally generated revenues (IGR) within megacities.

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REFERENCES

- [1] Abosede, F. B. (2006). Housing in Lagos Mega City-Improving Livability, Inclusion and Governance. International Conference on Building Nigeria's capacity to implement economic, social and cultural rights: Lessons learned, challenges and the way forward, 2, 1-11.
- [2] Adebamowo, M. A. (2011). The Implication of Global Economic Recession on Sustainable Housing in Lagos Megacity. *International Business Research*, 4 (1), 167 – 176.
- [3] Ademiluyi, I. A. and Raji, B. A. (2008). Public and Private Developers as Agents in Urban Housing Delivery in Sub-Saharan Africa: the Situation in Lagos State. *Humanity & Social Sciences Journal*, 3 (2), 143-150.
- [4] Adeoti, S. (2009). Effective transport system: a panacea for sustainable Tourism. *The Yaba Journal of Environmental Research*, 1(2), 46 – 54.
- [5] Adeoye, A. A. (2009). Lagos State Geo-information Infrastructure Policy (LAGIS) as a tool for Mega City Development: Opportunities and Challenges. AAC Consulting , Lagos. 1 -15.
- [6] Afolabi, A. and Dada, M. (2014). An evaluation of the factors affecting housing and urban development projects in Lagos State. Paper presented at the Proceeding of CIB W107 International Conference on Construction in developing countries and its contribution to sustainable development, University of Lagos, Lagos, Nigeria, 28th – 30th January.
- [7] Afolabi, A., Fagbenle, O. I. and Mosaku, T. O. (2017). IT Management of Building Materials' Planning and Control processes Using Web-Based Technologies. In: Á. Rocha et al. (eds.), *Recent Advances in Information Systems and Technologies, Advances in Intelligent Systems and Computing*, 570, Chapter 2, Springer, Cham, 12-19.
- [8] Afolabi, A. O., Oyeyipo, O., Ojelabi, R. A. and Tunji-Olayeni, P. F. (2017). E-Maturity of Construction Stakeholders for a Web-Based e-Procurement Platform in the Construction Industry. *International Journal of Civil Engineering and Technology (IJCIET)*, 8 (12), 465-482.
- [9] Ajanlekoko, J. S. (2001). Sustainable Housing Development in Nigeria – The Financial and Infrastructural Implication. International Conference on Spatial Information for Sustainable Development, 2, 1-14.
- [10] Akinmoladun, O. I. and Oluwoye, J. O. (2007). An assessment of why the problems of housing shortages persist in developing countries: A case study of Lagos Metropolis, Nigeria. *Pakistan Journal of Social Sciences*, 4 (4), 589 – 598.
- [11] Aluko, O.E. (2012). Impact of poverty on housing condition in Nigeria: A case study of Mushin Local Government Area of Lagos State. *Journal of African Studies and Development*, 4 (3), 81-89.

- [12] Aworemi, J. R., Abdul-Azeez, I. A. and Opoola, N. A. (2011). An Appraisal of the Factors Influencing Rural-Urban Migration in Some Selected Local Government Areas of Lagos State, Nigeria. *Journal of Sustainable Development*, 4 (3), 136 -142.
- [13] Dekolo, S. O. and Oduwaye, A. O. (2011). Managing the Lagos Megacity and its Geospatial Imperative. *International Archives of the Photogrammetric, Remote Sensing and Spatial Information Sciences*, 38 (4), 121 – 128.
- [14] Human Settlements Reference Group, HSRG (2005). *Breaking New Ground: A Comprehensive Plan for the Development of Sustainable Human Settlements*. Draft Discussion Document for Department of Local Government and Housing, 1- 49.
- [15] Ibem, E. O., Anosike, M. N. and Azuh, D. E. (2011). Challenges in public housing provision in the post-independence era in Nigeria. *International Journal of Human Sciences*, 8 (2), 1- 23.
- [16] Ibem, E. O. (2014). Public housing strategies in Ogun state: Implication for Urban development in Nigeria. *Advances in Sociology Research*, 15, 107-127.
- [17] Ibem, E. O. and Alagbe, O. A. (2015). Investigating dimensions of housing adequacy evaluation by residents in public housing: Factor analysis approach. *Facilities*, 33 (7-8), 465-484.
- [18] Ilesanmi, V. O. (2010). Urban sustainability in the context of Lagos mega-city. *Journal of Geography and Regional Planning*, 3 (10), 240-252.
- [19] Matawal, D. S. (2011). Linking academia to industry: a case study of the building and construction industry. Paper presented by the Nigerian Building and Road Research Institute, NBRRI, 1 – 20.
- [20] Oduwaye, L. (2009). Challenges of Sustainable Physical Planning and Development in Metropolitan Lagos. *Journal of Sustainable Development*, 2 (1), 159 – 172.
- [21] Ogunde, A. O., Olaolu, O., Afolabi, A., Owolabi, J. and Ojelabi, R. (2017). Challenges confronting construction project management system for sustainable construction in developing countries: Professionals perspectives (a case study of Nigeria). *Journal of Building Performance*, 8 (1), 1 – 11.
- [22] Oloto, E. N. and Adebayo, A. K. (2011). The new Lagos - Challenges facing the Peri-urban areas and its relationship with its City centre, 1- 6.
- [23] Olotuah, A. O. and Bobadoye, S. A. (2009). Sustainable Housing Provision for the Urban Poor: A Review of Public Sector Intervention in Nigeria. *The Built & Human Environment Review*, 2, 51 – 63.
- [24] Olusegun, G. K. (2009). An evaluation of housing estate finance in Nigeria: Case studies of four selected housing estates in Lagos state. *The Yaba Journal of Environmental Research*, 1(2), 70 – 82.
- [25] Oyeyipo, O. O., Odusami, K. T., Ojelabi, R. A. and Afolabi, A. O. (2016). Factors affecting contractors' bidding decision for construction projects in Nigeria. *Journal of Construction in Developing Countries*, 21 (2), 21 – 35.
- [26] Tunji-Olayeni, P. F., Emetere, M. and Afolabi, A. O. (2017). Multilayer Perceptron Network Model for Construction Material Procurement in fast Developing Cities. *International Journal of Civil Engineering and Technology (IJCIET)*, 8 (5), 1468-1475.
- [27] Yusuff, O. S. (2011). Students Access to Housing: A Case of Lagos State University Students – Nigeria. *Journal of Sustainable Development*, 4 (2), 1 – 16.
- [28] Dr. Manoj P K. Construction Costs in Affordable Housing in Kerala: Relative Significance of the Various Elements of Costs of Affordable Housing Projects. *International Journal of Civil Engineering and Technology*, 8(9), 2017, pp. 1176–1186.