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as noted by Kasarda et al (1993) include insufficient accommodation, inadequate sanitation, inadequate potable water supply, air pollution and other forms of environmental degradation. In the process, it is not just the urban buildings that degenerate but the population in the environment suffers from environmental deterioration.

The urban populations have been characterized by various forms of social problems of prostitution, criminality and juvenile delinquency. The city or part of it has strong visible signs of decay or derelictions and it should not be a surprise to any individual. The building materials and components used in constructing the buildings that define the urban form and create the urban landscape have definite life spans, set ways of preserving and maintaining them as determined by the manufacturers. In the same vein, the interaction between development and the environment can produce results and effects which may aggravate the urban decaying process (Zubairu, 2004).

Generally, environmental decay could be caused by neglect which can occur either while areas are awaiting development or by simple carelessness or lack of capacity and resources on the part of the government or individuals to effectively maintain the buildings and the entire environment around them. Infrastructural provision on an extensive and self-sustaining basis is a pre-requisite for effective and efficient operations of urban enterprise and the livability of our cities. Infrastructural facilities such as water supply, electricity, power stations, refuse disposal systems and others must be provided to serve a growing population and which are not constructed incrementally on a yearly basis.

Urbanization which is a cause for environmental decay and evolves due to search for income acquisition (Abumere, 1985), remain largely unplanned and uncontrolled and associated with rapid growth of cities results into rapid increase in the number of urban poor. As identified by George (1999) low capital formation (income) associated with slum areas in developing countries is mainly caused by low capital formation of less the privileged groups, whose income can only be enough for sustenance, while there is little capital to improve their homes and keep the environment healthy for human living.

Urban decay as a continuous process of degradation of things is a characteristics property of objectives be it animate (Olaore and Adeniji 1984). Decay, as identified by Abumere (ibid), is the decline or deterioration in all that urbanism stands for which is as old as the early cities themselves. It connotes in its widest context derelictions of any sort Zubairu (ibid). It represents a state of squalidness and overcrowding, characterized by derelict structures, poor sanitary conditions, overcrowding, under provision of amenities and general deterioration of the urban environment (Okoye, 1979 and Abumere ibid). Consequently, Onokerhoraye, (1986), argued that neighborhoods of urban decay are characterized by the poorest of the poor, the unemployed, unskilled, the illiterate, the alcoholic, the vagabond and they are also characterized by violence and various forms of vandalism. It follows, therefore, that urban decays are characterized by all forms of social problems such as

prostitution, criminality and juvenile delinquency. The likely implication of global population growth in most urban environment such as in Bosso town may adversely affect the inhabitants in terms of available resources and environmental quality, if not adequately put to check.

The town of Bosso was at the Bosso hills before its final relocation to its present place. Apart from the traditional Gbagyi indigenous settlers, there are other ethnic groups such as the Hausas, Nupes, Ibos, the Kemukus, Tivs, the Urhobos, Yorubas, the Binis and others. There is a numerous students' population of diverse socio – cultural backgrounds in the area. The indigenous Gbagyi settlers in the area are commercial farmers who engage mainly in agricultural crops production like yams, sorghum, millets, melon, rice etc. on a very large scale. There exists one main market in the town. Besides the agricultural industries in the area, there are pockets of artisans such as brick layers, goldsmiths, iron welders, carpenters, and radio and television mechanics. There are relatively pockets of white collar jobs amongst the educated elites in the area. The few places of white collar job opportunities are the Federal University of Technology, the local government council, the Federal Airport Authority, the state and Federal government offices in the area and others too numerous to mention.

In terms of road net work, there are tarred and untarred roads. There is the Minna – Zungeru dual carriage way that divides the town into two parts. Branching off from this major dual carriage way, are numerous roads that lead to residential neighborhoods in the town. Amongst such roads are the Anguwa Biri road, the Mechanic road, Sarki Bosso road, Area court road, Bosso Low-cost road, Kwata road, Pyata road, and the western Bye – pass road network among others. Bosso is linked to the national grid of electricity supply. There is a local government water board. The town has two obsolete earth dams to meet the water needs of the inhabitants and there is also the presence of the National Telecommunication networks in the area. There are private and public health institutions in the area, such as the University clinic, Bosso Local Government Area Health Centre, Kowa Clinic, Albarka Maternity Home, Bosso Maternity Home and many others. As regards educational institutions, there are both private and public educational establishments in the area, such as nursery primary schools, secondary and tertiary institutions.

1.1 Statement of the Research Problems

The massive cash flows in urban utilities and infrastructures during the last century's oil boom attracted a large movement of rural migrants and citizens into the urban centres of Nigeria (Udo, 1983). This situation has brought about tremendous rapid development in illegal shelters which invariably resulted to increase in urban decay and degradation. Bosso an adjoining urban centre to Minna, the administrative headquarters of Niger state, has problems of illegal squatting; conversion of housing functions and an extremely poor levels

of services provision compounded by the apparent dearth of financial capacity and political will to redevelop the town. The area is also characterized by low income level patterns which is associated with high urban decay bringing about low standard of living of the people (Muhammed, 2005).

There are obvious cases of poor access roads, poor housing quality, sub-standard housing units, poor road setbacks, and high level of population density. The study area is also characterized by dilapidation of buildings and unsanitary living conditions, deterioration of amenities, poor sanitary facilities and adverse environmental conditions like noise, odors, dust and others.

The locations of the International Airport at Maikunkele, the school of Arts and Islamic legal studies in Tundu -Fulani, Upper River Niger Basin Development Authority, the Nigeria Open University Campus and the Federal University of Technology, Minna, in the area have brought about rapid developments, in the form of construction of low income housing structures to meet the high demands for residential accommodations, for the people.

1.2 Objectives of the Study

The main objectives of this study are, therefore, to:

- i. Access the physical conditions of residential buildings and the surrounding environment;
- ii. Examine the housing facilities and services in the area; and
- iii. Make planning proposals for improvements in the housing, physical facilities and general environmental conditions in the area.

2. MATERIAL SOURCES AND METHODS:

Two methods of data collection were used for this study; that is the primary and secondary sources. The primary data were sourced through i) physical survey: A reconnaissance survey was conducted on various housing conditions and characteristics to determine the level of obsolescence of the buildings. and ii) Questionnaires survey to obtain the required information on housing conditions and environmental conditions of the study area. Issues such as housing structural materials, internal facilities, socio – economic profile of the residents and available services and infrastructure were obtained through the method.

The secondary data which comprises of all the relevant secondary data on this study were procured from the relevant ministries, departments and parastatals. All relevant text books, journals, past students' projects and the internet were used as secondary sources of data for the study.

2.1 Sample Survey

The study area was stratified into 25 geographical areas and a total of 20 households each were randomly selected from the 25 geographical areas, to give a total of 500 households as respondents in the survey. Such variables as age of households, income structure, number of

persons in each household, number of rooms and windows in each house were considered in the research questionnaire. The questionnaires were directed at the heads of each household. Visual assessment was employed for the determination of the physical structure of the study area.

2.2 The Study Area

Bosso is an indigenous Gbagyi settlement in Bosso Local Government Area of Niger State. The local government area was created in September 1991, among other local government areas by the former Military President of Nigeria, General Ibrahim B. Babaginda, with its headquarters at Maikunkele. Bosso is located 5 kilometers away from Minna, the capital of Niger state along Kontagora road. It is precisely 163 kilometers from the Federal Capital Territory, Abuja and it is the largest settlement in Bosso Local Government area in terms of human population.

It lies at Latitude 9o 87' North and on Longitude 60o 33' East, on a geological basement of undifferentiated complex containing genesis and magnetite (Max Lock, 1980). The study area is bounded to the North by Maikunkele, to the West and to the East by Bida and Shiroro Local Government Areas respectively. The National Population Commission (2006) put the population of Bosso at 53,043, but at 3.5% growth rate the population is 60, 796, disaggregated into 31,310 (51.5%) males and 29,486 (48.5%) females respectively (2012 estimates).

Table 1: Population of the Study Area (2012)

Neighborhoods	Population	
	2006	2012
Tundu Fulani	583	668
Bosso main Town	43,856	50,267
Bosso Estate	583	668
Jikpan/ Hayan	6,604	7,569
Gwari		
Tayi Village	1,417	1,624
Total	53,043	60,796

Source: National Population Commission (NPC) (2006) and Estimates (2012)

The study area comprises of Anguwa Sarki, Anguwa Masa, Tundu Fulani Tsoni and Anguwa Biri quarter of Bosso as indicated in Fig.1.

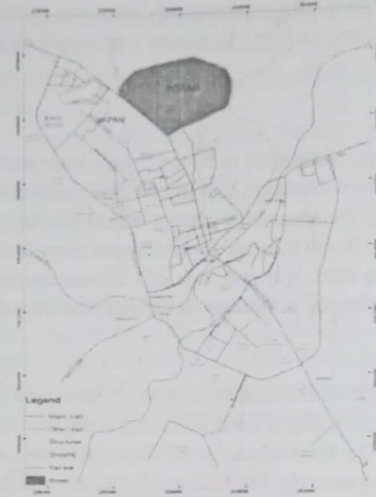


Fig. 1: Bosso in Minna Street Guide Map
Source: Urban and Regional Planning Dept. F.U.T, Minna

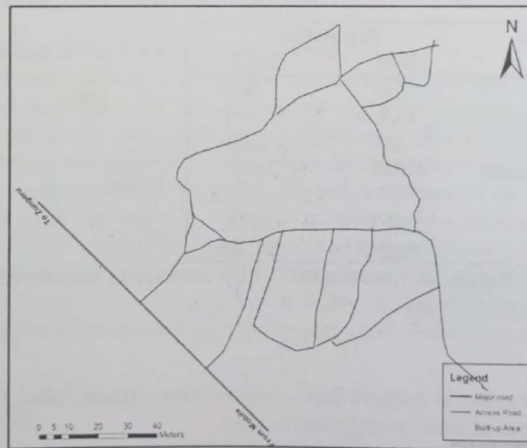


Fig. 2: Housing and Road network system in the study area
Source: Urban and Regional Planning Dept, F.U.T, Minna.

3. DATA ANALYSIS AND DISCUSSIONS

The data obtained from the field survey are presented and discussed below.

3.1 Socio-Economic Conditions of the Respondents

3.1.1 Age and Educational Level of Household Heads

The study examines the age and educational levels of the respondents in the study area. Out of the 500 household heads surveyed, only 5 (1%) are below 25 years of age and 352 (70.4%) were between 2 and 45 years age bracket, while 141 (28.2%) were above 46 years and only 2 (0.4%) were above 65 years. A greater percentage of the household heads belonged to the socially and economically active age bracket of 20 to 45 years.

With regards to the educational level of household heads surveyed, 110 (22.0%) had quranic education, 53 (10.6%) had primary education, 104 (20.8%) had secondary school education, 228 (45.6%) had tertiary education while 5 (1%) had no formal education.

3.1.2 Occupation and Monthly Income of Household Heads

The general occupational distribution of the household heads surveyed showed that 239 (47.8%) were civil servants, 74 (14.8%) engaged in farming activities, 118 (23.6%) were traders, 41 (8.2%) were in the informal sector, while 28 (5.6%) were self employed in establishments units like pure water outfits, aluminum pot manufacturing, soap making and many others.

Table 1: Monthly Income of Household Heads.

Monthly Income (₦)	Frequency	Percentage
Less than 10,000	256	51.2
10,001 - 20,000	169	33.8
20,001 - 30,000	48	9.6
30,001 - 40,000	13	2.6
40,001 - 50,000	4	0.8
More than 50,000	10	2.0
Total	500	100.0

Source: Field Survey (February, 2012)

The income level of an individual to a large extent determines the life style, since with higher income individuals could stay in better living environments. With high income level individuals can afford to pay for house rents and as well keep and maintain clean environment and the buildings. About 256 (51.2%) of the respondents earned less than N10, 000.00 per month and 169 (33.8%) earned between N10, 000.00 to N20, 000.00 monthly. The average monthly income of the population surveyed was estimated to fall within the range of N10, 000.00 and N20, 000.00, and they constitute mostly the civil servants in the state labour force. It was generally noted that a greater majority of the workers were usually left with nothing in their pockets after the monthly expenses, when salaries are paid.

3.1.3 Household Characteristics and Size

The survey shows that 205 (41%) out of the sampled size of 500 households heads constitute 1 – 5 per household size, 186 (37.2%) constituted the 6 – 10 persons per household size, while 109 (21.8%) were within 11 persons and above household size.

household size, while 109 (21.8%) were within 11 persons and above household size.

Table 2: Household Size of the Area

Household Size	Frequency	Percentage
1 – 5	205	41.0
6 – 10	186	37.2
11 and above	109	21.8
Total	500	100.0

Source: Field Survey (February, 2012)

3.1.4 Residents Status

A study of the status of the respondents indicated that 305 (61%) of the respondents were of indigenous background s of Niger state, while 195 (39%) were non – indigenes that migrated to the state.

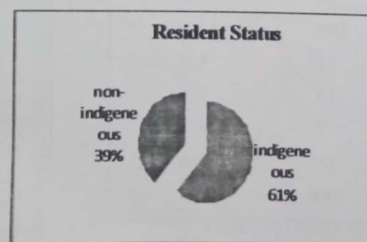


Fig. 3: Resident Status in the Study Area
Source: Field Survey February, 2012.

3.2 Housing Types and Development Pattern in the Area

3.2.1 Types of Building

The results from the survey conducted showed that 98 (19.6%) of the houses were one room apartments, 175 (35%) were room and parlor, 154 (30.8%) one/two bedroom apartments, 58 (11.6%) two/three bedrooms semi-detached and only 15 houses (3%) were storey buildings.

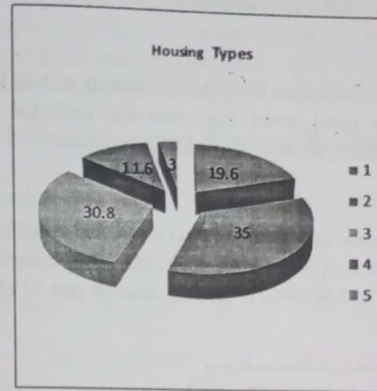


Fig. 4: Housing Types in the Study Area

Source: Field Survey February, 2012.

3.2.2 House Ownership

The survey also indicated that out of the 500 houses surveyed, 290 (58%) were owner occupied and 210 (42%) were rented accommodations.

3.2.3 Occupancy Ratio

Data on occupancy ratio showed that 53.8% of the households had less than 5 persons per room, 39.2% had between 6 – 10 persons, and only 7% had 11 persons per room. See Table 3 below.

Table 3: Occupancy Ratio among Dwelling Units

Occupancy Room	Per	Frequency	Percentage
Less than 5 persons	269	53.8	
6 – 10 persons	196	39.2	
11 and above	35	7.0	
Total	500	100.0	

Source: Field Survey (February, 2012)

3.2.4 Pattern of Housing Development

The pattern of housing development in the study area, as observed from the field survey, was cluster and linear development as houses and compounds were very close together and linearly located after each other along the major roads and footpaths. The various dwelling units were very close to one another and there were no well defined boundaries amongst houses, especially in the traditional core areas, around the Sarki house, Anguwan Biri, Anguwan Masa area, Tundu - Fulani Tsoni and around the area court.

3.3 Housing Conditions and Problems

Housing conditions survey was conducted to determine the extent of quality of buildings in the study area, using some criteria of very good, good, fair, poor and unfit for human habitation on such items as walls, windows, doors, roofs and housing foundation.

3.3.1 Materials Composition of Buildings

Different types of wall materials (mud, cements, and mud/cement) were mainly utilized for wall construction in the area. A total of 73 houses (14.6%) were constructed with earth mud, 163 (32.6%) constructed with mud/cement, 207 (41.4%) used only cement and 57 (11.4%) used other materials as indicated in Table 4.

Materials	Frequency	Percentage
Mud block	73	14.6
Mud/cement block	163	32.6
Cement block	207	41.4
Other materials	57	11.4
Total	500	100.0

Source: Field Survey (February, 2012)

3.3.2 Roofing Types and Roofing Condition

Data on the roof types showed that there were 469 (93.8%) corrugated zinc roofing type, 31 (6.2%) aluminum roofing type. But on the roof condition 211 (42.2%) houses had their roofs in good condition, while 185 (37%) and 92 (18.4%) houses had their roofs in fair and poor conditions respectively. Only 12 (2.4%) of the houses surveyed had their roof in unfit condition.

3.3.3 Walls and Foundation Condition

Data obtained from the survey showed that 238 (47.6%) of the walls of the houses surveyed are in good condition, while 35 (7.0%), 220 (44.0%) and 7 (1.4%) of the houses were in fair, poor and unfit conditions respectively.

For the foundation of the houses surveyed 232 (46.4%) buildings have their foundations in good conditions, 218 (43.6%) and 35 (7%) houses have their foundations in fair and poor conditions respectively and only 15 (3%) are unfit for human habitation.

3.3.4 Doors and Windows Materials and Condition

The materials used for the construction of the buildings in an area determine among others the healthy conditions of the habitants and depends on the income levels. Table 5 shows that 26 (5.2%) and 24 (4.8%) of the houses surveyed used corrugated roofing materials for the construction of doors and windows respectively. Only 5 (1%) and 10 (2%) houses used mat materials for the construction of doors and windows respectively.

Table 5: Doors and Windows Materials

Facility		Wood	Steel	Glass	Mat	Zinc	Total
	Frequency	168	269	32	5	26	500
Doors	%	33.6	53.8	6.4	1	5.2	100%
	Frequency	156	287	23	10	24	500
Windows	%	31.2	57.4	4.6	2	4.8	100%

Source: Field Survey (February, 2012)

For purpose of security of life and properties, doors and windows condition are very important components of any housing stock. The result of the survey conducted showed that a greater percentage of the housing had their doors and windows in good conditions. Over 200 houses had doors and windows either in very good or good conditions, while 238 (47.6%) doors and windows were fair and only 28 (5.6%) and 18 (3.6%) were in poor and unfit conditions respectively. See table 6 below.

Table 6: Doors and Windows Condition of Houses

Facility		V. Good	Good	Fair	Poor	Unfit	Total
	Frequency	35	175	193	94	3	500
Doors	%	7%	35%	38.6%	18.8%	0.6%	100
	Frequency	35	185	189	82	9	500
Windows	%	7%	37%	37.8%	16.4%	1.89%	100

Source: Field Survey (February, 2012)

3.3.5 Cross Ventilation in Houses

In all there were 3196 rooms in the 500 residential buildings studied and out of that 2115 rooms (66.2%) had cross ventilation, while 1081 rooms (33.8%) did not have cross ventilation. The importance of cross ventilation in a building in a hot climatic environment cannot be over emphasized.

3.3.6 Floor Types and Conditions

The survey conducted in the 500 housing units showed that 489 (97.8%) of the houses were with concrete floors, while only 11 (2.2%) houses were without concrete floors. As regards the conditions of floors of residential building units surveyed, 33 (6.6%), 201 (40.2%), 227 (45.4%), 35 (7%) and 4 (0.8%) were in very good, good, fair, poor and unfit conditions respectively.

3.3.7 Fascia and Ceiling Boards Types and Conditions

Particle boards and asbestos ceiling boards were the most commonly used ceiling materials in the study area having 394 (78.8%) and 64 (12.8%) respectively. Wood and mat materials had lower percentages of 15 (3%) and 10 (2%) respectively compared to particles boards and asbestos. However, there were some buildings without ceiling constituting 17(3.4%). The conditions of the fascia and ceiling boards of the 500 housing units surveyed were 22 (4.4%), 189 (37.8%), 185 (37%), 92 (18.49%) and 12 (2.4%) very good, good, fair, poor and unfit conditions respectively.

3.4 Housing Infrastructural Facilities and Problems

3.4.1 Bathrooms and Kitchen Facilities

Almost all the houses surveyed had bathrooms, ranging from iron zinc 160 (32%), mat 60 (12%), wood 95 (19%), cement block 150 (30%) and those houses without bathrooms 35 (7.0%). The proportion of households without kitchen in their homes is relatively small with 89 (17.8%) as compared to those with kitchen of 411 (82.2%) and it varies from open space kitchen type of 209 (50.9%) to room type of kitchen of 202 (49.1%) see table 7 below.

Table 7: Availability of Infrastructural Facilities within Buildings

Facilities	Availability of facility		Non availability of facility		Overall %
	Frequency	Percentage	Frequency	Percentage	
Cross ventilation	2115	66.2	1081	33.8	100
Bathrooms	465	93.0	35	7.0	100
Kitchen	411	82.2	89	17.8	100
Toilet	478	95.6	22	4.4	100

Source: Field Survey (February, 2012).

3.4.2 Toilet Facilities

The survey also indicated that 478 (95.6%) households had toilet facilities, while 22 (4.4%) had no toilet facilities at all but the residents use nearby bush, see table 7 above. A general observation of the type of toilet facilities use by the households showed that some households use pit latrines, 292 (58.4%), 186 (37.2%) use water closets and 22 (4.4%) use nearby bush.

3.4.3 Energy Power Supply

The study indicated that there is electricity supply in the area, but it is always irregular. The survey conducted showed that 408 (81.6%) respondents agreed that the supply of electricity is not regular and only 82 (16.4%) indicated it is regular, while 10 (2%) declined comments on the supply of electricity in the area.

3.4.4 Solid Wastes Disposal Facilities

There were numerous open spaces and undeveloped plots in the area which have been converted to disposal sites for solid wastes. From the survey conducted a greater percentage of the households 289 (57.8%) disposed off their refuse by open dumping, 108 (21.6%) by dust bins, open burning method had 56 (11.2%), government agency 15 (3%) and private agencies 32 (6.4%).

3.4.5 Sources of Water Supply

Various sources of water supply were identified with households in the study area, which ranged from streams, wells, boreholes, taps, and water vendors. The sources and availability of water supply in the study area is indicated in table 8 and fig. 4, 5 and 6. Potable water for domestic use is mainly supplied by water vendors, as it constituted 493(41.2%) and closely followed by stream 326 (27.3%), wells 265 (22.2%), public taps 105 (8.8%) and the least source of supply of water was boreholes with 6(0.5%).

Table 8: Sources and Availability of Water Supply.

Sources	Frequency	Percentage	Availability		%		
			Regular	Not regular			
Wells	265	22.2	97	36.6	168	63.4	100
Boreholes	6	0.5	2	33.3	4	66.7	100
Public taps	105	8.8	48	45.7	57	54.3	100
Streams	326	27.3	190	58.3	136	41.7	100
Water vendors	493	41.2	125	25.4	368	74.6	100
Total	1195		462(38.7%)		733(61.3%)		

Source: Field Survey (February, 2012)

With regards to availability of potable water supply in the area, 733(61.3%) of the respondents overwhelmingly indicated that the supply is not regular, while only 462 (38.7%) had regular water supply. Table 8 further indicated that most households rely on water vendors for water supply when other sources have become unavailable probably at certain periods of the year. The reliability of water obtained from water vendors leaves much on the environmental and health conditions of the households.

3.4.6 Nature of Access Roads

Three basic types of access roads were identified as foot paths (43.2%), minor roads (53.6%) and major roads (3.2%) as shown in table 9. It is noted that 196 (39.2%) of the road networks are fair and 269 (53.8%) are poor and non-motor able. The study also shows that 298 (59.6%) of the houses surveyed had untarred access, only 49 (9.8%) were accessed through tarred roads and 153 (30.6%) had no access but footpaths. Most of the buildings with roads were either in fair or poor conditions and were on top of hills or at the bottom of the hills as indicated in fig. 7. Houses on rocky and hilly terrains are liable fast washing away by gully erosion due to heavy rains.

Table 9: Access Types and Conditions of Access to Buildings

Access Type	Frequency	Percentages
Foot paths	216	43.2
Minor roads	268	53.6
Major roads	16	3.2
Total	500	100
Condition of Access to Buildings		
Untarred access	298	59.6
Tarred access	49	9.8
No access	153	30.6
Total	500	100

Source: Field Survey (February, 2012)

3.4.7 Drainage Types and Condition

Three types of drainage network as shown in table 10, were identified, that is the open and earth drainage 299 (59.8%), open and concrete drainage, 106 (21.2%) and lastly the closed and concrete drainage 95 (19%). The entire road network as seen in the study area was categorized as 9 (1.8%), 38 (7.6%), 102 (20.4%), 298 (59.6%), and 53 (10.6%) as very good, good, fair, poor and unfit respectively. The untarred roads, as shown in fig. 12, are very dusty and muddy during the dry and rainy seasons and pose health and environmental hazards to the immediate inhabitants.

Table 10: Drainage Type and Conditions of Road Network

Drainage Type	Frequency	Percentage	Condition of Drainage Network					
			Very good	Good	Fair	Poor	Unfit	Total
Open and earth	299	59.8	9	38	102	298	53	500
Open & concrete	106	21.2						
Closed & concrete	95	19.0	1.8%	7.6%	20.4%	59.6%	10.6%	100
Total	500	100						

Source: Field Survey February, 2012.

3.4.8 General Assessment of the Environment by the Residents

Majority 340 (68%), assessed the environment as very bad and uncomfortable, 125 (25%) assessed it as bad and an insignificant proportion 35(7%) assessed it as good. This shows that the general environmental conditions, such as housing types and conditions, housing infrastructural facilities provisions in the area are not adequate and of poor standards, the low income earners in the area are not comfortable because that is which they could afford with their meager income is not adequate.

3.4.9 Willingness to Move out of the Area by Residents

On the question, "If given alternative accommodation where would residents like to stay", the respondents overwhelmingly agreed that they would like to remain in their present places of abode because of their already long established socio-cultural and economic ties with their neighbours as indicated in Table 11.

Table 11: Willingness to Move to Alternative Place of Residence.

Reasons for staying	Frequency	Percentage
Because of long existing family ties	216	43.2
Because of economic opportunities in the area	122	24.4
Willing to move to another area	106	21.2
No comment	35	7.0
Missing link	21	4.2
Total	500	100

Source: Field Survey February, 2012

4. SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

4.1 Summary of Findings

The major findings of the study are as follows:

- i. A majority of the facilities and social amenities provided in the study area were grossly inadequate and in very bad conditions.
- ii. The environmental conditions of the area in terms of good road networks, wastes disposal methods, drainages and general beauty of the area is very poor and this situation, in turn, affects the value of the properties in the entire area.
- iii. The entire study area is made up of haphazard building structures erected everywhere and in most cases the buildings are inaccessible by motor able road networks.
- iv. The study also showed that some buildings stocks in some areas in the study area are unfit for human habitation and do not meet the criteria of building bye-laws. Some of the buildings in the area are erected on river valleys and rocky hills and are therefore susceptible to natural disasters.
- v. Despite the deteriorating environmental conditions of the study area, majority of the inhabitants are not willing to move out due to their long established socio-economic ties with their close neighbours whom they are not ready to do away with.

4.2 Recommendations

The following recommendations are made:

- i. In view of the analysis and the associated inferences drawn from the study, up grading proposals are imperative for a successful alleviation of the physical conditions in the area. In this regard, it is important to take into account the social, economic and political backgrounds of the people, in the area.

- ii. The Niger State government should work in collaboration with the people of the area for the provision of public services in the form of potable water supply, environmental sanitation, electricity supply etc to mobilize and motivate them to pay for installation, at a minimal price and maintenance costs of those services, for the long lasting of the services.
- iii. The development control unit of the Niger state Urban Development Board (NUDB) should improve in land security so as to avoid the construction of illegal structures and also the building of houses on hills and rocks to avoid natural disasters.
- iv. The Niger State Urban Development Board (NUDB) should use building by-laws to regulate the construction of buildings that do not meet planning standards. Moreover, an organized system of refuse collection and disposal should be established by the board for efficient refuse management in the area and Niger state in general.
- v. Residents in the study area being unaware of the extent of their housing environment problems, maybe due to lack of education, it is therefore proposed that residents should be mobilized for self-help actions. The unkempt latrines and bathrooms of most houses and the indiscriminate disposal of refuse in front of houses and at their rears, or nearby streams are defects which the inhabitants themselves can remove through their own efforts.
- vi. Inhabitants may also be educated on the relevance of ventilation facility to their houses. In this regard, residents should be educated on how to improve the ventilation in rooms, sanitation quality of their toilets and kitchens and the general use of space in the interior parts of the house. These environmental awareness and improvements should come through persuasions by social workers, explanations of basic health issues, discussions and meetings at community level, through the use of community media such as documentary films, radio discussions and posters.

4.3. Conclusions

The study has examined building conditions and housing facilities and their general effects on the environment in Bosso area of Minna in Niger state. It is expected that the implementation of the recommendations given in the study will go a long way in ameliorating the housing and infrastructural facilities conditions problems and the general environmental degradations in the area in particular and the state in general.

REFERENCES

- Abumere S. I (1985): *The Nigerian Urban Environment and Problems of Slums*. Department of Geography; University of Ibadan, Nigeria P. 33
- Aiyejina T. and Umar, Emmanuel (2010): *Impacts of Urbanization on Environmental Quality in Kaduna and Zaria Cities of North – Western Nigeria* *Centre for Human*

- Settlements and Urban Development Journal*,
Federal University of Technology, Minna (CHSUDJ) Vol. 1, No.1, December,
2010 Pp 48–60
- David, D.E and Ubong, E.H (2006): "Poverty and Environmental Degradation in Uyo, Akwa Ibom state, Nigeria". A paper Presented at a National Conference on Urban and Regional Planning, Federal University of Technology, Minna 15 – 19th November, 2006.
- George G.K (1999): *Basic Principles and Methods of Urban and Regional Planning*. 2nd Edition Libro – Gen Ltd, Lagos
- Kasarda, J.D and Parnell, A.M (1993): "Third World Cities: Problems, Policies and Prospects" Sage, New York pp. 9–10
- Max Lock (1980): *Minna Master Plan (1980–2000)*
- Mohammed A.M (2005): *Appraisal of Income and Housing Relationship. Case Study of Bosso – Minna Project Submitted to the Department of Urban and Regional Planning, Federal University of Technology, Minna.*
- NPC (2006): *National Population Commission 2006 and Population Estimates for 2012*
- Udo R.K (1983): *Internal Migrations and Development in A Geography for Nigeria Development* edited by Oguntoyinbo et al
- Onokerhoraye A.G (1986): "Urban Decay and Environmental Pollution in Nigeria Cities: Implications for Social Welfare". A Paper Presented at a Seminar on Environmental Pollution in Nigeria, NISER, Ibadan June 18 – 19, in *Urban Renewal in Nigeria NISER Ibadan, Nigeria*
- Okoye, T.O (1979): "Urban Planning in Nigeria and the Problems of Slums". *Third World Planning Review*, Vol.1, No.1 1979, Pp. 71 – 85
- Olaore O.G and Adeniji, S .A (1984): "Towards a new Theory of Slums Evolution and Redevelopment" paper presented at a National seminar on Innovative approaches to development theory, organized by NISER, University of Ibadan, Jan. 23-27.
- Odongo J. (1979): *Housing deficits in cities of the of third worlds, fact or fiction in Morison H.S and Plea J. (eds) Housing in third world countries, Macmillan.*
- Zubairu M. (2004): "The Decaying City: Dilemma and Challenges of the Architect. Centre for Housing Settlements and Urban Development (CHSUD) Federal University of Technology, Minna, Niger State, Nigeria



Fig.4 Untreated Water from Bosso Dam



Fig.5: Open Well near refuse dump site



Fig.6: Bore hole



Fig. 7: Housing on Rocky and hilly terrain



Fig. 8: Refuse dumping at back of house



Fig. 9: Inaccessible Residential areas



Fig.10: Outside Bathroom in Angwa Masa



Fig. 11: Access without drainage



Fig. 12: Untarred motor able access

Source: Field survey February, 2012

ANALYSIS OF URBAN DECAY AND ENVIRONMENTAL DEGRADATION IN
ANGWUA SARKI AREA IN BOSSO, MINNA

¹Ikhazuagbe Saliu Shaibu, PhD
shaibusi@gmail.com

²Olusegun Owoeye Idowu

^{1,2}Urban and Regional Planning Dept, Federal University of Technology, Minna

Abstract

The study is on urban decay and environmental degradation in Bosso Area of Niger state. The study was undertaken through data collection and oral interviews of the residents in the study area. In light of the research findings, it was noted that facilities and social amenities provided in the area were grossly inadequate and in highly dilapidated and deteriorated conditions. The study area was found to be short of planning, as most of the erected buildings had no building plans, building set-backs, no access roads and are built on rocky and hilly terrains that are susceptible to natural disasters. Above all, the buildings in the area lack basic adequate community facilities such as potable water supply, drainage system, wastes disposal facilities and electricity. Based on the aforementioned environmental situation existing in the study area of Bosso, recommendations were offered to reduce the level of decays and environmental degradation.

Keywords: Degradation, Environment, Housing condition, Urban decay, Urbanization

1. INTRODUCTION

The problems of environmental degradation resulting from rapid industrial development and largely unrestrained urban planning brings about worsening of the environment which results in degradation and lower the quality of life (Aiyejina et al 2010, David et al 2006). Rapid urban spatial growth has been a major source of global worry due to the attendant social, economic and environmental problems. Despite all efforts to reverse the prevailing trend, the crisis in which the large cities find themselves is deepening still. These problems