Degree of Modernity among Residential Areas of Bauchi Metropolis, Nigeria

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Abstract: *Modernity is the exposure of societies (especially developing countries) to industrial technology and urban social experience. In an academic sphere today modernity theory relies on the key idea of rationalization to give explanation on the distinctiveness of the modern societies. The rationales for creating fresh federal and state capital cities in the third world especially Nigeria is to accomplish national ambition of a modern capital as a sign of state identity. As a consequence states aspire to be seen as coming of age in terms of development or "catching up with the west". Improvement in quality of urban life in the course of provision of housing and basic services, and healthier environment is very important aspect of being modern and that is why this paper examined the degree of modernity of residential areas in Bauchi Metropolis to see how areas have improved and modernised in order to keep phase with modernity. The paper specifically assessed the nature of the build up environment, mobility, communication and availability of basic utilities in Bauchi. In order to achieved theses objectives multy-stage sampling was conducted where ten residential areas was purposely selected and subsequently a total of one hundred questionnaires was administered using questionnaire survey to the selected residential areas. A total means score for all the residential areas was used to determined the level or degree of modernity and Jahun, Nursing Quarters, Federal Lowcost, Fadaman Mada and Old GRA were discovered to have higher degree of modernity compare to Nassarawa, Bakaro, Yelwa, Kofan Dumi and Kandahar residential areas. Thus, prioritiesfor improvement in standard of living and physical development should be focused towards Nassarawa, Bakaro, Yelwa, Kofan Dumi and Kandahar residential areas of Bauch Metropolis.*

Keywords: Degree of Modernity, Modernity, Bauchi Metropolis and Residential Areas

1. Introduction

Modernity is the exposure of societies (especially developing countries) to industrial technology and urban social experience (Vern and James, 1975)   Thus, a change from an agricultural societies to an industrialized and technological and, or from a traditiona to a modern technological society. Modernity can further be elaborated as the historical situation that distinguishes modern societies, cultures, and human development (Philip Brey)**.** In an academic sphere today, modernity theory relies on the key idea of rationalization to give explanation on the distinctiveness of the modern societies (Andrew, 2003). The modernity theories center on the structure of modern societies, and try to find the transition to modernity. It tries to illustrate and examine this historical condition and focuses on the distinction between premodern and modern cultural forms and modes of socital progress (Philip Brey). Modernity has its root on the new town movement that began in Britain with the perspectives of the garden city concepts initiated by Ebenezer Howard (1902) as a way of improving urban environment (Abubakar & Doan, 2010). The modernist models such as the garden city concept has been the dominant tradition shaping planning practices in the West and was later transferred to developing countries through its aggressive promotion by developers, consultants and international agencies in the developemnt of Federal and State capitals (Watson, 2009)

The development of new Federal and State Capitals (Towns) in Nigeria signify a sign of socially progressive modernism using technology to create and improve urban environment and societies through adaptation of the garden city concepts (Abubakar & Doan, 2010). Therefore, the rationales for creating fresh federal and state capital cities in the third world especially Nigeria is to accomplish national ambition of a modern capital as a sign of statel identity (Abubakar &

Doan, 2010). As a consequence states aspire to be seen as coming of age in terms of development or "catching up with the west" (Watson 2009). Improvement in quality of urban life in the course of provision of housing and basic services, and healthier environment is very essential aspect of being modern and that is why this paper examined the degree of modernity of residential areas in Bauchi Metropolis to see how areas have improved and modernised in order to keep phase with modernity. One of the main objectives for sustainable development is to ensure enhancement in quality of life for everyone, now and for the next generations (Adesoji, 2010).

Hence, The main of the paper was to determine the degree of modernity among diversed residential quarters of Bauchi Metropolis and specifically to assessed the nature of the building structures and facilities, the types of mobility, communication and to study the availability of basic utilities in Bauchi and to finally look into the degree of modernity among the diversed residential areas of the Bauchi Metroplis. In order to achieve theses objectives multy-stage sampling was conducted where ten residential areas was purposely selected and subsequently a total of one hundred questionnaires was administered using questionnaire survey.

The finding revealed that the most common types of material used for building roof in Bauchi metroplis are basically zins and nearly half of the residential buildings do not have walls sorrounding their buildings and this is common in Kofar Dumi, Federal Low Cost Housing, Yelwa residential areas. The paper further revealed that a considerable number of houses in Bauchi have their bath room attached (inside) to the main building and these are very common in residential areas of Old GRA, Fadaman Mada, Nassarawa, Kofar Dumi and Federal Low Cost Housing areas. In addtion, almost half of the toilets in all the residential houses are pit toilets and 56% of buildings

interiors are untilled and this is ommon in Kofar Dumi, Kandahar, Yelwa and Bakaro residetial areas. On average almost all household have 3 persons or more per room and the most common areas are Kofar Dumi, Bakaro and even Federal Low Cost housing areas. In terms of mobility and communication, the research disclosed more than half of household heads do not own automobile car, although ownership of aotomobie car is very common in Old GRA, Fadaman Mada and Nursin Quarters residential areas. Besides 60% of the residence have subscribed for satellite TV connections and the most considerable areas are; Old GRA, Federal Low Cost, Nursing Quarters, Fadaman Mada and Nassarawa residential areas, with 75% of the household heads possesing smart phones. The paper dscovered that almost all the households in the various residential areas are connected with electricity and the most common sources of water are pipe born water supply (commonly in Low Cost, and Nursing Quarters) and well.

A total means score from all the residential areas was used to dtermined the level or degree of modernity and Jahun, Nursing Quarters, Federal Lowcost, Fadaman Mada and Old GRA were found to be more modern compare to Nassarawa, Bakaro, Yelwa, Kofan Dumi and Kandahar residential areas.

2. Study Area

Bauchi Metropolis is absolutely located at Latitude 10° 18' 50.9724'' N and Longitude 9° 50' 46.6152'' E. The town is located in the North Central part of Nigeria, with a total population of about 1.5 million people. Historically, the metropolis was the capital of a great Sokoto Empire. However, today the city is a hub for an advanced transportation and commercial activities with some local monuments such as the ancient emir palace and the only Nigerian Prime Minister's tumb (Sir. Abubakar Tafawa Balewa).

3. Material and Method

Multy stage sampling was conducted where ten residential areas were purposely selected in Bauchi Metropolis. Questinnaire survey was further conducted and the questionnare was tested in 100 households in a random style. The observation made in the field was coded through assignment of numeriacal values to create Likert scale in order to form an ordinal data. The questionnaire was intended to incorparate a built in coding structure. The collected data was analysed and presented using Statistical Parkage for Social Science (SPSS) and presented in tables, graphs and charts. Measure of central tendency such as mean was used to test the degree of modernity. The mean score was taken as a simple measure of degree of modernity which was employed as a basis comparison among the residential

areas of Bauchi Metropolis. The higher the score for a residential area, the more well to do or the higher the degree of modernity of the residential area.

4. Result and Discussion

The degree of modernity was measured as a function of building structures and facillities, mobility and comunication and utilities variables. The building structure and facilites variables is defined as building roof, wall, floor, types of bath room, types of toilet, kitchen type and average number of persons in a room. While, mobility and communication variable are defined as ownership of vehicle, types of amusement/information system and the utility variable comprises of source of water and availability of electricity. The collected information from the questionnaire field survey was inputed into the Statiscal Parkage for Social Sicence (SPSS), analysed using descriptive statistics tools such cross. The results of the analysis are presented according to the following themes.

4.1 Building Structures and Facillities

The design of modern development is put forwad as "differentiation" of society. For example building structures has evident applications to the division of property and political power, offices and persons (Andrew, 2003). Improvement in quality of urban environment means of provision of sufficient housing and fundamental services, more sufficient transportation structures, and healthier environment (Abubakar & Doan, 2010)

Therefore, building structures and facilities were measured as types of roofing, nature of the wall, nature of the floor, bath room type, toilet types and kitchen types. The average number of person per room was also measure so as to find out how the density of persos per room each in all residential areas. Table 1 showas that the common types of material used for roofing in Bauchi metroplis are generally zing materials (54%) and Kandahar, Nassarawa, Bakaro, Jahun residential areas takes the lead. However, a significant number of residential houses in Government Residential Areas (GRA) and Fadaman Mada are builts with either alluminium or stone cut roofing system.

Almost hafl (46%) of the residential building in Bauchi metropois do not have walls sorrounding their households and this is common in Kofar Dumi, Federal Low Cost Housing, Yelwa residential areas and in the areas where we have wall about 30% of the walls are plastered. Furtehermore, 56% of buildings interior are untilled but a significant number of houses in Old Government Residential Areas (GRA), Nursing Quarters and Jahun are tilled as shown in table 1

Table 1: Nature of the Building Structures

Residential Areas	Roof		Wall			Floor	
	Iron Zink	Alluminium/ Stone Cut	No Wall	Unplastere	Planstered	Untilled	Tilled
Federal Low Cost	5	5	8	0	2	6	4
Kofar Dumi	6	4	9	0	1	8	2
Kandahar	8	2	0	8	2	9	1
Yelwa	5	5	8	0	2	7	3
Fadaman Mada	3	7	5	0	5	3	7

Nassarawa	7	3	0	5	5	8	2
Jahun	7	3	0	8	2	3	7
Nursing Quarters	6	4	5	3	2	3	7
Old GRA	0	10	5	0	5	0	10
Bakaro	7	3	6	1	3	9	1
Total	**54**	**46**	**46**	**25**	**29**	**56**	**44**

Source, Fieldwork, 2019

The nature of the building facilities such as bath room, toilets and kitchen types are also important in modernity studies. A substantial number of houses in Bauchi have their bath room attached (inside) to the house and this is very common in Old GRA, Fadaman Mada, Nassarawa, Kofar Dumi and Federal Low Cost Housing areas as seen in table 2. Table 2 also shows that almost half of the toilets in Bauchi metropois are pit toilets and theses are basically found in Kofar Dumi, Kandahar, Yelwa and Bakaro areas. More than half of kitchens are detached types however; most kitchens in Old GRA, Federal Low Cost are found inside the houses as shown in the table 2 below.

Table 2: Nature of the Building Facilities

Residential Areas	Bath Room		Toilet		Kitchen		Average No of Persons/Room			
	Outside	Inside	Pit Latrine	Water System	Detached	Inside	1	2	3	More than 3
Federal Low Cost	3	7	2	8	4	6	0	0	2	8
Kofar Dumi	3	7	8	2	9	1	0	1	9	0
Kandahar	6	4	8	2	7	3	0	4	5	1
Yelwa	6	4	7	3	8	2	0	3	6	1
Fadaman Mada	0	10	0	10	5	5	0	1	3	1
Nassarawa	2	8	6	4	4	6	3	3	3	1
Jahun	4	6	5	5	5	5	3	5	1	1
Nursing Quarters	1	9	2	8	6	4	2	1	6	1
Old GRA	0	10	0	10	0	10	0	3	3	4
Bakaro	4	6	7	3	4	6	0	0	8	2
Total	**29**	**71**	**45**	**55**	**52**	**48**	**8**	**21**	**46**	**25**

Source, Fieldwork, 2019

Morethan seventy percent (71%) of the residential houses in Bauchi Metropolis have three (3) persons to morethan 3 persons on average per room and this is common in Kofar Dumi, Bakaro and even Federal Low Cost Housing residential areas.

4.2. Mobility and Comunication Technology Possesions

Technology made modernity attainable because of being the engine room for modernity, shaping and pushing it forward. The newest emergence of information evolution is as well a creation of technological innovation in information technology that creates a significant impact on modernity. The important variable related to modernity is the mobility and telecommunication technology variable and this was measured as ownership of vehicle and possesion of phone, and amusement/information systems. Table 3 indicate that 20% of the people do not possesed any type of vehicle, while 6% and 32% possesed bicycle and motorcycle respectively. In essence, 58% do not own automobile car in Bauchi city however, the remaining 42% possesed cars. Areas where we have a significant number of residents owning cars are Old GRA, Fadaman Mada and Nursing Quarters as seen in table 3. Possesion of amusement and information facilities serves as a factor for determining modernity. About 60% of the households in Bauchi metropolis have subscribed for satellite TV connections and the most considerable areas are; Old GRA, Federal Low Cost, Nursing Quarters, Fadaman Mada and Nassarawa residential areas. The kinds of phone people possesed indicate how modern they are and table 3 shows 75% of the household heads possesed smart phones while the remaining percent do no have smart phones.

Table 3: Mobility and Communication

Residential Areas	Vehicle Ownership				Amusement/Information					Phone	
	None	Bicycle	Motor Cycle	Car	Newspaper	Radio	CD/MP3/Player	Areal/Cable TV	Satellite TV	Unsmart	Smart
Federal Low Cost	2	1	1	6	0	1	0	0	8	1	9
Kofar Dumi	6	1	2	1	0	0	2	3	5	2	8
Kandahar	2	2	6	0	0	3	2	3	2	5	5
Yelwa	4	1	2	3	0	2	0	3	5	3	7
Fadaman Mada	1	1	1	7	0	1	0	2	7	1	9
Nassarawa	2	0	6	2	0	2	1	0	7	5	5
Jahun	1	0	3	6	0	3	1	3	3	4	6
Nursing Quarters	1	0	2	7	0	0	2	1	7	0	10
Old GRA	0	0	0	10	0	0	0	0	10	0	10
Bakaro	1	0	9	0	1	1	1	4	3	4	6
Total	20	6	32	42	1	13	9	20	57	25	75

Source, Fieldwork, 2019

4.3 Utilities

One of the fundamental objective for state capital cities was to provide citizens with pleasing and modern housing development with basic services like tap water (Abubakar & Doan, 2010). Access to basic household utilities sch as electricity availability and sources of water was also considered in the modernity concept. Almost all the households (85%) in the various residential areas are connected with electricity with the exception of few as shown in table 4. The most significant sources of water in Bauchi metropolis are pipe born water and well sources with 42% and 36% respectively. Old GRA, Kofan Dumi, Federal Low Cost, and Nursing quarters have the highest concentration of pipe born water connections compare to other residentiala areas (see table 4).

Table 4: Access to Basic Utilities

Residential Areas	Electricity		Water Source			
	Available	Not Available	Tank/Vendors	Well	Borehole	Pipe Water
Federal Low Cost	1	9	0	3	1	6
Kofar Dumi	1	9	1	2	0	7
Kandahar	2	8	3	3	1	3
Yelwa	1	9	0	7	2	1
Fadaman Mada	3	7	0	3	3	4
Nassarawa	2	8	0	4	1	5
Jahun	3	7	0	7	3	0
Nursing Quarters	1	9	2	1	1	6
Old GRA	0	10	0	0	2	8
Bakaro	1	9	1	6	1	2
Total	**15**	**85**	**7**	**36**	**15**	**42**

Source, Fieldwork, 2019

4.4 Level of Modernity in Residential Areas of Bauchi Metroplis

Building structures and facilities, mobility and information, and basic utility variables was utilized to measured degree of modernity in the residential areas of Bauchi metropolis. The variables were measured using ordinal scale and measure of central tendency such as the mean was calculated from the total scores generated from all households in the selected residential areas. The total score was further divided by the one hundred sample households to obtainedd the mean and this is presented in table 5.

Table 5: Sum of Scores and Means obtained from Various Residential Areas in Bauchi Metropolis

Residential Areas	Variable Sum of Scores	Means
Federal Low Cost	216	21.6
Kofar Dumi	244	24.4
Kandahar	256	25.6
Yelwa	266	26.6
Fadaman Mada	228	22.8
Nassarawa	280	28.0
Jahun	309	30.9
Nursing Quarters	241	24.1
Old GRA	272	27.2
Bakaro	228	22.8
Total	2540	25.4

Source: Fieldwork, 2019

The total mean was used as a bench mark (level) for the degree of modernity among the residential areas. Residental areas that have mean scores equal or above the total mean score are considered modern while those that have a means scores below the total mean score are considered less modern.

Table 6: Mean Scores as Degree of Modernity

Mean Scores	21.6	22.8	22.8	24.1	24.4	**25.4**	25.6	26.6	27.2	28.0	30.9
		Not Modern				Total Mean Score		Modern			
Res. Areas	Kandahar	K/Dumi	Yelwa	Bakaro	Nassarawa		Jahun	Nursing Quarters	Federal Lowcost	Fadaman Mada	Old GRA

Source: Fieldwork, 2019

Note: Res. = Residential, K/Dumi = Kofan Dumi, GRA = Government Residential Areas

Table 6 indicate Jahun, Nursing Quarters, Federal Lowcost, Fadaman Mada and Old GRA residential areas as most modern, while Nassarawa, Bakaro, Yelwa, Kofan Dumi and Kandahar residential areas mean scores are lower than the total mean score hence less modern.

5. Conclusion and Recommendation

The main aim of the paper was to determine the degree of modernity among diversed residential quarters of Bauchi Metropolis and specifically to assessed the nature of the building structures and facilities, the types of mobility and communication and to study the availability of basic utilities so as to determine the degree of modernity among residential areas of Bauchi Metropolis

The paper was abled to see that the most common types of material used for building roofing in Bauchi metropolis are generally zins. Nevertheless, a significant number of residential houses especially Government Residential Areas (GRA) and Fadaman Mada were builts with either alluminium or stone cut roofing material. It was aslo discovered that nearly half of the residential buildings do not have walls and this is very common in Kofar Dumi, Federal

Low Cost housing, Yelwa residential areas. Furtehermore, 56% of buildings interior are untilled. The paper revealed a considerable number of houses in Bauchi have their bath room attached (inside) to the main building and this is very common in Old GRA, Fadaman Mada, Nassarawa, Kofar Dumi and Federal Low Cost Housing areas. In addtion almost half of the toilets in are pit toilets common in Kofar Dumi, Kandahar, Yelwa and Bakaro residetial areas. On average almost all household have 3 persons or more per room and the most common areas are Kofar Dumi, Bakaro and even Federal Low Cost housing areas. In terms of mobility and communication, the research discloses more than half of household heads do not own automobile car, although ownership of car is very common in Old GRA, Fadaman Mada and Nursin Quarters. Besides 60% of the residence have subscribed for satellite TV connections and the most considerable areas are; Old GRA, Federal Low Cost, Nursing Quarters, Fadaman Mada and Nassarawa residential areas, with 75% of the household heads possesing smart phones.

The paper also discover that almost all the households in the various residential areas are connected with electricity and the most common sources of water are pipe born water (Low Cost, and Nursing quarters) and well. Jahun, Nursing Quarters, Federal Lowcost, Fadaman Mada and Old GRA are found to have higher degree of modernity compare to Nassarawa, Bakaro, Yelwa, Kofan Dumi and Kandahar residential areas.

It is recommended that government should encorage residents in Kofar Dumi, Kandahar, Yelwa and Bakaro residetial areas to build water system toilets so as to improve saniatary condition. Kofar Dumi, Bakaro and even Federal Low Cost housing areas are more crowded therefore there is need for provision of more houses to cater for the crowdnes. Government should provide more lucrative economic activities that can boost the income of residential areas of Nassarawa, Bakaro, Yelwa, Kofan Dumi and Kandahar residential areas which will probably improve their standard of living and subsequently more modern.

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