Environmental Technology & Science Journal
Vol. 11 No. 1 June 2020

Assessment of Residential Housing Transformation in Oyo Town, Nigeria

[1*]Olubi, R.A & [2]Ayoola, H.A
[1]Department of Architecture, Ajayi Crowther University, Oyo
[2]Department of Architecture, Federal University of Technology, Akure
ar.olubi@acu.edu.ng

Received: 13/2/2020 **Reviewed: 9/4/2020** **Accepted: 13/6/2020**

Housing transformation through the addition of spaces, in-depth re-arrangement, and re-organization of the functional spaces for different reasons remains a topical issue in housing design research. Housing transformation creates enormous effects on the available housing stock and also negatively impacts the existing housing facilities and satisfactions. This paper analyses various thoughts through direct observation and a cross-sectional survey of selected residential districts in Atiba Local Government Area of Oyo Town and highlights several reasons for housing transformation among which economic gains and increase social status rank high. The study concludes that residential accommodations are grossly reduced, built environment negatively impacted and there is a drastic reduction in the quantity and quality of open spaces in the environment as a result of housing transformation. The paper, therefore, recommends housing transformation only for upgrading, rehabilitation, and maintenance of residential buildings without limiting or hampering residential housing stock and quality.

Keywords: Housing, Transformation, Residential Accommodation.

Introduction

Housing is indeed an essential human need next to food; that helps in meeting the basic spatial human need for work, live, recreate and socialize (Jinadu, 2007; Ojikpong, Agbor & Emri, 2016). It is a physical asset that determines the social, economic, and cultural classes of its inhabitants. Housing supply mostly in the developing countries is under serious threat due to urbanization which forces people to engage in different activities that compete with dwindling residential spaces within towns and cities. This, in turn, led to the incessant transformation of residential buildings to other uses most especially for commercial purposes (Ojikpong *et al.*, 2016). Urban poor most times engage the process of transformation of existing buildings and structures to generate more income (Adegbehingbe, 2010: Makachia 2005: Aduwo, Ibem & Opoko, 2013), activities which led to a significant reduction in the housing stock.

Housing transformation is a common occurrence in the developing countries of the world and despite its diverse justifications; it widened the existing gap between housing needs and housing provisions (Tipple, 2000; Mai & Rahman, 2011). Housing transformation and its impacts on residential accommodations is a common phenomenon in Oyo Town just like every other town in Nigeria which requires empirical studying. This study therefore aimed at understanding the nature, extent, and impacts of housing transformation that have overtime taken place in Oyo Town, Nigeria with the view of knowing the social and spatial imbalance it creates on residential accommodation.

Housing Transformation

Several theories support housing transformations but relevant to this study is the housing adjustment theory. It is a theory that recognizes housing provisions for its problems solving potentials which also meet both the social and lifestyle needs of the

residents. Morris and Winter (1975) and Aduwo *et al.* (2013), argued that people generally judge their housing conditions based on specific "family and cultural norms". The change in housing conditions as against the established norms and lifestyle generate what is known as housing dissatisfaction, housing deficit, or housing stress. These are overcome by adjusting and re-adjusting the levels of tolerance on one hand and improving the housing conditions through housing transformation on the other hand.

According to Mai and Rahman (2011), housing transformation has four basic components which are; the behavioral, cultural, socio-economic, and spatial components. Behavioral, cultural, and socio-economic components identify key issues relating to nature and characteristics of available spaces, societal norms, and family practices within the urban structure. This includes the means of livelihood of the people. Meanwhile, the spatial component emphasizes the physical features of the dwelling. This explains different changes that housing is subjected as a result of changing human and environmental needs; the responses to these changes often cause housing transformation (Nguluma, 2003).

Housing transformation brings about an alteration of socio-economic setting and change of lifestyle composition of the residents to adapt to varying housing conditions and needs (Avogo *et al.*, 2017). Among several reasons for housing transformation in the developing countries, socio-economic is a common phenomenon mentioned by several Authors (Nguluma, 2003; Makachia 2005; Adegbehingbe, 2010; Aduwo, Ibem & Opoko; 2013; Ojikpong, *et al.*, 2016). Housing ownership signifies social status among the urban poor, the need to express individuals' social class and housing desire trigger residential housing transformation process without considering its impacts on other important variables.

Tipple (2000) observed that the need for housing transformation includes the creation of identity, income generation, and the need to accommodate expanding households. This phenomenon which is more prevalent in the government residential estates of developing nations takes advantage of the distortion between the changing needs, social norms, and lifestyles of the residents. The sporadic upsurge in the urban socio-economic conditions most a times subject urban life to threat and make the urban lifestyle unguaranteed as a result; housing transformation becomes a coping strategy. In addition to that, Ojikpong *et al.* (2016) discovered that housing transformation is more prevalent at the Central Business District (CBD). Motivations for economic gains make informal businesses spring and thrive at CBD than other parts of the Town. These informal businesses provide additional income for landlords and the means of livelihoods for the operators. Inadequate spatial accommodations as a result of improper developmental planning sometimes result in the transformation of residential buildings to create spaces for the businesses.

Studies by Hassan (2006), Aduwo *et al.* (2013), and Alagbe and Aduwo (2014) revealed the causes of housing transformation as primarily the failure of the government to provide quality housing for the medium and low-income earners. Other factors such as the need to create more domestic spaces, lack of considerations for the diversity of traditional lifestyles, and socio-economic characteristics of residents constitute reasons for incessant housing transformation. Residents, therefore, result in housing transformation as a way of generating income, solving housing dissatisfaction, add more useful spaces, and increase housing stock for low-income households. Turner *et al*. (2009) argued that among all aforementioned benefits of housing transformations, its potential to "improve the value of housing, increase housing stock within a locality and attract more residents into the neighborhood" rank high.

Housing Transformation in Nigeria

Ademola (2010) argued that the housing transformation in Nigeria causes shortage of residential accommodation; studying Surelere in Lagos, he painted a situation where all tenants of a residential building were evicted and the property sold for commercial use. This makes it seemingly difficult for new migrants to secure residential accommodation in the area. The author also identified the effects of the transformation on the environment to include environmental pollution, an increase in traffic along the street, and insecurity. This was corroborated by of El-Hussain (2018) that housing transformation generates a series of urban congestions and also constitutes environmental damage to urban streetscapes. Various forms of pollution such as heat, noise, solid waste, and carbon monoxide are generated into the environment which causes serious inconvenience, discomfort, and insecurity for the residents. Moreover, Aluko, (2003), Jinadu, (2007) and Ojikpong *et al.* (2016) all observed with concern the rate of residential housing transformation to other uses most especially for commercial uses with its attendant impacts on reducing housing stock in Nigeria thereby resulting to overcrowding, high rent, slum, and squatter settlements in urban areas.

Total demolition and reconstruction of old residential buildings into another use is a common factor in most urban centers in Nigeria. This looks more of a conservation issue but affects the urban environment and housing stock provision in a great way. In this context, more economic benefits and modern cityscape effects are sought without any considerations for the negative consequence on residential accommodation. Up-scaling or remodeling of old buildings is a must to safeguard the urban environment but such should be done without necessarily changing the use; more so, the involvement of appropriate building professionals in designing, planning, monitoring, and maximizing the potentials of the buildings under transformation cannot be undermined (El-Hussain 2018). Mai and Rahman (2011) therefore suggested adaptive reuses of old buildings through adequate incentives and policies that stipulate limits to change of use of buildings.

Previous researches in the area of housing transformation majorly focused on the conversion of public or government housing schemes with little emphasis on the transformation of individual houses in the communal neighborhoods in particular and its impacts on residential accommodations in general. This study, therefore, focuses on housing transformation in the ancient Town of Oyo with the view of identifying its impacts on residential accommodations. Historically, the place of Oyo in the Yoruba nation cannot be over-stressed; hence the need to understand the importance and influence of housing on the lifestyle, quality of life, social status, and economy of the residents is imperative.

Physical Characteristics of Housing in Oyo

Oyo is one of the foremost traditional and ancient cities in South-Western Nigeria. It is a significant city in the Yoruba nation through its cultural orientations, economic independence, social stratifications, and political unification (Wheatley, 1970). Oyo exhibits a traditional style of architecture not only built on tradition and customs but also being influenced by social, economic, climatic among other factors (Okeyinka & Odetoye, 2015). Just like other traditional cities, the cityscape of Oyo reflects land use for residential, markets, Oba's Palaces (administrative), farmlands, and shrines (Oluremi, 2002; Okeyinka & Odetoye, 2015).

Several house types have evolved in Oyo overtimes, common among is the traditional compound popularly known as (Agbo-ile) (Jiboye & Ogunshakin, 2010). Another important house type commonly built in the 1930s in Oyo Province but rarely discussed in the literature is 'Ile Ilese Merin' which had the inputs of the Colonial sanitation officers during construction. Afro-Brazilian type is another most important house forms in Oyo to date. This house form gained prominence in the entire south-western

Nigeria as a result of economic boom from cocoa, palm oil, and most importantly as a result of the cultural mix influences by the returned Brazilian freed slaves. The architecture consists of a double but opposite row of rooms connected with a common corridor which sometimes serves as a commonplace for working and sitting. Architecture forms a significant part of the culture and both share similar dynamic attributes that inform the transformation and evolution of the architecture of Oyo from traditional house types to contemporary and modern style (Okeyinka & Odetoye, 2015).

The development of Oyo started from the core; an area described by Goddard, as the origin of the town. Located within the core of the town are popular and foremost places such as Ashipa (Ago-oja), Aafin, Agunpopo, Bashorun, Apara, Molete, Jabata, Ajagba, Ishokun, Iyaji, Pakoyi and Gudugbu (Goddard, 1971). The urban core houses several important functions for public buildings, markets, places of worship, and administrative area (King's palace). Surrounding the urban core is transition zones which are mainly used for residential buildings and agricultural production. The outer periphery (outskirt) zone is meant for the provision of basic social infrastructure. However, Oyo was made the Provincial Headquarters of Oyo Province during the colonial rule in Nigeria and the impacts of independence brought unprecedented growth to the contemporary Oyo town (Jiboye & Ogunshakin, 2010).

Methodology

This study relied on primary data collected through direct observation and structured questionnaire administered to the residents of the selected residential quarters in Atiba Local Government Area, Oyo. Apart from being the foremost and the origin of the town, Atiba local government has historical, cultural, and economic significance in Oyo which necessitates its selection for the study. It spans across the core, transition, and periphery of Oyo where administrative, commercial, and residential activities are prominent. Four residential quarters comprising Owode, Ajegunle, Agunpopo, and Adikuta with approximately 1600 residential houses were selected for the study using simple random sampling techniques. The total sample size for the study is 156 houses; this was generated with a sample size calculator; an online application for calculating sample sizes, using a confidence level of 95%. The studied houses for questionnaire administration and other research inquiries were then selected through systematic simple random sampling with just one questionnaire per house to any volunteered resident. A total of 115 questionnaires were retrieved; the questionnaire among other things investigated the resident's socio-economic characteristics and data gathered were subjected to statistical packages for social sciences (SPSS) for analysis and appropriate statistical techniques were used to explain the results of the study. Also, characteristics of housing, developmental pattern, and the impacts of housing transformation on residential accommodations were investigated through direct observations.

The Study Area

Ancient Oyo was prominent in South Western Nigeria during the 17th century as the royal and commercial capital of Yoruba nation and the largest single empire ever existed which spanned between Volta and Niger Rivers (Jiboye, & Ogunshakin, 2010). After its collapse, the present Oyo located about 130km south of the Old Oyo (Goddard, 1971) on latitude 7.850°N and longitude 3.933°E of the Greenwich Meridian emerged. It covers the land area of 2,427km^2 and located about 55km North of Ibadan the state capital. Oyo is a medium town which according to the National Bureau of Statistics (NBS 2013), annual abstracts of statistics, has a population of 428,798 during the 2006 population census with a projection of 3.7%, Oyo town is expected to be occupying about 650,915 people in 2020. Oyo experienced evolutions of spatial patterns expressed by Burgess as concentric zones theory of land-use pattern (Owoeye & Omole, 2012). The theory categorized CBDs' as places within the cities with spontaneous developments and

access to other parts of the city. Most commercial activities are located within the CBD which in turn responsible for high rent and land value. Atiba Local Government which comprises about fifty-six residential quarters shown in Plate 1 below is identified as the CBD in Oyo; the quarters apart from the historical and economic relevance also exhibit traditional and modern characteristics with the possession of different elements of development. This study then focuses on assessing the significance of housing transformation on residential accommodation in Oyo concentrating on Atiba local government area in particular.

Results and Discussion

Assessments of residential housing transformation in Oyo, requires an in-depth understanding of the study area, residents, and characteristics of housing under study. In a bid to arrive at a transparent survey, Table 1 below reports the socio-economic background of the respondents and reveals 74% as males and 26% as females. This shows that generally, male folks take more housing decisions and are mostly responsible for housing issues than their female counterparts in the study area. A higher number of males than females in housing matter further buttress their pole position as the household heads and the "breadwinners in the African setting" (Alagbe & Aduwo, 2014). The age range of the respondents shows that 14% are between 20-30 years of age, 44% are between 31-40 years, 22% are within the ages of 41 to 50 years, and 21% are above 50years of age. This shows that 65% of the respondents are between the ages of 31 and 50; which indicate that the study covers a large population of working and economic active residents which might be a factor for increase residential housing transformation in the area. The education level of the respondents indicates 78% as a graduate of different tertiary institutions, 13% had secondary education, 4% had only primary education while 4% do not have any formal education; this shows a very high level of literacy in the study area and a high level of understanding of the subject under investigation and the need for more income generation as one of the reasons for housing transformation. This study conforms to the findings of Avogo, *et al* (2017), which pointed out that the capacity of individuals to transform their house for income or monetary exercises is a factor of their level of education and wellbeing status. The monthly income level of the respondents indicates that 35% earned N18,000 - N50,000, 21% earn between N51,000 - N100,000, 35% earn above N100,000 while only 9% earn below N18,000. This does imply that majorities of the respondents have a good financial capacity and that good residential accommodation might be needed in the study area. Respondents' tenure system was investigated which reveals that 61% are tenants, 35% are owners while 4% inherited their houses. The decision to transform any building rest solely on the house owners rather than tenants (Avogo *et al.*, 2017), but the tenants' needs and willingness to pay influence transformation decisions. The duration of occupancy of the respondents indicates that 65% have stayed between 1-10 years in their present apartment, 17% have stayed between 21-30 years while 9% have stayed between 11-20years and above 30 years each.

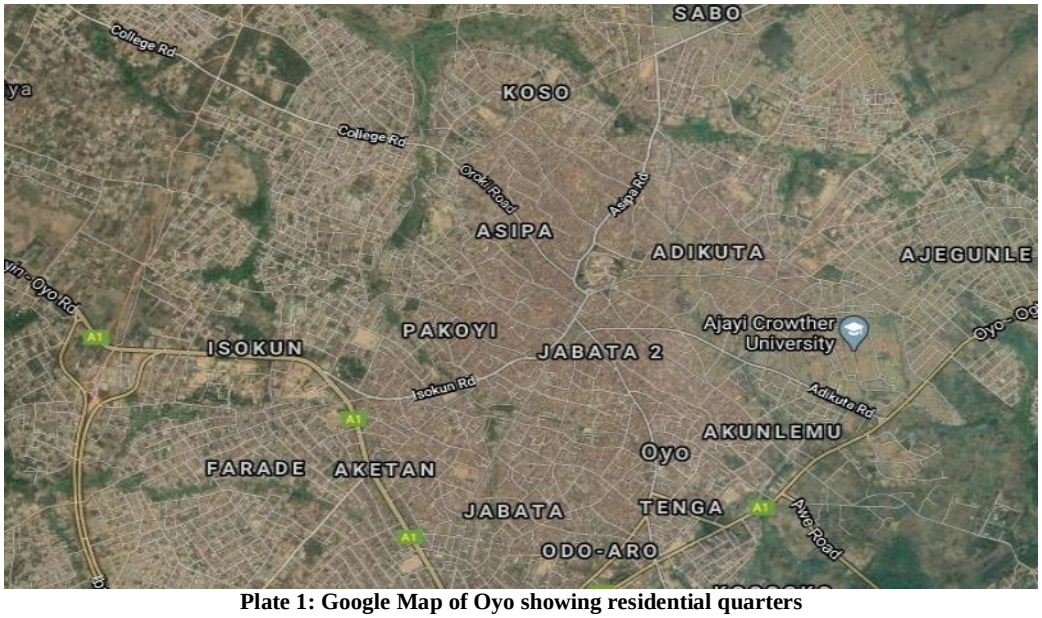

Plate 1: Google Map of Oyo showing residential quarters
Source: Centre National Detudes Spatiales / Airbus, (2020).

Table 1: Socio-Economic Distribution of the Respondents

Distribution	Frequency(n=115)	Percentages(%)
Gender		
Male	85	73.9
Female	30	26.1
Age		
21-30years	16	13.9
31-40years	50	43.5
41-50years	25	21.7
Above 50years	24	20.9
Education Level		
No formal Education	5	4.3
Primary Education	5	4.3
Secondary Education	15	13.0
Tertiary Education	90	78.3
Income		
Below ₦18,000	10	8.7
₦ 18,000-₦ 50,000	45	35.1
₦ 51,000-₦ 100,000	15	21.1
Above ₦ 100,000	45	35.1

Table 2 probes the physical characteristics of housing in Oyo. The type of buildings investigated varied as 74% residential, 13% commercial, 9% industrial, and 4% mixed-use buildings. Although the focus of this study is on residential accommodation, yet it was discovered that housing transformation cuts across all building types, also some of the other building types were once residential buildings before being transformed into the present uses.

The form of buildings investigated ranged from compound houses 22%, Afro-Brazilian 17%, and others (modern and international styles) 61%. This result shows a logical progression in house form from the oldest to the recent. It also points to the assumption that the desire to meet the recent trend and modernization could be one of the reasons for housing transformation in the study area. This can also be buttressed by the building materials (wall) used in the study area. 91% of respondents indicated the use of hollow sandscrete blocks while 9% indicated having mud walls.

Table 2: Housing Characteristics in Oyo

Distribution	Frequency(n=115)	Percentages (%)
Duration of Occupancy		
1-10years	75	65.2
11-20years	10	8.7
21-30years	20	17.4
Above 30years	10	8.7
Age of the Buildings		
1-10years	50	43.5
11-20years	20	17.4
21-30years	*25*	21.7
31-40years	10	8.7
Above 40years	10	8.7
Building Use		
Residential	85	73.9
Commercial	*15*	13
Industrial	10	8.7
Mixed-Uses	*5*	4.3
Residential House Forms		
Compound Houses	8	9.4
Brazilian	46	54.1
Others	*31*	36.5

Plate 2: Residential building undergoing transformation

Plate 3: Residential building undergoing transformation

Table 3 shows the spatial transformation in the study area and reveals that 65% of the houses have undergone different forms of transformations while 35% remain in their original designed state without being transformed. Further investigation shows varied forms of housing transformation in the study area. The majority of the respondents 48% indicated the addition of shops at the frontages as shown in plate 3 above, conversion of setbacks and air spaces to accommodate various informal activities and light industry, Plate 2 above supports the position of 17% of the respondents that indicated changing rooms to shops while 13% of respondents indicated changing rooms to stores. Various reasons for housing transformation in the study area as indicated by the respondents include income generation 50%, the need for modernization/improved social status 39%, and other reasons 11%. These findings are in consonance with the discoveries of Tipple (2000); Aduwo,*et al* (2013); Avogo,*et al* (2017), that residential housing transformations are motivated by socio-economic needs, income generation and lifestyle, The need to generate more income ranks high because of the assumption that residential accommodations generate less income when compared with other uses. Housing transformation has become a common occurrence both in government residential estate and the private buildings in the developing countries as against the claim of Tipple (2000). Today, housing needs, social status, need to accommodate the informal business, lifestyle among others affect both residents of government estates and individual private houses, therefore, creating the need for housing transformation in other to meet up with the changing needs. However, reasons for housing transformations vary from geographical locations and context (Avogo, *et al* 2017). The involvement of building professionals in housing transformation in the study area was probed into and 26% of respondents indicate the involvement of building professionals during housing transformation while 74% indicated none involvement of relevant building professionals. This gives the reason for pronounced negative impacts such as reduction of housing stock, poor housing quality, and other ills on the entire environment which would have been mitigated through proper design and planning. These findings support the position of El-Hussain (2018), who opined that, the roles of building professionals in designing, planning, and monitoring residential housing transformation cannot be over-emphasized. Adequacy of residential accommodations are considered, optimum performances of building fabrics achieved, ills associated with transformations mitigated, and the entire neighbourhood environment enhanced when appropriate professionals are engaged during housing transformations.

Table 4 reports the impacts of housing transformation on residential accommodations in Oyo. It was discovered that the effects of housing transformation on housing stock are enormous as 65% of respondents agreed that housing transformation reduces housing stock in the study area while 31% disagreed. This study corroborates the findings of Ojikpong, *et al* (2016) that residential housing transformation results in a reduction in the quantity of residential housing stock. The extent of which is largely agreed to be on the average which is expected to reduce with adequate "housing administration" and timely policy implementation on housing transformation in Nigeria (El-Hussain, 2018). Rent per annum of residential accommodation in Oyo is believed to be on average when compared with the neighbouring cities according to 57% of the respondents. 39% believed that rent in Oyo is low while 4% were of the opinion that rent is high in Oyo. Since the majority of the respondents agreed that housing rent in the study area is on average then the need for housing transformation should be minimal. However, the effect of housing transformation on housing rent is considered to be imminent. 82% of the respondents agreed that housing transformation results in an increase in rent while 9% disagreed and another 9% were indifferent. It then clearly shows that if not

for housing transformation, residents of the study area are supposed to pay less rent for residential accommodation.

On the effects of housing transformation on the residential environment; the study reveals that there occur high traffic along the street roads sometimes as indicated by 42% of respondents, 22% indicated high traffic most times, 36% believed there is no difference in vehicular traffic along the street roads. This shows that 64% of respondents agreed that housing transformation causes traffic congestion along the street roads (either sometimes of most times). The consequence of high traffic along the street roads on residents of the study area was probed into as 88% of respondents do feel uncomfortable and unsafe during high traffic while just 12% take advantage of traffic along the street roads for street trading, an act which is not only dangerous but also detrimental to urban safety. Other environmental challenges identified by the respondents associated with housing transformation in the study area are insecurity, pollution, and indiscriminate waste disposal. This is in tandem with the discovery of El-Hussain (2018), that housing transformation generates a series of urban congestions which damage urban streetscapes. Various forms of pollution such as heat, noise, solid waste, and carbon monoxide are generated into the environment which causes serious inconvenience, discomfort, and insecurity for the residents.

On the level of respondent's satisfaction in getting suitable accommodation in the study area; the result shows that 46% of the respondents had an unsatisfactory experience, 25% were satisfied, 14% were highly satisfied and 15% were indifferent. This means that generally, respondents' experiences in getting desired residential accommodation in the study area are not suitable owing to poor building designs, and construction. This is in line with the submission of Alagbe and Aduwo (2014) that unsatisfactory indoor spaces negatively impact the resident's quality of life which oftentimes results in the need for housing transformations whereby residential accommodations are made to blend with the principles, status, lifestyle, and comfort of the residents.

Table 3: Transformation of Housing in Oyo Town

Distributions	Frequency	Percentages
Reasons for Transformation		
Income	58	50.4
Modernization/Social Status	45	39.1
Others	12	10.5
Level of Comfort Achieved with Transformations		
Highly comfortable	38	33.0
Comfortable	38	33.0
Not comfortable	32	27.8
Indifferent	7	6.1
Professionals Involved During Transformations		
Architect	8	7.0
Civil Engineer	8	7.0
Town Planner	27	23.4
None	72	62.6
Other Spaces Added During Transformations		
Shops	45	39.1
Rooms	26	22.6
Stores	32	27.8
Others	12	10.5

Table 4: Impacts of Housing Transformation on Residential Accommodations in Oyo Town

Distributions	Frequency	Percentages
Impacts on Housing stock		
Greatly reduced	75	65.2
Averagely reduced	36	31.3
Insignificantly reduced	4	3.5
Impacts on Residential Annual Rent		
Rent is high due to transformations	94	81.7
Rent is on average despite transformations	10	8.7
Transformations has no impact on rent	11	9.6
Impacts on Vehicular Traffic		
Heavy traffic most times	25	21.7
Heavy traffic sometimes	48	41.7
No impact on traffic	42	36.4
Impacts of Heavy Traffic on Human Comfort and Safety		
Not comfortable and unsafe	101	87.8
Happy and opportunity to make brisk business	14	12.2
Respondents Experience in getting suitable residential accommodations		
Highly satisfactory	16	13.9
Satisfactory	29	25.2
Highly unsatisfactory	27	23.5
Unsatisfactory	26	22.2
Indifferent	17	15.2

Conclusion

This study shows that residential buildings at the CBDs are mostly prone to transformation for several reasons such as income generations, up-scaling, provision of space for different business activities and to support home-based economic activities. This usually results in negative impacts such as shortage of residential accommodations, low housing quality, and deterioration of the built environment. There is neither adequate consideration for the residents being displaced nor the environment being seriously impacted. The desire to showcase social status is another identified motivation for housing transformation whereby residential accommodation built of mud is being demolished and other building types using modern materials coming up on the same location without adequately taking into consideration the number of displaced occupants for re-accommodations. Most times buildings are being transformed into other uses without adequate planning and thus reduce housing stock. Deterioration of building due to age is inevitable and transformation of such buildings is not debatable, however, this study reveals that old or dilapidated buildings can be remodeled, renovated or redesigned and reconstructed using modern building materials to accommodate the same or higher number of occupants and not less. Therefore, housing transformation only for upgrading, rehabilitation, and maintenance should be encouraged.

Recommendations

Residential housing transformation requires efforts from both governments and the stakeholders in the built environment to mitigate its impacts on residential accommodations. Firstly, the core housing strategy with the full participation of building professionals should be enforced during housing transformation. This will enable proper planning and implementation of housing transformations and its consequential impacts on the housing stock, quality, and the entire environment be curtailed. Secondly, mixed-used development should be encouraged such that instead of clearing or reducing residential accommodation during transformation, other uses are added. Lastly, the study reveals that open spaces which are the necessary components of a healthy and livable housing environment may eventually become non-existence in the study area in the nearest future as a result of incessant, unplanned, and spontaneous housing transformation to other uses which

make the housing environment poor and unlivable. Spaces for shops, small scale, and informal businesses should be provided within residential neighborhoods which can be achieved through adequate design, planning, and urban renewal strategies. This will discourage spontaneous transformation activities within urban Towns.

References

Adegbehingbe, V. O. (2010). An Evaluation of Physical Transformation of Residential Buildings in Government Estates in South-Western Nigeria. *West African Built Environment Research (WABER) Conference* (pp. 127-140). Accra, Ghana: West Africa Built Environment Research (WABER) Conference.

Ademola, F. (2010). Land Use Conversion in Surulere Local Government, Lagos, Nigeria. *Urban and Regional Review,* 2(1), 1-14.

Aduwo, E.B., Ibem, E.O. & Opoko, A.P. (2013). Residents' Transformation of Dwelling Units in Public Housing Estates in Lagos, Nigeria: Implications for Policy and Practice. *International Journal of Education and Research,* 1(4), 1-20.

Alagbe, O.A & Aduwo, E.B. (2014). The Impact of Housing Transformation on Residents' Quality of Life: A Case Study of Low-Income Housing Estate, Ipaja, Lagos. *covenant Journal of Research in the Built Environment (CJRBE),* 2(2), 134-147.

Aluko, O. E. (2010). The Impact of Urbanization on Housing Development: The Lagos Experience, Nigeria. *Ethiopian Journal of Environmental Studies and Management,* 3(3), 64-74. DOI:10.4314/ejesm.v3i3.63967.

Avogo, F.A., Wedam, E.A. & Opoku, S.M. (2017). Housing transformation and livelihood outcomes in Accra, Ghana. *The International Journal of Urban Policy and Planning.* http://dx.doi.org/10.1016/j.cities.2017.05.009.92-103

El-Hussain, A. M. (2018). Factors of Spontaneous Physical Housing Changes in Urban Centres of Southwest Nigeria. *Architecture Research.* DOI: 10.5923/j.arch.20180802.04, 74-85.

Goddard, S. (1971). Ago That Became Oyo: An Essay in Yoruba Historical Geography. *The Royal Geographical Society (with the Institute of British Geographers)* http://www.jstor.org/stable/1796741

Hasan, A. (2006). *The scale and causes of urban change in Pakistan.* Karachi: Ushba Publishing International.

Jiboye, A. D. & Ogunshakin, L. (2010). The Place of the Family House in Contemporary Oyo Town, Nigeria. *Journal of Sustainable Development,* 3(2), 117-128. DOI:10.5539/jsd.v3n2.

Jinadu, A.M. (2007). *Understanding the Basics of Housing*. Jos: Jos University Press Ltd

List of Towns and Villages in Atiba Local Government Area. Oyo. Retrieved from https://nigeriazipcodes.com/4309/list-of-towns-and-villages-in-atiba-lga

Mai, M. M. & Rahman, M. (2011). Cultural Sustainability of Residential Adjustment Styles of Semi-Urban Abuja and Core Dhaka Neighborhoods. *Journal of Sustainable Development and Environmental Protection,* 1(1), 41-56.

Makachia, P. A. (2005). Influence of House Form on Dweller-Initiated Transformations in Urban Housing. *World Congress on Housing Transforming Housing Environments through Design*. Pretoria, South Africa. Retrieved from https://repository.up.ac.za/handle/2263/10364

Manalang, R. T., Munemoto, J., Yoshida, T. & Espina, C.R. (2002). A Study on Residents' Self-built Improvements at MRB Dwelling Units in Metro Manila. *Journal of Asian Architecture and Building Engineering,* 2(2), 117-122. https://doi.org/10.3130/jaabe.2.b117

National Bureau of Statistics (2013). *Annual abstracts of statistics 2011*. Federal Republic of Nigeria

Nguluma, H.M. (2003). *Housing Themselves: Transformations, Modernisation, and Spatial Qualities in Informal Settlements in Dar es Salaam, Tanzania*. Published PhD thesis. Stockholm: Royal Institute of Technology. Retrieved from http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A9299&dswid=-3935

Ojikpong, B.E., Agbor, A.E. & Emri, S.I. (2016). The Impact of Building Use Conversion on Residential Accommodation In Calabar, Cross River State Nigeria. *International Journal of Science, Environment and Technolog*, 5(3), 1445 - 1467.

Okeyinka, Y. R & Odetoye, S.A. (2015). House form Characteristics of the Yoruba Culture. *Journal of Culture, Society, and Development*, 10, 25-29.

Obateru, I.O. (2002). *The Yoruba City in History 11th Century to the Present*. Nigeria: Penthouse Publication.

Owoeye, J.O. & Omole, F.K (2012). Effects of Slum formation on a Residential Core Area of Akure, Nigeria. *International Journal of Environmental Science*, 1(3), 159-167.

Tipple, G. (2000). *Extending Themselves: User-initiated Transformations of Government-built.* Britain: Liverpool University Press.

Wheatley, P. (1970). The Significance of Traditional YorubaUrbanism. *Comparative Studies in Society and History*, 12(4), 393-423, https://doi.org/10.1017/S0010417500005971