

**URBAN NEIGHBOURHOOD QUALITY  
AND RESIDENTIAL PROPERTY VALUES:  
(A CASE STUDY OF MINNA METROPOLIS)**

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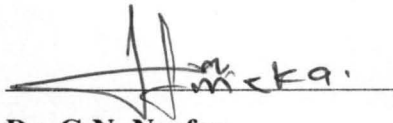
## DECLARATION

I, AMUSA MUKAILA DELE hereby declare that this thesis entitled: "Urban Neighbourhood Quality and the Residential Property Values in Minna" is a product of my own research under the supervision of Dr. G.N. Nsofor

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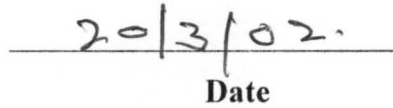
## CERTIFICATION

We certify that this research work was originally carried out by AMUSA MUKAILA DELE with registration number PGD/GEO/2000/2001/140 and approved as meeting the requirements for the award of Postgraduate Diploma in Environmental Management in the Department of Geography, Federal University of Technology, Minna, Niger State.

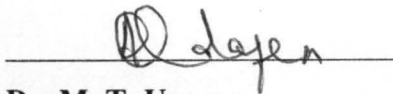


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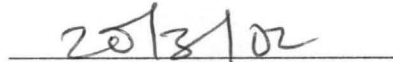


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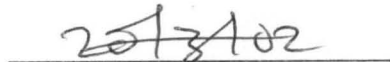
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## **DEDICATION**

This project work is dedicated to my wife “Hajiya Rashidat Ayo Hamza for her words of encouragement and provision of conducive environment for me to undertake the programme ; you are a wife any reasonable being would wish to have.



## ACKNOWLEDGEMENT

First and foremost, I give thanks to Almighty God for the opportunity given to me to run this programme.

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## ABSTRACT

This paper highlights the result of a research carried out to examine the effect of urban neighbourhood quality on rental values attracted by various residential building types in seven Geographical neighbourhoods in Minna. A significant aspect of the study involved literature review, computer analysis – statistical package for social science (SPSS) to determine whether there is significant correlation between Rental values and neighbourhood quality in Minna. The study also built a regression model to determine the contribution of the environmental factor in explaining the variation in rental values. The adequacy of the model was then tested by analysis of variance (F) which helped to determine the significance of the correlation between the determinant and the independent variable.

Results show that there is a significant relationship between rental values of residential properties and environmental quality of the seven neighbourhoods in Minna and that housing and social amenities form important factors that influence rents as well.

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## CHAPTER ONE

### 1.0 INTRODUCTION

The environment in which a person as a being finds himself by nature and where a property is sited by decision of man is a composition of both natural and human artificial factors.

Human beings by their activities through urbanisation and civilisation have been able to mould the environment through planning and provision of basic amenities.

The quality of a neighbourhood is determined by a number of factors. These include among others:

- condition of houses in an environment
- availability of good road network
- availability of good drainage systems
- availability of water supply
- availability of waste disposal system
- toilet facilities and housing conditions

The existence of the afore-mentioned has contributed to rich texture of interesting urban diversity, while their absence has resulted in degraded neighbourhood.

Everywhere in the world, there are several differences in environmental qualities of residential neighbourhood which in turn affects the rental values of properties.

This study therefore intends to understand differences in rental values of residential property and how these have been influenced by differences in neighbourhood quality.

### 1.1 BACKGROUND/DESCRIPTION OF THE STUDY AREA

Minna, the focus of this project work is the capital of Niger State. Minna was about two decades ago, one of the small human settlements in the Niger province of the defunct North western states.

Minna, was still in a status of a rural set-up when in 1976, the then military government of late General Murtala Muhammad created Niger State with Minna as its capital. This exercise marked the beginning of the departure of Minna from rural settlement to a growing urban settlements.

The eventual status of Minna as a state capital soon started to witness the influx of people both from the rural areas of the young state and from other parts of the country.

The influx of people in large numbers provoked a massive physical expansion of the town in order to make accommodation available for the people coming in.

As increasing population led to the physical expansion of Minna, business, agricultural and domestic activities were also expanding.

In the early years of Minna being the state capital, problem of wide disparity in rental value of similar properties in different neighbourhoods was not noticeable. Now that the physical and human growth had occurred, this has now become problem.

**(a) Landform**

The total landmass of Minna is underlain by hard rocks. There is also the threat of increased rocky nature of the landmass if erosion and deforestation activities are not checked. The water table in Minna is usually quite high and wells are sunk to a comparatively shallow depth before water is struck. If solid wastes are not properly managed therefore there is the risk of contamination of wells.

**(b) Climate**

Like the rest of the West African sub-region, the climate of Minna is influenced largely by two dominant air masses affecting the sub-region. They are the dry and dusty tropical continental air masses and the warm moist tropical moisture air masses. There is dynamism in the climatic condition which determines the nature of the rainfall regimes, the temperature and the wind.

**(c) Rainfall**

The rainfall season is usually from the month of April to October. In some years however, the first two weeks of the month of November also witness some rainfall. Although the beginning of rainfall is recorded in the month of June and July and the highest rainfall is recorded between the months of August and September.

**(d) Temperature**

In Minna, the highest level of atmospheric humidity is between the months of March, April and May before the onset of the rainy season. During this period the atmospheric temperature rises up to 38°C. The lowest temperature is recorded from the end of December to the end of February. The rise in atmospheric temperature during the period can be linked to the highest amount of sunshine experienced during the period.



Temperature may facilitate air pollution if solid wastes are left untreated. Thus temperature may cause a threat to the health of individuals if refuse are left to decompose in the study area.

**(e) Wind**

There is the occurrence of heavy destructive wind that accompanies the early rainstorms, usually in the months of April and May. Another similar wind comes again towards the end of October signalling the end of the rainy season. During the months of January and February, strong harmattan winds are also experienced which terminates with the beginning of high temperature. The wind in the study area could pick up refuse dump or scatter it elsewhere if refuse is not properly managed.

**(f) Drainage**

Before the devastating flood of September 1986 in Minna there were poor drainage systems. Most of the drainage networks prior to the floods of 1986 were either inadequate or non functional. The construction of large multi million Naira modern drainage system across Minna has reduced to the barest minimum, the incidence of flooding in Minna. It is therefore necessary to manage solid waste in order to prevent the blockage of drainage that could lead to flooding.

**(g) Landuse**

The land in Minna is essentially used for agricultural purposes. Within Minna township crops like maize, melon and groundnut are produced. Vegetable gardens are also maintain near some households. The largest percentage of land is used to build residential houses to accommodate the rising population. Considerable percentage of land is also used for building both government and private office block. A reasonable percentage of land area is also used to build township roads for ease of movement. The hygienic nature of the land is however hampered since there is indiscriminate defecation and dumping of all sorts of wastes everywhere.

**(h) Vegetation**

The vegetation of Minna belongs to the Guinea Savannah vegetation. The vegetation is characterised by tall grasses with scattered tree like locus bean, shea butter and mango trees etc. Several year of repeated cultivation has rendered the land almost

bare. Instead of tall fresh grasses we now have scanty and miserable looking grasses with almost all the tall trees cut down for used as fuel wood. Vegetation of the study area will not pose a threat to solid waste management.

**(i) Soil**

The surface soil in Minna is generally low sand. The soil is well drained and has high water infiltration rate. Soils in Minna are derived from basement complex rock. They range from shallow to very deep soils overlying weathered genesis and magmatites. Some are underlain iron per a varying depths. They are strong burson to red sandy clay or clay with often gravely loamy sand or sand surface layer.

## **1.2 STATEMENT OF THE PROBLEM**

Generally speaking, the quality of a neighbourhood in terms of housing conditions therein, provision of road network, water supply among others and value of properties are related. This invariably means that the neighbourhood in which a property is sited has a significant influence on the value (capital or rental) of such property.

The discrepancy/disparity observed in Minna metropolis as regards rent attracted by similar properties in different location is enormous and a course for concern.

## **1.3 AIM AND OBJECTIVES OF THE STUDY**

The aim of this research work is to examine the neighbourhood environmental quality relationship with rental value of residential properties in Minna.

Objectives of the study among others include:

1. To examine housing conditions and facilities within the study area.
2. To study the environmental conditions of the residential neighbourhoods
3. To collect and analyse data on rental values of residential properties within the study area.
4. To correlate indices of neighbourhood quality with residential property value.
5. To make appropriate recommendations that will improve neighbourhood quality and residential property values.

## **1.4 JUSTIFICATION OF THE STUDY**

In the recent past, there had not been an attempt by writers/researchers in the field of environment to link up the quality of a neighbourhood and the property values,

especially in Minna metropolis. The research work has only been focussing on a particular aspect of different dimensions.

This study is an effort at linking up property values and neighbourhood quality, deduce the disparity therefrom or otherwise and make recommendations accordingly.

This is useful in the better management and effective planning of our urban centres. It will provide useful data for land use planning in particular and urban management in general.

The data therefrom are useful to a wide spectrum of professionals such as urban land use planners, estate surveyors, geographers, and government bodies among others.

## **1.5 SCOPE AND LIMITATION**

The purview or operation of this study is precisely restricted to the rental value of residential properties of blocks of flat, bungalows, duplexes, and tenement buildings in the selected areas. The selected areas are to reflect different residential densities.

- i. High Density Neighbourhood :- Kpakungu, Sauka Kahuta and Kwangila areas.
- ii. Medium Density:- Tunga, Old Airport quarters among others.
- iii. Low Density:- Government Reserved Areas (GRA), Senior Staff Quarters, Bosso Estate among others.

## **1.6 EXPECTED FINDINGS**

The working assumption/hypothesis here is that there is a direct relationship between quality of neighbourhood and the value of residential properties in these neighbourhoods. This implies that as quality increases the rental value is expected to be enhanced.

We may however find a mixed result whereby low quality neighbourhood may have high rental values close to high quality neighbourhood for certain category of properties.

## **1.7 ORGANISATION OF THE THESIS**

This thesis has been organised and written in five chapters.

Chapter one being an introductory chapter, discusses aim and objectives of the study statement of problem, historical background of the study area, and the manner in which the thesis has been organised.

Chapter two deal with reviewing various textbooks relevant to the subject matter of the research work.

Chapter three deals with the methodology employed in gathering data for the dissertation.

Chapter four deals with data presentation and analysis.

While chapter five is the summary of findings recommendation to overcome problems and conclusions.

## CHAPTER TWO

### 2.0 LITERATURE REVIEW

### 2.1 PROCESS OF URBANISATION

Urbanisation according to chamber 20<sup>th</sup> century dictionary refers to as to make (a district) town like as opposed to rural in character.

The problem of identification of what is urban has been made all the more difficult by the fact that the concept and indeed the reality of what is urban are not static but are continually being changed by new conditions.

In early times, the town meant “market town” and the legal possession of a market virtually defined a town (Carter, 1981).

#### 2.1.0 THE DEVELOPMENT OF MODERN CITIES

In the 14<sup>th</sup> and 15<sup>th</sup> centuries before industrial revolution; only few countries such as Venile and Paris had a population up to 100,000 persons.

Urbanisation became generalised as a result of the incorporation of large non economical areas of the world into European “civilised fold” through imperialism of the European powers (IDRC1995).

#### 2.1.1 RECENCY OF URBANISATION

In historical terms urbanisation on any scale is essentially recent, a feature of the last one hundred and fifty years.

It has been estimated that before the start of the 19<sup>th</sup> century, only some 3% of the world’s population lived in town of over 5000. By the present, this has risen to near 40%.

Expressed in a different way, the world urbanisation level rose from 28.2% to 34.6% (Carter, 1981).

### **2.1.2 THE DOMINANCE OF URBANISATION**

The most conspicuous feature of today's accelerated world population growth is its even greater rapidity of urbanisation. In many periods of history, population and cities have grown but the tempo and dimension of recent years have never been equalled. It follows that urbanisation is the dominant process in the spatial organisation of the world population.

## **2.2 CAUSES OF URBANISATION**

(Carter, 1981), highlighted the followings as the possible causes of urbanisation among others.

### **2.2.1 ECONOMIC DEVELOPMENT**

This relates to the movement of people out of agricultural communities into other and generally larger non-agricultural communities. This conception gives primary recognition to the differential ordering of occupations. The crux of this approach is a direct correlation of economic development with urbanisation and it is usually couched in the form of the identification of phases of economic development each of which is associated with a degree of urbanisation.

### **2.2.2 AGGLOMERATION ECONOMIES**

To an extent this overlaps with economic development but rests more on the argument that growth is cumulative and cyclical. Once a large city is created then the attraction it offers in terms of supplies of labour and capital as well as the build up of infrastructure will of themselves promote growth so that a rising spiral of development is set in motion.

### **2.2.3 POLITICAL AND SOCIAL CHANGE**

In proving this theory on urbanisation, Reissman (1964) put forward four urbanisation variables. The first is urban growth itself and this is measured by the



percentage of population in cities of over 100,000. The second is industrialisation which he argues applies to the whole process of change and its accompanying consequences as a society moves from agricultural to an industrial economy, from a small rural homogenous society to a large metropolitan heterogenous massing; the third variable is an attempt to assess the restructuring of power relations within a society so that the move to industrialisation can begin; the fourth variable is the rise of nationalism- a pivotal element in the social transition being analysed. This measured by the percentage of literacy among the population over the age of fifteen.

### **2.3 URBAN SPRAWL**

Sanusi (2001), defines urban sprawl as the uncontrolled development of land and in most cases the settlements therefrom are often subject to decay.

Urbanisation and the cities which it gives rise to could be perceived in its problematic terms, the overcrowdings, the slum and squatter conditions, garbage heaps, the poor sanitation, pollution and general environmental degradation culminating in diseases and high mortality, unemployment and rising poverty. Urban sprawl is thus a product of urbanisation.

Urbanisation and the environment which it creates however predisposes the population to new attitudes, to social changes and awareness, to easier access, to new ideas, scientific information and technical knowledge and to innovation and changes.

Urban sprawl tends to overshadow the positive sides of urbanisation and this has forced some analysts to call for a halt to urbanisation.

### **2.4 CONCEPT OF RENT AND VALUE**

RENT: According to Advance Learner Dictionary of Current English, rent is defined as the regular payment for the use of land, a building, a room or rooms, machinery among others.

In classical economy, according to John Procter (Longman Dictionary of Contemporary English), rent means the income derived from ownership of land and other natural resources in fixed supply.

Paret (1997), defines rent as a payment for the periodic use of anything which may either be land or physical development thereupon, and also motor vehicle, motor cycle among others.

It is also referred to ordinarily as the reward for land after compensating for all other variable factors of production (Cleavelly, 1985).

2.5 **RENTAL VALUE:-** In a broad sense, rental values of a landed property is the periodic income stream receivable by a willing lessor from willing and able lessee in consideration for a lease that is, right of use of the property at a particular point in time in line with usual landlord and tenants covenant.

2.6 **TYPES OF RENT:** The word rent can mean different things, depending on the type of rent being referred to. Some types of rent are discussed below:

- i. **Profit Rent:-** Profit rent is an amount of rent receivable which exceeds the rent paid. Under a leasehold interest, there are cases where properties are leased for an appreciable term of years in which the rent paid is lesser than the open market rent and not subject to frequent adjustment under rent review clauses in the lease agreement. In this instance the lessee enjoys a “Profit Rent”
- ii. **Gross Rent:-** This is a rent which includes the necessary outgoing, (i.e. expenses) such as repairs, insurance, rates, maintenance costs (Samuelson, 1971).
- iii. **Net Rent:-** This is a rent that is free from all outgoings for example, after charges for repairs, maintenance have been deducted from gross rent, the rent is net.



- iv. **Virtual or Sitting Rent**:-It is applied to a true annual rent of premises to lessee (tenants). It is rent paid plus the annual equivalent of any capital sums he might have expended on the premises from time to time.
- v. **Rack Rent**:- This is the current open market letting value or the amount for which premises is let in the open market at a time under consideration, therefore, it refers to the greatest amount that premises command in the market (Samuelson, 1971).
- vi. **Ground Rent**:- This is the rent paid by property owner annually to the state government in order to preserve the legality of his ownership. The amount payable is always indicated in the Certificate of Occupancy.

## 2.7 VALUE

Value refer to the capacity of a thing to satisfy wants, John Procter (Longman Dictionary). Thus there are as many kinds of value as there are wants, this donates that value is connotative in the sense that it has many interpretations as it could mean one thing to the scientist and yet another to the artist. For example, in real estate transaction, lending institutions use the term “Loan Value” “Insurer Use” Insurable Value” etc. (Ratcliff, 1961).

Estate valuers when used the word value will be referring to “Market Value” which can be defined as “highest price” in terms of money, which a property will bring in a competitive and open market, all conditions requisite to a fair sale, the buyer and seller each acting prudently, knowledgeably and assuming the price is not affected by undue influence.

There is no compulsion on either the vendor or the purchaser to enter into transaction. The vendor will only sell if offered the sum he requires and the purchaser will only buy if he can do so at the price which he considers satisfactory. This therefore shows that both parties consider the deal from their own personal advantage.

### 2.7.1 TYPES OF VALUE

Although value is really symbolic of ideas and this can not be defined precisely, however it could be divided into two according to (Hoty, 1939).

- i. Value-in-Exchange:- Which means the power of a goods or commodity to command other goods in exchange.
- ii. Value-in-use:- which also refers to the present worth of all future benefits anticipated from ownership rights in real estate to typical users.
- iii. Going Concern Value:- This is the value of land, building plant and machinery in the hand of purchaser, acquiring them as a part of the business for which they were designed and used. Such a purchaser will have regard to the amount of the profit which he would make out of business.
- iv. Current value: This is the market value, which a piece of land attracts under its current use.
- iv. Development Value:- This usually refers to the value of a piece of land which ripe for development. It also applies to values of uncompleted property. For example if a plot of land has not ripped for development or reached the peak of development, so, the existing value of the plot plus the value of proposed development is the development value.

### 2.8 DEFINITION OF PROPERTY

The term property has a widespread interpretation. It is a complicated legal concept which consists not only the objects owned by a person but rather of man's right (Thorncroft, 1970). In defining the term property, a layman will see it as his personal belongings, such as a watch, a book, a bag, a can and a flower; people in the legal profession would also define

it to consist of immovable property such as lands, buildings, machineries and plants and other items that are fixed assets.

Paret (1997) defines property as anything that may be possess or become the subject of ownership. Furthermore, the term property is defined in the following words “not simply as a matter of land and building but of property rights in this physical thing”; therefore property in its sense does not only include physical but other abstracts rights. These rights can be regarded as exclusive rights which include right of possession, enjoyment and disposal of the object itself.

There are two types of property, namely: real and personal property.

The real property refers to the benefit and interest associated with the land, while personal property refers generally to movable items, that is, those not permanently fixed to loan.

Properties can generally be acquire by: inheritance, gift, dedication, assignment among others.

### **2.8.1 CLASSIFICATION OF RESIDENTIAL PROPERTIES**

Nwuba (19 97) classified residential properties into five (5) categories:

- i **Tenement Building:-** A building having units of bed rooms arranged on a single or double line with common corridor facilities and conveniences.
- ii **Block of Flat:-** A building on one or two floors having a separated and self contained set of accommodation units with in-built private conveniences for individual units. Its always in a multiple of one. The size of this flat ranges from 2- bed room 3- bed room 4- bed room among others.
- iii **Duplex Buildings:-** This is a building on two floors with sitting and guest bed room on the ground floor, and other bed rooms on the first floor .

iv. **Bungalow:-** A house on ground floor only in a premises having an enclosed accommodation unit with conveniences and facilities for the occupation of one family unit.

v. **Mansion:-** This type of accommodation is usually on one floor of either four or five bed room challets.

Additional facilities in this type of accommodation include garage, swimming pool, well-paved courtyard, lawn tennis court among others.

## **2.9 URBAN RESIDENTIAL NEIGHTBOURHOOD AND ENVIROMENTAL QUALITIES.**

One of the major dimensions of the housing commodity can be given the long but descriptive name of “ environmental amenities”.

These are the characteristics of the surrounding area which affect the desirability of the residence.

Families are concerned not only with the distance to school for their children but also with the qualities and prestige of that school. Since the quality of schools varies widely in most American cities, American families tend to consider this factor most carefully when searching for a home. To a lesser degree, perhaps, the quality of a local fire and police protection are also considered.

Other urban services such as parks, playgrounds and hospitals influence the relative desirability of housing. Trees and grass belonging to prospective neighbours, the view obtained from the house in question, and the peculiarities of the neighbourhood climate, (temperature, wind, fog etc.) are also part of the housing “Package’

One very objective kind of “ Environmental Quality” which can nevertheless play a most important role in housing is the social characteristics of the people in the neighbourhood.

Absolute privacy is neither desirable nor possible for most city dwellers. Association with neighbours will be a necessary and perhaps valuable part of the living in a particular dwelling unit. Sometimes the social desirability of a neighbourhood is significantly influenced by the past history of the area; some locations acquire fashionable reputations and others suffer from a relatively bad name. For better or worse, the real and traditional social status of the area will rub-off on families moving into it.

Environmental quality can be influenced to an important degree by community programmes of land use control. If small factories and eating places are mixed on with residential uses, the resulting noise, congestion and visual appearance may make housing in the area less attractive and enjoyable. The placement of utility lines and traffic control devices may be beneficial or harmful depending upon the skill and authority exercised by public officials. Local laws governing the passage of pedestrian or vehicles across otherwise private land have substantial meaning for would be residents of the area. (Smith, 1971).

## **2.10 FACTORS THAT INFLUENCE PROPERTY VALUE**

The following are the factors that enhance/affect values adversely in a given location.

- i. **Social Status and Quality of Neighbourhood:** The social status and qualitative characteristic of the neighbourhood generally influence the value of properties in that neighbourhood. For instance in the study areas, properties (residential) in GRA, Senior Staff Quarters, Bosso Estate which are occupied by the “cream of the society” who make sure that all necessary facilities and services are incorporated rates high in values than the “slum” such as Sauka Kahuta, Kwangila among others while the facilities for human existence is a little bit lacking for “dregs” of the society that pervade there.

ii. **Availability of Public Utility And Services in Different Locations:** The availability of public utilities such as pipe borne water, regular supply of electricity, good road among others enhance the demand for and correspondingly the rise in the value of properties in any given locations, while their absence or limited supply in other locations affects such demand and inversely, the value of property in such areas. Accessibility assumes an added significance in Nigeria, especially where telecommuincations facilities are not reliable. This makes accessibility by road to be of paramount importance for the enhancement of property values; the more accessible a location, the more values are its properties.

iii. **Other factors include:**

a. **Changes in Population:** Where there is a change of population usually cause by movement of people in or out of an area there tends to be an influence in rental value of properties downward or upward.

b. **Changes in Building Cost:** Newly constructed properties usually attract more demand, but due to the present cost of building materials which has been astronomical in the recent past make the cost of erecting a property to be more higher than it was before. This consequently affects the value of the properties.

c. **Changes in Taste and Fashion:** Changes in the taste and fashion has forced older properties in the metropolis to be unfashionable and hence less in demand. It is observed that as a result of the above analysis, older building in Minna metropolis do not meet current functional requirement in houses.

Modern and fashionable finishes such as aluminium, sliding door and windows, terrazzo or marble floors, fashionable ceiling board, wall pelmet among others, added more rental value to the property.



- d. *Design of the Property:* It is an established fact that a well designed property enjoys an enhanced values, but reverse in the case in an in-built faults. This is because an in-built faults will usually have an adverse effect for a good cross ventilation, good internal lighting, sufficient and adequate toilet and bathroom facilities ensuring that no room is too big or too small among others.

The methodology employed in gathering data for this study is discussed in the succeeding chapter.

## CHAPTER THREE

### 3.0 RESEARCH METHODOLOGY

The objective of this study is to analyse the rental value of residential properties in relation to the neighbourhood quality in Minna metropolis.

In gathering data for this research work, the procedure employed includes the use of questionnaire, personal interview/physical survey of the area, personal observation, discussion held with tenants, landlords and some estate surveyors and valuers within Minna metropolis.

To analyse rental value, the following factors affecting it must be quantified; these are housing quality, social amenities and the natural environmental amenities or qualities.

### 3.1 AIM AND OBJECTIVE OF THE STUDY/HYPOTHESIS

The aim of this research work is to examine the neighbourhood environmental quality relationship with rental value of residential properties in Minna.

Objective of the study among others include:

1. To examine housing conditions and facilities within the study area.
2. To study the environmental conditions of the residential neighbourhood.
3. To collect and analyse data on rental values of residential properties within the study areas.
4. To correlate indices of neighbourhood quality with residential property value.
5. To make appropriate recommendation that will improve neighbourhood quality and residential property values.

HO: There is no relationship between the quality of neighbourhood and rental value of residential properties in the selected neighbourhood.



### **3.2 SAMPLING PROCEDURE**

The studied areas were randomly selected. In this type of selection, each neighbourhood/household stands the chance of being selected for representation of the entire population.

Seven neighbourhoods were selected on the overall based on the concentration of residential properties. These are: Government Reserve Area (Zarumai Quarters), Senior Staff Quarters, Bosso Estate, Tunga, Old Airport Quarters, Kpakungu, Sauka Kahuta, Kwangila among others.

### **3.3 SOURCES OF DATA COLLECTION**

The data for this dissertation work was collected from the following sources:

1. Primary sources of data collection
2. Secondary sources of data collection

#### **3.3.1 PRIMARY SOURCES OF DATA**

These include data obtained from the source i.e. through such methods as personal interview, discussion held with tenants, landlords, estate surveyors and the use of questionnaires among others.

The selected areas were surveyed and some necessary information was obtained through aforementioned methods together with personal observation. This enabled the researcher to have an in-depth understanding of the impact of neighbourhood quality on the residential property values in the selected areas in particular and Minna as a whole.

### **3.3.2 PHYSICAL ENVIRONMENTAL SURVEY**

This involves physical survey of the environment by the writer. The essence is to note specific environmental quality indices in the selected neighbourhoods.

### **3.3.3 QUESTIONNAIRE**

This kind of study requires highly qualitative and quantitative data to make meaningful deductions, inferences and useful conclusions and recommendations.

In view of this, questionnaires were administered to residents/tenants and some estate surveyors and valuers within the study areas. (Questionnaire attached as appendixes I and II respectively).

### **3.3.4 QUESTIONNAIRE DESIGNS**

Questionnaires are designed to ask a wide range of questions from the respondents.

The question asked (Appendix I) borders on such thing as personal attribute – age of the respondents, number of year spent in school, their income level, occupational status, manner of paying rent among others. Others bordered on their environmental conditions and their housing facilities. These include conditions of drainage system, waste storage facilities, means of waste disposal sources of water and generally their level of contentment with their environment.

The second question (Appendix II) were designed to collect data on the rental values of various properties common in the selected areas from the practising estate surveyors and valuers.

### **3.3.5 PERSONAL INTERVIEW**

This method involved face-to-face-interview between the interviewer and interviewee. It brings about the collection of the first hand information. It also brings greater depth of response from the respondents as it is being conducted.

Some landlords, tenants and estate surveyors were interviewed. This method enables some of the respondents to open up on relevant issues which might have remained hidden without them being interviewed.

### **3.3.6 PERSONAL OBSERVATION**

Arising from the physical survey carried out by the writer personal observations were made as regard the analysis of the influence of neighbourhood quality on residential property values.

### **3.3.7 SECONDARY SOURCES OF DATA**

The information obtained through these sources were extracted from past research work, text books relevant to the course of study, seminar papers, newspaper publications on rental values of residential properties.

### **3.3.8 OTHER SOURCES:**

These include class or lecture notes and handouts, journals, books, articles, other thesis and dissertations, newspapers etc.

#### 3.4.0 METHOD OF DATA ANALYSIS

Statistical Package for Social Science (SPSS) was employed in the processing of the data so obtained.

#### 3.5.0 LIMITATIONS/PROBLEM ENCOUNTERED

In carrying out this research work, some problems were encountered. They are as follows:

- a. **Unco-operative Respondents:** Some individuals refused to divulge information probably because they wanted to maintain some privacy. There was also a general suspicion of the respondents on the intention of the writer/ researcher.
- b. **Illiteracy:** This can also be referred to as ignorant constraint; this is because some respondents cannot speak English language and this makes it so difficult for necessary information to be obtained.
- c. **Finance:** Inability of some landlords/tenants to speak English language makes it an additional burden on the writer to hire a paid interpreter. Also financial status of the writer confined his ability to small portion of the area and to other possible data collection sectors.
- d. **Limited time:** The short time within which the research work had to be carried out alongside office responsibility in the place of work, and other academic activities posed some problems in collection of data for the research paper.

The data collected through various sources mentioned in this chapter analysed and presented in the next chapter.

## CHAPTER FOUR

### 4.0 DATA PRESENTATION AND ANALYSIS

This chapter presents the result of the data analysis. Also, the hypothesis earlier set were tested.

The data for the dissertation were collected via two different sets of questionnaires; one administered to respondents of the seven (7) selected neighbourhoods; and the other to some practising estate surveyor and valuers within Minna metropolis.

Table 4.1 below shows the response rate from questionnaire administered on seven neighbourhoods.

| NEIGHBOURHOODS     | NO. OF QUESTIONNAIRE ADMINISTERED | RESPONSE | PERCENTAGE |
|--------------------|-----------------------------------|----------|------------|
| GRA                | 15                                | 12       | 80         |
| SSQ (Bosso estate) | 15                                | 10       | 67         |
| Tunga              | 15                                | 11       | 73         |
| Old Airport        | 15                                | 11       | 73         |
| Kpakungu           | 15                                | 8        | 53         |
| Sauka Kahuta       | 15                                | 10       | 67         |
| Kwangila           | 15                                | 9        | 60         |
| Total              | 105                               | 71       |            |

Rental values of four categories of common residential properties were also collected from the practising estate surveyors and valuers.

The questionnaires administered were coded for computer analysis.

Statistical Package for Social Science (SPSS) was used for the analysis of the data so collected. The frequency analysis therefrom is as shown in the following table.

Table 4.2 *Socio-economic characteristics of the people (respondents).*

| OCCUPATIONAL STATUS | FREQUENCY | PERCENTAGE |
|---------------------|-----------|------------|
| Pensioner           | 6         | 9          |
| Civil servant       | 25        | 35         |
| Private sector      | 40        | 56         |
| Total               | 71        | 100        |

Source: Author's field survey – Dec. 2001

From table 4.2, it can be seen that the bulk of the respondents are in the private sector group. This constitutes 56% of the respondents. 35% of the respondents are civil servants, while 9% of the group are made up of pensioners.

The private sector group referred to in the table above are micro-sect. The implication of this is that they are not organised private sector and thus the poverty level is still high. This will however reflect on the quality of the neighbourhood.

Table 4.3 *Age of Respondents*

| RANGE (YRS) | FREQUENCY | PERCENTAGE |
|-------------|-----------|------------|
| 25-35       | 11        | 15.5       |
| 36-40       | 15        | 21.13      |
| 41-50       | 37        | 52.10      |
| 51-60       | 8         | 11.27      |
| Total       | 71        | 100        |

Source: Author's field survey (Dec. 2001)

As shown in table 4.3, 52% of the respondents fall within the age of (41-50 years); 21% of the respondents fall within the age group (36-40 years); 15% of the respondents fall within the age group of (25-35 years) and the least, 11% fall within (51-60 years).

Young and middle aged people who are particularly productive form the majority (52%). This is evidently a welcome development. We can see that this 52% can take care of the environment which will eventually enhance the value of the properties in such a neighbourhood.

Table 4.4 *Grading of neighbourhood by residents*

| GRADES    | FREQUENCY | PERCENTAGE |
|-----------|-----------|------------|
| Very good | 2         | 2.8        |
| Good      | 29        | 40.8       |
| Fair      | 31        | 43.7       |
| Poor      | 9         | 12.7       |
| Total     | 71        | 100        |

Source: Author's field survey (Dec. 2001)

From table 4.4, it can be seen that the perception of 44% of the respondents towards their environment is fair, 13% of the respondents graded their environment as poor while 41% and 3% graded their environment as good and very good respectively.

Majority do not see their neighbourhood as belonging to high quality. This internal view is likely to effect a low negotiation for property especially rents.

Table 4.5 Expression of satisfaction with present housing condition

| CONDITION | FREQUENCY | PERCENTAGE |
|-----------|-----------|------------|
| Yes       | 21        | 29.6       |
| No        | 50        | 70.4       |
| Total     | 71        | 100        |

Source: Author's field survey (Dec. 2001)

From table 4.5 it can be seen that 70% of the respondents expressed the dissatisfaction with their present housing condition.

Surprisingly about 30% felt very satisfied with their living condition. This tells us that the quality of housing in most neighbourhoods are not favorable and inturn bounce back to the values of the property.

Table 4.6 Reasons for choice of location by the respondents

| REASONS                   | FREQUENCY | PERCENTAGE |
|---------------------------|-----------|------------|
| Low rent                  | 8         | 11.3       |
| Nearness to place of work | 25        | 35.2       |
| Influence from relation   | 6         | 8.5        |
| Others                    | 32        | 45         |
| Total                     | 71        | 100        |

Source: Author's field survey (Dec. 2001)

From table 4.6 above, explaining the reason for choice of location by low rent accounts for 11%, 35% of the respondents chose their own location based on nearness to their various places of work, while influence from relation, made about 8% of the respondents to choose their own location.



Other factors/reasons, such as availability of basic amenities, regular supply of water, among other constitutes the bulk of the reasons (45%) by respondents (see table 4.6).

The implication that 45% respondents chose their location based on the availability of basic amenities, regular supply of water indicates an improved neighbourhood. This will go along way to influence the value of the property.

*Table 4.7 Manner of paying rent*

| MANNER      | FREQUENCY | PERCENTAGE |
|-------------|-----------|------------|
| Annually    | 36        | 50.7       |
| Bi-annually | 3         | 4.2        |
| Quarterly   | 16        | 22.5       |
| Monthly     | 2         | 2.8        |
| Others      | 14        | 19.7       |
| Total       | 71        | 100        |

Source: Author's field survey (Dec. 2001)

From table 4.7, it is found out that the majority of the respondents (51%) paid their rent once in a year. 22% of the respondents pay their rent quarterly; 4% paid on bi-annually basis; 3% paid on monthly basis, while others use other forms of payments such as weekly or bi-weekly.

Manner of payment may not however have a direct relationship with the quality of environment and as such their correlation as regard enhancements or otherwise may not be significant.

Table 4.8 Access to buildings

| MODE         | FREQUENCY | PERCENTAGE |
|--------------|-----------|------------|
| Accessible   | 56        | 78.9       |
| Inaccessible | 9         | 12.7       |
| Others       | 6         | 8.5        |
| Total        | 71        | 100        |

Source: Author's field survey (Dec. 2001)

From table 4.8, accessibility here means each particular building fronting a road. Inaccessibility on the other hand, referred to those houses that do not front a road.

It is discovered that 79% of the houses surveyed are accessible while 13% are not. Houses with other means of access which is essentially footpath constitutes 8%. Houses with no good access hinder the management of solid waste in such an environment and consequently the value of the property.

Table 4.9 Age of building

| RANGE OF YEARS | FREQUENCY | PERCENTAGE |
|----------------|-----------|------------|
| < 5            | 2         | 2.8        |
| 5-15           | 21        | 29.6       |
| 16-25          | 48        | 67.6       |
| Total          | 71        | 100        |

Source: Author's field survey (Dec. 2001)

From table 4.9 68% of the houses surveyed fall within the age of (16-25 years), 30% within the age bracket of (5-15 years) while 2% are less than 5 years old.

This implies that most of the houses in the neighbourhood surveyed are fairly old. The younger the building however, the higher the rental values and the higher the neighbourhood quality and vice versa.

*Table 4.10 Type of building occupied*

| TYPE               | FREQUENCY | PERCENTAGE |
|--------------------|-----------|------------|
| One Bedroom flat   | 12        | 16.9       |
| Two Bedroom flat   | 26        | 36.6       |
| Three bedroom flat | 6         | 8.5        |
| Duplex             | 2         | 2.8        |
| Tenement           | 25        | 35.2       |
| Total              | 71        | 100        |

Source: Author's field survey (Dec. 2001)

As shown in table 4.10, 37% of the respondents lived in one – bedroom flat, 8% lived in 3-bedroom flat, while 35% account for people living in tenement building, while 3% lived in duplexes.

Combining inhabitants of one – bedroom flat and tenement building together totaled 52%.

It may be expected that occupants of these houses are low-income people whose low saving may prevent them from investing or maintaining housing and the environment.

Table . 4.11 Drainage system

| TYPE        | FREQUENCY | PERCENTAGE |
|-------------|-----------|------------|
| Open drains | 62        | 87.3       |
| Others      | 9         | 12.7       |
| Total       | 71        | 100        |

Source: Author's field survey (Dec. 2001)

From table 4.11, analysis of facilities within houses indicate that houses with open drains constitutes 87% as opposed to houses with covered drainage channel which constitutes 13%. The implication of this is that the larger percentage of houses are with no good drainage facilities and this lessens the quality of the neighbourhood.

Table . 4.12 Sources of water supply for households

| SOURCES | FREQUENCY | PERCENTAGE |
|---------|-----------|------------|
| Well    | 10        | 14.1       |
| Tap     | 59        | 83.1       |
| Others  | 2         | 2.8        |
| Total   | 71        | 100        |

Source: Author's field survey (Dec. 2001)

From table 4.12, 83% of the respondent have their source of water through tap, 14% account for those who utilized well water and other sources such as river, streams, purchase of water from local vendor, constitute 3%.

Having greater proportion (83%) getting their water through tap is quite encouraging and this will go a long to improve the quality of the environment.

Table 4.13 Regularity of supply of water

| INTERVAL | FREQUENCY | PERCENTAGE |
|----------|-----------|------------|
| 2 DAY    | 25        | 35.2       |
| Weekly   | 11        | 15.5       |
| Others   | 35        | 49.3       |
| Total    | 71        | 100        |

Source: Author's field survey (Dec. 2001)

The revelation from the table 4.13 shows that irregular supply of water is prevalent in the neighbourhoods. Supply of water at a two-day interval constitutes 35%, weekly account for 15% while bi-weekly, and monthly account for 49%.

The 49% recorded for irregular supply of water is likely to have a negative effect on the quality of the environment.

Table 4.14 Toilet facilities in houses

| TYPE         | FREQUENCY | PERCENTAGE |
|--------------|-----------|------------|
| Water closet | 52        | 73.2       |
| Pit latrine  | 19        | 26.8       |
| Total        | 71        | 100        |

Source: Authors field survey (Dec. 2001)

From table 4.14, 73% of the household surveyed have water closet while 27% of them used pit latrines.

The implication of this is higher prevalence of water closet. Sanitation which improves rental values of the property is a positive influence on environmental quality. However, water closet and irregular water supply are not complementing to good environmental quality.

Table 4.15 Means of storing waste

| TYPE    | FREQUENCY | PERCENTAGE |
|---------|-----------|------------|
| Dustbin | 24        | 33.8       |
| Drum    | 37        | 52.1       |
| Bags    | 8         | 11.3       |
| Bucket  | 2         | 2.8        |
| Total   | 71        | 100        |

Source: Author's field survey (Dec. 2001)

As shown in the table 4.15, 33% of the household surveyed stored their waste in the dustbin, 52% used drum as their means of storing wastes, 11% of the respondents stored

their wastes in the bag, while 3% of the respondents used bucket as their method of storing waste.

Since the largest percentage of the people used drum, the environmental quality of the neighbourhood will be enhanced, unlike a situation where there is excessive use of either bucket or bags.

*Table 4.16 Method of waste disposal*

| METHODS                   | FREQUENCY | PERCENTAGE |
|---------------------------|-----------|------------|
| NUDB                      | 8         | 25.3       |
| Private collector         | 29        | 40.8       |
| Burnt outside the house   | 8         | 11.3       |
| Disposal at illegal point | 8         | 11.3       |
| Throw into gutter         | 8         | 11.3       |
| Total                     | 71        | 100        |

Source: Author's field survey (Dec. 2001)

Revelation from the above table 4.16 indicates that 65% of the respondents patronised formal means of waste disposal system (Private collector and NUDB). 11% of the respondents burnt their waste outside the house. Another set of 11% disposed theirs at illegal points, while another set of 11% threw their waste into the gutter.

This implies that though 65% of the respondents patronised formal means of waste disposal, the 35 that depend on illegal means, is also high enough to offset the positive impact of the respondents who depend on the formal means of disposal.



#### 4.1 NEIGHBOURHOODS AND MEAN RENTAL VALUE

Table 4.17 shows the mean rental values per annual of four categories of properties common in the selected neighbourhood.

| NEIGHBOURHOODS     | ROOM & PARLOUR | ONE BEDROOM FLAT | TWO BED ROOM FLAT | THREE BED ROOM FLAT | MEAN RENTAL VALUE |
|--------------------|----------------|------------------|-------------------|---------------------|-------------------|
| GRA                | 25,000         | 40,000           | 50,000            | 70,000              | 46,250            |
| SSQ (BOSSO ESTATE) | 25,000         | 35,000           | 50,000            | 70,000              | 45,000            |
| TUNGA              | 20,000         | 30,000           | 50,000            | 70,000              | 42,500            |
| OLD AIRPORT QTRS   | 20,000         | 30,000           | 45,000            | 60,000              | 38,750            |
| KPAKUNGU           | 12,000         | 20,000           | 40,000            | 50,000              | 30,500            |
| SAUKA KAUTA        | 15,000         | 20,000           | 40,000            | 50,000              | 31,250            |
| KWANGILA           | 15,000         | 25,000           | 45,000            | 50,000              | 33,750            |

Source: Author's field survey – (Dec- 2001)

It could be observed from Table 4.17 that rent patterns varies from neighbourhood to neighbourhood. For instance, the lowest means rental value is found in Kpakungu (N30,500), while the highest means is found in GRA (46,250).

Relative higher housing and environmental standards observed in GRA are likely to have influence on the rental value of the properties as opposed to others and in particular, the highest density neighbourhood as represented by Kpakungu.

#### 4.2 RELATIONSHIP BETWEEN MEAN RENTAL VALUE AND ENVIRONMENTAL QUALITY INDICES.

Table 4.18 below shows the result of paired correlation analysis of the mean annual rental value against environmental quality indices

| <b>Factors</b> | <b>Factors description</b>                     | <b>Mean annual rental values for all categories of properties per neighbourhood</b> |
|----------------|--|---|
| 1.             | % of houses with access roads                  | 0.740   |
| 2.             | % of houses that burn waste                    | -0.868*   |
| 3.             | % of houses with open drain                    | -0.383  |
| 4.             | % of houses that use illegal refuse dump       | -0.616  |
| 5.             | % of houses that use organised waste collector | 0.704   |
| 6.             | % of houses with pit latrine                   | -.815*  |
| 7.             | % of houses perceived as poor                  | -0.773*   |
| 8.             | % of houses with public tap                    | 0.52  |
| 9.             | % of houses with WC                            | 0.815*  |

Correlation analysis shows that there are relationship between mean rental (index of property value) and the indices of environmental quality. Such relationship are found to be strong between mean rental and all the factors except factor 3(% of houses with open drain). For example, it is 0.868, 0.815, 0.773 in case of percentage that burn waste, with pit latrine perceived as poor. The relationship between rent and those factors are also found to be significant.

The relationship between rent and those factors are also found to be significant. This relationship are also found to be negative in respect to percentage of houses that burn waste, with open drains, that use illegal refuse dump with pit latrine, perceived as poor. The implication of this is that the neighbourhoods that do carry aforementioned activities attract low rental value.

In other words, the more these activities are being carried out, the lesser the environmental quality and the lower the property values.

#### **4.3 CROSS TABULATION OF INDICES OF NEIGHBOURHOOD ENVIRONMENTAL QUALITY AS FOUND IN EACH LOCATION**

Cross tabulation of indices of neighbourhood environmental quality as found in each neighbourhood was conducted. Table 4.19 shows that the result of the cross tabulation as related to each selected neighbourhood.

*TABLE 4.19*

#### **RESULTS OF CROSS TABULATION OF INDICES OF NEIGHBOURHOOD ENVIRONMENTAL QUALITY AS FOUND IN EACH LOCATION.**

|  | Kpakungu | Kwangila | SSQ<br>(B/Estate) | Sauka<br>Kahuta | Tunga | Old Air<br>port Qtrs. | GRA |
|--|----------|----------|-------------------|-----------------|-------|-----------------------|-----|
| % of houses perceived as poor                          | 50       | 60       | 0                 | 50              | 0     | 0                     | 0   |
| % of houses with pit latrine                           | 100      | 51.1     | 0                 | 55              | 0     | 0                     | 0   |
| % of houses with WC toilet                             | 0        | 20       | 100               | 0               | 80    | 100                   | 100 |
| % of houses that depend on waste burning               | 37.5     | 30.1     | 0                 | 40              | 25    | 0                     | 0   |
| % of houses with public tap                            | 50       | 45       | 100               | 50              | 90    | 90                    | 100 |
| % of houses without public tap                         | 50       | 70.9     | 0                 | 50              | 10    | 10                    | 0   |
| % of houses with open drain                            | 80       | 100      | 0                 | 50              | 80    | 70                    | 10  |
| % of houses with access roads                          | 37.5     | 100      | 100               | 40              | 90    | 90                    | 92  |
| % of houses with illegal refuse dump                   | 60.5     | 88.9     | 0                 | 60              | 27.3  | 27.3                  | 0   |
| % of houses that depend on organised<br>waste disposal | 0        | 0        | 50                | 0               | 72.7  | 72.7                  | 100 |

As seen in the table, 50% each of the residents in Kpakungu and Sauka Kahuta, perceived their environment as poor, and 60% in Kwangila.

On the other hand, no one like GRA and Senior Staff Quarters (SSQ) Bosso Estate perceived their environment as poor.

Houses with pit latrine are common in Kpakungu (100%), Kwangila (51.1%), Sauka Kahuta (55%).

Higher percentage of houses with water closet (WC) toilet are found in GRA (100%), Senior Staff Quarters (Bosso estate) – (100%). We know that in GRA, SSQ (Bosso estate) have edge over other neighbourhoods such as Sauka Kahuta, Kpakungu, Kwangila among others in terms of less dependence on waste burning, enjoying public taps, access roads as deduced from the table 4.19.

All these have a significant influence on the rental value of the properties in those neighbourhoods.

#### **4.4 TESTING FOR MEANS RENTAL VALUE WITH THE VARIABLES OF NEIGHBOURHOOD QUALITY**

Mean rental value is considered as an independent variable, while indices of environmental quality are considered as dependent variable. The result is shown in table 4.20. The table shows F-value, significance of F and  $R^2$  values of the test with respect to each of the variables.

Table 4.20 TABLE SHOWING THE RESULT OF F AND R<sup>2</sup> VALUES OF THE TEST WITH RESPECT TO EACH OF THE VARIABLES.

| VARIABLES                                     | F-Value | Significant F | R      | R <sup>2</sup> |
|---|---------|---------------|--------|----------------|
| % of houses that burn waste                   | 6.838   | 0.74          | -0.868 | 0.753          |
| % of houses that use illegal refuse dumps     | 15.959  | 0.660         | -0.616 | 0.379          |
| % of houses that use organised waste disposal | 19.056  | 0.019*        | 0.704  | 0.496          |
| % of houses with pit latrine                  | 13.542  | 0.017*        | -0.815 | 0.664          |
| % of houses perceived as poor                 | 7.435   | 0.041*        | .      | .              |
| % of houses with public tap                   | 17.085  | 0.056         | 0.052  | 0.003          |
| % of houses with WC                           | 13.542  | 0.017         | 0.815  | 0.664          |
| % of houses with access roads                 | 1.329   | 0.472         | 0.744  | 0.547          |
| % of houses with open drain                   | 5.624   | 0.095         | -0.383 | 0.147          |

Source: Author's field survey - (December 2001)

The F-value is seen to be significant with respect to four variables, percentage of houses that use waste disposal (0.019), percentage of houses with pit latrine (0.017), percentage of houses perceived as poor (0.041) and percentage of houses with WC (0.017).

Regression of rent with each of the variables also shows that in each case the environmental factors indicate high variation in the mean rental value. For example, houses that burn waste account for 75% variation in rent, houses with pit latrine accounts for 66% variation in rent, houses with water closet accounts for 66% and houses with access roads account for 55% variation in rent.

Summarily, the analysis of data have been presented in this chapter using Statistical Package for Social Sciences (SPSS). The summary of findings, recommendations and conclusions are presented in the succeeding chapters.

## CHAPTER FIVE

### 5.0 SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

#### 5.1 INTRODUCTION:

The disparity prevalent in Minna metropolis in terms of rent attracted by similar properties in different locations aroused the desire of the researcher to carry out the research work.

In the same vein, there has not been an effort in recent past at linking property values and neighbourhood quality. This research work is justified on this basis.

- Aims and objective of the study have been stated to include such things as:

#### **Aim**

- a. Examination of the neighbourhood environmental quality relationship with rental value of residential properties in Minna.

#### **Objectives**

- To examine housing conditions and facilities within the study area.
- To study the environmental condition of the residential neighbourhoods.
- To collect and analyse data on rental value of residential properties within the study area.
- To correlate indices of neighbourhood quality with residential property value.
- To make appropriate recommendations that will improve neighbourhood quality and residential property values.

Data for this research work were gathered via the use of questionnaires and personal interview, physical survey, discussion with landlord/tenants and estate surveyor. The



analysis of all these were done through the use of computer package known as Statistical Package for Social Science (SPSS).

Summary of findings is as hereunder presented.

## 5.2 SUMMARY OF FINDINGS

- (i) The commonest building type used for residential purpose in Minna include; block of flats, tenement building, bungalows, among others.
- (ii) The commonest type of building that appeared in all the selected neighbourhood include block of flat and tenement building
- (iii) Two bed room flat appears the commonest types of building in the selected neighbourhood (37%). Table 4.10 referred.
- (iv) The commonest method of rent payment nowadays in Minna is rent in advance of one year (51%). Table 4.7 referred.
- (v) Highest mean rental value is found in GRA Government Reserved Area and Senior staff Quarters (SSQ) Bosso estate. Table 4.17 referred.

The reason for this is that GRA is the most attractive neighbourhood in Minna. The area is well planned with modern residential building with virtually all necessary social and environmental facilities. Kpakungu has the least mean rental value (N30,500). The reason could be that these areas form parts of the traditional core areas of Minna with little or no planning.

- (vi) Most houses surveyed in high density residential neighbourhood as Sauka Kahuta, Kwangila, lack basic amenities and therefore commands low- rent. Table 4.17 referred.
- (vii) Environmental quality was found to have significant influence on the rental value of residential properties. Mean annual rental value matched against neighbourhood quality indices shows significances at various points. Table 4.18 referred.



(viii) Similarly, mean rent of houses tested against variables of neighbourhood quality using F (analysis of variance) shows significant at various points. Table 4.20 referred.

From the foregoing, it could be established undoubtedly that the bulk of influence in residential properties value is brought about by quality in terms of presence / absence of amenities such as good road net work, well planned environment good waste disposal among others.

### 5.3 RECOMMENDATION

Since availability of amenities exert much influence on the value of properties. Listed below are the recommendations to correct anomalies.

1. Government should see each neighbourhood as unique and hence the provision of necessary amenities.
2. Planning and monitoring of the development in an environment should be given priority attention to by government, so as to avoid slum development.
3. Local government and private sectors participants in the building should be encourage and empowered in the area of site and services on the potentially developable land.
4. Maintenance of urban infrastructure could be carried out in partnership with private individual company. This is necessary because not all the areas tagged as high density has no infrastructure, only by lack of maintenance, they have become obsolete and unfashionable, (so revealed through personal interview by a respondent).
5. Minimum sanitary code should be set and enforced. The effect of neighbourhood quality on the residential properties valued will be minimized if the above recommendation are implemented, this is because, the markets will be broadened and many players, (property investor) will be interested in development

#### **5.4 SUGGESTIONS FOR FUTURE RESEARCHERS**

This research work has made only a modest contribution to the study of rent structure and environmental quality. This is only the beginning. Sample size of 105 seems very small, a larger sample size is recommended. The present study used limited indices of environmental quality, such as road networks, waste disposal system, drainage, toilet facilities, age of the building among others. A wider range of indices of environmental quality may also be considered in future research.

#### **5.5 CONCLUSION**

The aim of the research work is to determine the effects of urban neighbourhood quality on residential property value.

We have been able to establish the enormity of the influence which neighbourhood quality have on the value of residential property; also that the rich and well-to-do people in the society are living in the neighbourhoods commanding high rental value by virtue of their affordance of the high rent. Poor and less privileged people of the society live in the area of the town as Sauka Kahuta, Kwangila and Kpakungu with deplorable environmental condition.

These disparities could be removed or reduced to the barest minimum by provision of basic amenities by government in less developed environment.

## BIBLIOGRAPHY

- Abiodun J.O (1985) Urban and Regional Planning Problems in Nigeria pp176-179
- Adediji Tolulope (1998) Analysis of rental value of properties in Minna (unpublished B.tech thesis submitted to the Department of Estate Management, FUT Minna.
- Agboola Y. (1989) Real Estate Investment in Nigeria.
- Alan Gilpin Dictionary of Environmental terms ( 1<sup>st</sup> Edition)
- Carter (1981) The study of Urban Geography (London)
- Edward Cleverly (1985) The Marketing of industrial and commercial properties (Estate Gazette London)
- Hurd R. M (1926) Principle of city land value quoted by Beny Bram J.C (1965)
- Hornby A.S (1995) Oxford Advanced Learner dictionary of current English (fifth edition).
- Hoyt H. (1939) The structure of residential neighbourhood in American cities quoted by Beny Bram J.C. (1965)
- IDRC (1995) Diversity Globalization and the ways of nature IDRC, Canada.
- John Procter (1982) Longman Dictionary of contemporary English
- Muhammed U. and Garba Ahmed (1997) Development and management of land resources. The relevance of environmental impact assessment to sustainable development. A published paper presented at the College of Environmental Studies (CES) Kaduna Polytechnic Annual Conference.

- Nwuba (1998) Lecture note on property management to HND II Estate Management student Kaduna Polytechnic, Kaduna.
- Panet G.A. (1997) Lecture note on land Economics to HND I Estate management Student, Kaduna polytechnic, Kaduna.
- Ratcliff R.U (1961) Real estate Analysis Mc Graw, Hill book company, USA, pp63-64
- Sada P.O. and Odemerho (1988) Environmental issue and management in Nigerian development pp 20-30
- Sada P.O. and Osirike A.B. (1984) Case studies in migration and urbansation perspective in policy issues pp 142-150
- Samuelson P.A (1971) Analysis of land rent reviewed by Ophac Eh (1973)
- Sanusi (2001) Personal Communication (Dec. 2001)

## APPENDIX I

Questionnaire on urban neighbourhood quality and residential property values in Minna metropolis

### INTRODUCTION

The underlisted questionnaire are meant for the collection of information project topic: urban neighbourhood and residential property values: a case study of Minna metropolis: Any information supplied will be confidentially treated.

|                     |             |
|---------------------|-------------|
| Neighbourhood ..... | Street..... |
|---------------------|-------------|

1. What age are you presently?
2. How many years did you spend in school?
3. What is your income level presently?
4. Which type of building do you live in?  
(a) One Bedroom Flat (b) Two Bedroom Flats (c) Three Bedroom Flats (d) Duplex (e) Room and parlour
5. How do you pay/collect your rent?  
(a) Monthly (b) Quarterly (c) Haf-yearly (d) Annually (e) Others
6. Access to buildings?  
(a) Accessible (b) No Access (c) Others (d)
7. Age of building  
(a) <5 years (b) 6-10 years (c) 11-15 years (d) 16-20 years (e) 21-25 years (f) 26 – 30 years (g) > 30 years
8. Toilet facilities  
(a) WC (b) Pit latrine (c) Pail (d) None
9. Drainage system  
(a) Open drains (b) Covered gutter (c) others (d) Duplex (e) Room and parlour
10. Sources of water  
(a) Well (b) Borne hole (c) Tap (d) Stream (e) Others
11. If tap. How regular do you have water supply?  
(a) 2 days interval (b) A week interval (c) Others
12. Wastage storage  
(a) Bags (b) Dustbins (c) Buckets (d) Drums (e) Baskets (f) Others

13. Waste Disposal  
 (a) NUDB (b) Private (c) Burn outside the house (d) Disposal at non-designated refuse dumps (e) Throw gutters (f) Others
14. What is/are reason(s) for your choice of this location?  
 (a) Low rent (b) Nearness to place of work (c) No any other place (d) Influence from relations and friends (e) Others
15. Are you contented with your present housing conditions? Yes/No
16. If YES, please justify with reasons  
 .....  
 .....
17. If NO, what type of improvement do you want therein?  
 .....
18. How would you grade the quality of your neighbourhood?

**Qualification**

- (a) Very Good.....70 and above
- (b) Good .....60-69
- (c) Fair .....41-59
- (d) Poor.....30-40
- (e) Very Poor.....<30

Questionnaire to inhabitant of the seven neighbourhood.

## APPENDIX II

### QUESTIONNAIRE TO ESTATE SURVEYORS AND VALUERS PRACTICING WITHIN MINNA METROPOLIS.

1. Name of the Firm.....
2. What is the rental value (P.A) of the following type of properties in different neighbourhood –  
See the table below:

| S/N | NEIGHBOURHOOD                       | ROOM &<br>PARLOUR | 1 BEDROOM<br>FLAT | 2 BEDROOM<br>FLATS | 3 BEDROOM<br>FLATS | DUPLEX<br>(4 BEDROOM) |
|-----|-------------------------------------|-------------------|-------------------|--------------------|--------------------|-----------------------|
| 1.  | Government Reserved Area (GRA)      |                   |                   |                    |                    |                       |
| 2.  | Senior Staff Quarters) Bosso Estate |                   |                   |                    |                    |                       |
| 3.  | Tunga                               |                   |                   |                    |                    |                       |
| 4.  | Old Airport Quarters                |                   |                   |                    |                    |                       |
| 5.  | Kpakungu                            |                   |                   |                    |                    |                       |
| 6.  | Sauka Kahuta                        |                   |                   |                    |                    |                       |
| 7.  | Kwangila                            |                   |                   |                    |                    |                       |