AN ASSESSMENT OF THE DISPARITY IN URBAN HOUSING QUALITY IN KEFFI, NASARAWA STATE, NIGERIA

BY

DALHATU, Musa Tijjani M.TECH/SSSE/2006/1512

A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL,
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA, IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
DEGREE OF MASTER OF TECHNOLOGY (M.TECH) IN
GEOGRAPHY (ENVIRONMENTAL MANAGEMENT)

DECEMBER 2010

DECLARATION

I hereby declare that this research project has been conducted by me under the guidance of Dr. A.S Abubakar of the Department of Geography, Federal University of Technology, Minna, and have neither copied someone's work nor has someone else done it for me. All citations from the authors have been duly acknowledged.

Dalhatu Musa Tijjani

16-12-2010

Date

CERTIFICATION

This thesis titled: An Assessment of the Disparity in Urban Housing Quality in Keffi, Nasarawa State, Nigeria by; DALHATU, Musa Tijjani (M.Tech/SSSE/2006/1512) meet the regulations governing the award of the degree M.Tech of the Federal University of Technology, Minna and is approved for its contribution to scientific knowledge and literary presentation.

Dr. A.S Abubakar Name of Supervisor

Signature & Date

Dr. A.S Abubakar Name of Head of Department

Signature & Date

Prof. M. Galadima Name of Dean, School & Science Education

Signature & Date

Prof. S.L. Lamai Name of Dean, Postgraduate School

Signature & Date

DEDICATION

This project is specially dedicated to Almighty Allah.

ACKNOWLEDGEMENTS

My profound gratitude goes to the ALMIGHTY ALLAH for sparing my life to attend this course. My special thanks goes to Dr. S.A. Sadauki who accepted to be my new supervisor despite his tight schedules. May I also express my appreciations to entire staff and academics of the post graduate school for their patients and encouragements accorded to me to undertake the course. My humble regards goes to my former project supervisor Late Dr. Shola P. A. (RIP) for his advice and encouraging words and patients in the supervision of my work.. My thanks go to the entire management of the Nigerian Prisons Service Head Quarters Office Abuja, for the opportunity granted me to attend this course. I acknowledged the various contribution made by my superior officer, Mr. O. A. Ogundipe mni. Controller General of Prisons for his support, and other officers, A.U. Saraki Ag. DCG (F&B), Mr. S. M. A. Bello DCP (works), B.M. Dutse DCP (Arch.) for their candid encouragements and also to my other colleagues and friends for their numerous contributions. My sincere regards and appreciation goes to my beloved wife Hajia Aisha and our children Mohammed, Bilkisu, Yusuf, and Zullai for their love and understanding for the success of the course All Thanks and Praise to ALLAH (SWT).

ABSTRACT

Provision of housing as a residential environment including the physical structure has been beneficial to man as shelter in encompassing all necessary facilities that requires good living of the inhabitants. This research seeks to assess the Disparity in Urban housing quality in Keffi, Nasarawa State. For the study, a combination of secondary and primary data were collected from the in the study area. The secondary data were collected from the Keffi local government archives (history of Keffi town). The primary data collection was basically through the administration of questionnaire on socio-economic status of the residents of Keffi town. The procedure of data analysis was a multi stage sampling process where the study area was divided into three zones: low density, medium density and high density areas based on building density and location of the area. Based on the findings derived from the survey, Keffi was found to be a relatively sparsely populated urban area. The housing quality in the area was generally poor due to poor quality of building material and the lack of adequate drainage system and waste collection. There was no significant difference in quality of houses of the high, medium, and low density areas. Practicable recommendations were made such as the need for massive building programme, and improvement on the access of people to quality building materials at reasonable cost.

TABLE OF CONTENTS

		Page
Cove	er Page	i
Decl	aration	ii
Certi	ification	iii
Dedi	cation	iv
Ackı	nowledgements	v
Abst	ract	vi
Tabl	e of contents	vii
List	of Tables	X
List	of Figures	xi
List	of Plates	xi
CHA	APTER ONE;	
1.0	INTRODUCTION	1
1.1	Background	1
1.2	Statement of research problem	3
1.3	Aims and objectives of the study	4
1.4	Scope and limitation	5
1.5	Study Area	5
CHA	APTER TWO;	
2.0	LITERATURE REVIEW	15
2.1	Housing facility in Nigeria	19
2.2	The nature and scope of housing development in developing Countries	20
2.3	Housing quality	22
CHA	APTER THREE;	
3.0	MATERIALS AND METHODS	23
3.1	Description of Data	23

	× ·	Page
3.2	Sampling Procedures	23
3.3	Data Analysis	24
CHAI	PTER FOUR;	
4.0	RESULTS	25
4.1	Results of the accessibility to the residential Areas	25
4.2	Results of the physical conditions of the buildings	26
4.3	Results of ages of the buildings	27
4.4	Results of buildings ownership	. 28
4.5	Results of quality of building materials	29
4.6	Results of sources of water supply	30
4.7	Results of sources of power supply	31
4.8	Results of provision of toilet facilities	32
4.9	Results of provision of parking facilities	. 33
4.10	Results of the provision of drainage system	34
4.11	Results of waste collection systems	35
4.12	Results of frequencies of waste collection	36
4.13	Results of the sources of finance	37
4.14	Results of types of labour	. 38
4.15	Results of the sources of building materials	39
4.16	Results of the literacy level	40
4.17	Results of income level	41
4.18	Results of indices of housing quality	42
,	·	
	PTER FIVE;	40
5.0	DISCUSSION, CONCLUSION AND RECOMMENDATIONS	49
5.1	Discussion	49
5 1 1	Accessibility to the residential areas	49

		Page
5.1.2	Physical conditions of the building	49
5.1.3	Building ownership	. 50
5.1.4	Quality of building materials	50
5.1.5	Basic Facilities Within the Building	50
5.1.6	Sources of water supply	51
5.1.7	Sources of power supply	51
5.1.8	Provisions of toilet facilities	. 51
5.1.9	Basic Facilities Outside the Building	52
5.1.9	Provisions of parking facilities	52
5.1.11	Provision of drainage system	52
5.1.12	Waste collection systems	53
5.1.13	Frequency of waste collection	. 53
5.1.14	Factors Contributing to Low Housing Quality	54
5.1.15	Source of Finance	54
5.1.16	Types of labour	54
5.1.17	Source of building materials	55
5.1.18	Literacy level	55
5.1.19	Income level Percentage distributions of houses	55
5.1.20	Comparison of Quality of Housing	56
5.2 C	onclusion	57
5.3 R	ecommendations	58
R	eferences	60
Α	ppendices	. 62

LIST OF TABLES

Table		Page
4.1	Accessibility of the building	26
4.2	Physical Condition of the Building	27
4.3	Age of Building	28
4.4	Building Ownership	29
4.5	Quality of Building Materials	30
4.6	Sources of Water Supply	31
4.7	Sources of Power Supply	32
4.8	Provision of Toilet Facilities	33
4.9	Provision of Parking Facilities	34
4.10	Provision of Drainage System	35
4.11	Waste Collection System	36
4.12	Frequency of Waste Collection	37
4.13	Sources of Finance	38
4.14	Types of Labour	39
4.15	Sources of Building Material	40
4.16	Literacy Level	41
4.17	Income Level	42
4.18	Indices of Housing Quality	43

LIST OF FIGURES

Figu	re	Page
1.1	Map of Nigeria showing Location of Keffi	7
1.2	Map of Keffi	8

CHAPTER ONE

INTRODUCTION

A lot has been written about housing and the problems with it. Since shelter comes next after food and clothing in order of importance as one of the basic necessities of life (Mabogunje 1974).

1.1 Background

1.0

Urban Planning (Cataness 1979) defined Housing in its most basic sense "as shelter" but in the modern world it serves more needs than only protecting people from the environmental hazards, it also provides spaces for a range of activities like cooking, eating, recreation, sleeping etc. It provides a location that determines relative access to schools, Jobs, parks, retail areas and other amenities. It provides a measure of relative status, as persons are judged by the quality and location of their housing. The oxford Advanced Learner Dictionary (2009) of the current English defined housing as "accommodation in houses" while the new universal library Encyclopedia (2009) define housing as the provision of houses, flat, hostels, and other forms of shelter and living spaces.

Viewing the above three definitions we can see similarity in perspective. This is to say the definition of housing is the 'same world wide. It is associated with provision of shelter and houses. Housing is recognized as areas of house and is also increasingly considered to be a matter of public as well as private concern (Universal Library, 1969). This stand, coupled with the new slogan has been the source of hope for the low-income urban workers. However, low income housing programme in most cases has benefited the wrong-people, who are the top supposedly civil servants. It is common nowadays to find expensive cars parked in the garages of the low-income houses. However, where most facilities are provided such houses are seen to be private houses owned by organization and advertised to be let.

The problem of housing quality can be attributed to a combination of social, economic, demographic and technological factors. An example of this can be illustrated or seen in the present situation. There has been evidence that urban dwellings are surrounded by deplorable urban landscape with elementary amenities. This situation is getting worse due to land acquisition in some urban areas, and rapid development. In fact, undeveloped plots within the built up areas of most cities are commonly used as conveniences. The kind of housing quality required varies with sizes and types of family, income, taste change in family cycle and changes in the pattern of family living.

The distance of houses to each other and other buildings as well as facilities can have an impact on the amount of light, air, noise and odor in the houses and through which it affects physical and mental health. The quality of housing that has been achieved through the automation of equipment, improvements in plumbing, heating, cooking, lighting and food storage and preparation equipment always made housing more sanitary, healthy and comfortable that greatly reduced the labour of running a house(FMW&H, 2001).

The problem of urban land in some parts of the country has less effect in terms of housing quality, but that of ill-management and lack of development control. However, zoning in Nigeria is not regarded as a legal instrument for land Development control within the urban limit. Zoning and sub-division regulations are two powerful land development controls in advanced countries (Sule, 1988).

A house is not a house if it does not guarantee the minimum of privacy, protection and access to essential facilities, no matter its degree of aesthetic quality. Housing therefore is not only about the shell or in other words "the quality of housing reflects the status of the person in the family and in the local community" (Rod, 1977).

1.2 Statement of Research Problem

Housing problems in most urban areas relate not only in the inadequacy of the number of housing programmes, and it has also not paid adequate attention to quality and other aspects of housing needs. The focus of our housing programmes, particularly the low income housing has not adopted the broad interpretation of housing needs. In Nigeria, the hard fact concerning housing quality has never been taken seriously by urban development policy decision (Aina, 1990). In 1976, the Federal Ministry of National Planning commissioned a firm to conduct a comprehensive study on urban housing needs in Nigeria's urban centers. The study depended heavily on secondary data; It did not undertake a field study of urban housing conditions in any part of Nigeria. The sources of information for the study were inadequate and no effort was made to supplement the data.

1.4 Scope and Limitations

The research was faced with some limitations. The first problem emerged from the respondents themselves, the level of literacy of most landlords or tenants to stand on behalf of their father or caretaker. Field surveys of this type are generally very costly especially as assistance was needed to administer questionnaires in various streets in the densities selected. It was due to inadequate finance that assistants could not be obtained to do more than 14 streets in the town. It is hoped that in future a wider study may attempt to cover the whole area of the town.

1.5 Study Area

1. 5.1 Historical Background of Keffi Town

Keffi town the headquarters of Keffi local Government Area was founded in the year 1802 by a Fulani cattle rearer named Mallam Abdu Zanga who came from Yan-Tumaki under former Dutsen-Ma Local Government of Katsina State. According to sources, it was during one of the Abdu Zanga'a annual herds grazing from Yan-Tumaki that he decided to settle in this area and encouraged a number of Fulani cattle rearers to unite under his leadership. On Monday, 30th September 1902, a letter was written from the Governor Lord Lugard to the then Emir of Keffi, Mallam Ibrahin Barde which contain the following conditions that real power was to lie henceforth with the British. The Emirs were required to obey all the laws of the Protectorate, especially laws against slave raiding and importation of liquor, to give the resident every assistance in the performance of his duties and to be guided by his advice in the establishment and procedure of native

courts, tribute assessment and other matters as well as to obey the High Commissioner to the utmost in all matters whatsoever.

Keffi Emirate is known for its resistance against British incursion, particularly the role played by one Magaji Dan Yamusa I who saw the advent of British as an extension of British hegemony over Keffi Emirate and infiltration of western cultures on the Keffi Community. For this reason, therefore, brief skirmishes ensued between the British colonial masters and Magaji Dan Yamusa along with the Keffi Native Force. In the process Captain Maloney the British resident to Keffi was killed and Magaji Dan Yamusa fled to the protection of Northern Emirs (Aliyu) Emir of Kano who was later on deposed by the British for honouring Magaji Dan Yamusa I.Some of the early inhabitants of the area were Gade, Yeskwa, Koro, Mada, Eggon, Gbgayi, Gwandara, Afo and host of others. Present Karu and Kokona Local Government Areas were carved out of the former Keffi Local Government Area in the years 1992 and 1996 respectively.

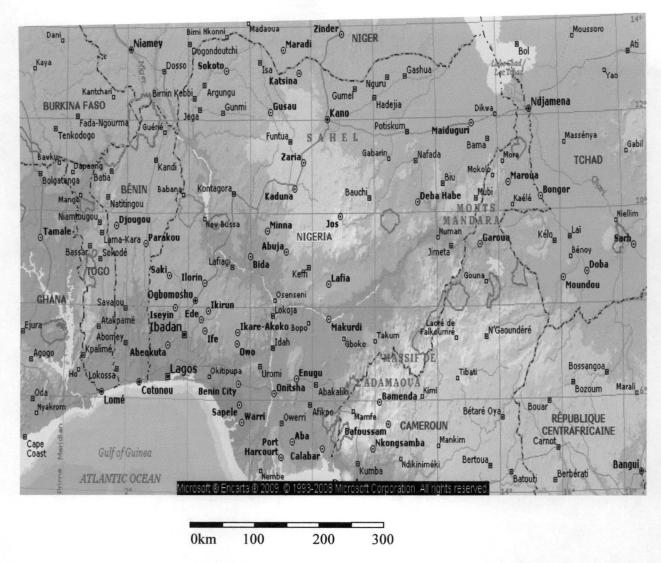


Figure 1.1: Map of Nigeria showing the Location of Keffi

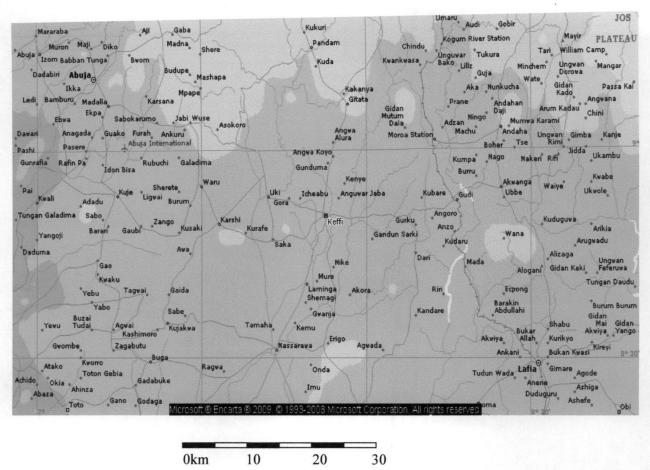


Figure 1.2: Map of Keffi, Nasarawa, Nigeria.

1.5.2 Location

Keffi Local Government which was created in 1976 remained one of the oldest councils in the Nigeria (figure 1.1). It shares common borders with Karu and Kokona Local Governments in the southeast and north respectively (figure 1.2), occupying an area of about 3,019 square kilometers. According to the 2006 National Population Census, Keffi had a total population of 85,000 people.

1.5.3 Major towns

With the creation of Karu and Kokona Local Government Areas out of the former Keffi Local Government area, places such as Keffi town itself, Jigwada, Gauta, Ang. Lambu, Yarkadde and Ang. Jaba are still within the vicinity of Keffi Local Government Area.

Keffi Local Government is having twelve (12) wards as follow:

- 1. Tudun Kofa
- 2. Gangaren Tudu
- 3. Yara
- 4. Goriya
- 5. Iya I
- 6. Iya II
- 7. Ang. Rimi
- 8. Liman Abaji
- 9. Yelwa
- 10. Kofar Hausa
- 11. Sabon Gari
- 12. Jigwada

1.5.4 Agriculture

Keffi is an agrarian area. It is blessed with fertile land for cultivation and animals rearing. Farm products like yam, rice, maize, cassava, groundnut, guinea corn, beans, etc. are produced in large quantities for both commercial and domestic purposes, while animals such as cattle, goats, sheep and others are reared for the same purposes. Furthermore, fishing and poultry are practiced as part of farming activities in the area.

1.5.5 Education

Keffi has always been referred to as a home of learning. It is blessed with number of schools that trained and produced men of substance in the society. In its vicinity there are six (6) secondary schools namely:

- 1. Government College
- 2. Federal Government College
- Government Pivotal Teachers' College
- Government Secondary School Kofar Hausa
- 5. Government Day Secondary School, Yelwa
- 6. Government Secondary School, Keffi South

School of Health Technology, Nassarawa State University, Private and Vocational Schools are also located in the area. Keffi has a total of twenty nine (29) public primary Schools (appendix I).

1.5.6 Health

People of Keffi Local Government Area are very lucky to have its General Hospital taken-over by the Federal Government and converted into a Medical Centre. Besides, there are good numbers of Primary Health Centers/Clinics established by Keffi Local Government in addition to numerous private hospitals in the area.

1.5.7 Culture

Culturally, Keffi is endowed with rich culture. It is known for Gangan Noma, Hausa song, Local boxing (Dambe), Fulani local beating (Shadi), Shantu occasions or annual celebrations like Sallah festivals. This area also have other cultural groups that exhibit their cultural heritage like the Mada, Eggon, Yoruba, Igbo and many others.

1.5.8 Tourism

To cater for visitors and investors to Keffi town and its environs, there exist luxurious hotels and super markets that give accommodation and comfort to such visitors. Among them are the Iman motel, Jenni motel, Fash Guest Inn, New Keffi hotel, Gwaza hotel, Annex Guest Inn, Rainbow hotel, NADP Guest Inn, National hotel, Executive, VIP, Arewa Resort and shopping complex, among others. There is also the famous Captain Maloney Hill, Inter-Contractors River Side, Dying pits at Karofi just to mention but few.

1.5.9 Mineral resources

There are large deposits of mineral resources in the area. These include: Clay, Marvel, Topaz, Monazites, Gemstones, and Tantalite etc. Prospective investors in the mining

industry have been taking advantage of the favourable mining climate that exists in the area (appendix V).

1.5.10 Transportation

Keffi town is blessed with good network of Trunk 'A' road that traversed it, linking it with places such as Abuja the Federal Capital, Kaduna, Jos, Makurdi and other parts of the country. There are good numbers of public transport such as buses, taxis ad commercial motorcycle operators popularly known and called (Going) both for inter and intra city movement of people along with their goods.

1.5.11 Communication

For effective communication, the area has two booster stations. NTA and Nasarawa Broadcasting Service TV through the NTA booster station, it is easier to view NTA Makurdi and Abuja. The area can also be reached via Nasarawa State Radio at Lafia, also FM Abuja, FRCN, Kaduna, FM Jos and many other stations both within and outside the country. Also established within Keffi town are the NITEL and NIPOST services which make it easier to deliver message within and outside the country. For easy communication, there is public telephone boots placed in some strategic locations within the town.

1.5.12 Industrial and Commercial activities

Keffi town the headquarters of the area, is a fast growing commercial center considering its proximity to the new Federal Capital Territory, Abuja. There exist agro-based

industrial and commercial activities in the area. Yams, maize, guinea corn, beans, fish, poultry and host of others are produced in large quantity for commercial purposes. Also industries like block molding, quarry processing, rice mills, bakeries, metal fabrication, printing press, shoe making, vulcanizing, garri processing etc. are found in the area. For more industrial and commercial activities in the area, there are potentials for the establishment of animal feeds, pharmaceutical starch, fruit juice, etc.

To enhance commercial activities in the area, there exist some commercial banks such as Unity Bank, Keffi, Community Bank, Nigeria Agricultural and Cooperative Bank, Tripod Loans and Saving Scheme. There are other Cooperative Societies that boost commercial activities in the area. Also, a number of filling stations such as Mobil, Total, Unipetrol, AP, Gangs, ELF, Major, Atabs, Texaco, Rabo Ramalan, Bagobiri, Alhaji Aruwa, Damagani etc. in the area.

1.5.13 Water supply

Keffi town, the headquarters of the Council enjoys prompt and stable water supply from the Keffi-Akwanga-Doma multi million Naira water scheme for portable water supply.

1.5.14 Electricity supply

Keffi town and its surrounding villages have been enjoying full and moderately stable power supply from the national grid while some individuals and companies have generating plants for domestic and commercial purposes. In line with its policies of providing social amenities to its people, Keffi Local Government Council had of recent,

provided Anwan Lambu and Jigwada village with electricity connected to the national grid while that of Angwan Ninzom is nearing completion.

1.5.15 Other Establishments

This includes Federal and State Governments Parastatals and Agencies having administrative set-up in existence in Keffi (appendix IV).

CHAPTER TWO

LITERATURE REVIEW

2.0

Housing has been related to man from the beginning of his existence. Housing, according to (Mabogunje, 1974) is one of the important needs for the physical survival in the environment after the provision of food and clothing from nature. Among these necessities of life, shelter has the most visible impact on the built environment, while at the natural environment by consumption of natural resources, adding physical objects to the environment, and also acting as an intermediary between man and nature.

In Nigeria the hard fact concerning housing quality has never been taken seriously by urban development policy decision (Aina, 1990). In effect both old and new housing environment in most Nigerian urban centers, large or medium-size, suffer from an inadequate supply of water, rudimentary system of sewage refuse and storm drainage disposal, and lack of parks, poor landscaping, overcrowded houses and poor vehicular access.

With nearly 1 billion people around the world eking out a living in urban slums, world leaders set a specific target in the Millennium Declaration aimed at alleviating their plight. UN-HABITAT has a Shelter Branch that deals specifically with Housing Policy, Housing Rights, Land and Tenure and Slums/Settlements Upgrading. It works closely with governments, municipalities and civil society organizations. (Habitat, 1992).

Dysentery is endemic and malaria has become a pathological disease in most urban area (Aina, 1990) in many respect the quality of toilet amenities available in a residential neighborhood affects not only the quality of individual houses as per value added but also the quality of entire environment where the units are located, this is because good quality houses lead to the proper environmental neatness. Whichever position one chooses to take, one thing is evident; where the implications of squatting have been ignored it has tended to mushroom and has asserted its own chain culminating in poor urban environmental quality. The solution of this problem is one of the issues confronting many of the developing nations in the world today. Housing constitutes the most pressing needs of the poor and average Nigeria (Sule, 1988 and Onibokun, 1990).

There is lack of consensus in the literature as the exact meaning or definition of housing. (Rod, 1977) explained that a house is not a house if it does not guarantee the minimum of privacy, protection and access to essentials facilities, no matter its aesthetic quality. Housing therefore is not only about the physical structure but what it does to the life of the people or in other words the quality of its response to the life situation of the person in the family and in the Local Community (Rod, 1977). In the cities as commented by Onibokun (1990), the majority of the citizens are masses themselves in the unkempt and often squalid hearts of the cities, living under conditions that are at times sub-human and sharing sub-standard houses in areas which by any standard are slums. The environmental dimension of these problems has reached an alarming stage. The problem has been aggravated because most of the housing stocks are being provided by

developers most of whom pay no regard to building laws, edicts or any other development control.

During the first three years of the plan period, (1962-68) the construction of residential building undertaken by household oscillated around 8.97 Million 1962. The figure rose rather steeply to 10.3million in 1965-66. As a result of national crises, the level of dwelling construction by household dropped to about 9.2 million in 1967 but picked up again in 1968-70. The significant consequences of the civil war were the destruction of physical assets notably residential dwellings. A number of large and medium size towns, particularly in the four states most affected by the war, suffered physical damages (Sada, 1975 and Onokerhoraye, 1977). The need to make good, such damage and facilitates resettlement and rehabilitation exerts a strong upward pressure on building activities during the present plan period.

In addition, most of the dwellings in the urban centers in the country was already substandard and suffered further from poor maintenance during the war. The rising cost of building and the increasing difficulty of obtaining building materials also meant that many building decisions or operations were postponed during the war. Apart from this pent up demand, there is the additional need to build more houses to take care of the growth in population, in the Urban Areas is compounded by the Rural-Urban migration (Raji, 2008). All these factors are bound to give rise to a building boom in the house hold sector during the plan period, starting from a base of 10.5 million in 1970-71, dwelling construction is expected to rise of up to N120.0 million in 1973-74. Over the plan period,

a total of N45 million would have been disbursed by households in building new houses and upgrading old ones (Second National Development plans 1970-74).

(Sule, 1988) has pointed out that apart from their structural defects in terms of ventilation, aesthetic and soundness, most of the houses are poorly located and are lacking community facilities. These, not only limiting the occupants access to opportunities such as pipe borne water, electricity, education, health, fire service but leading to poor unhygienic or in short, degraded environment "that is highly susceptible to epidemics.

Housing quality problems have been linked by (Onibokun, 1990) to the rapid growth of population leading to the spread of the cities and the decline in the standard of the environment in the emerging nations. Rapid population growth and urbanization are the major factors contributing to the increase in demand for housing in urban areas. Along with urbanization; there is an increase in the number of professional administrative and technical people as a result of improvement in educational standards which lead to people demanding for quality houses. In Urban Areas, housing problem is qualitative and quantitative that is, a problem of finding the means to provide houses which are relatively cheap and within the means of the Urban folk and yet of sufficiently high quality to satisfy certain basic requirement (Acquaye, 1973).

Despite the seriousness of the housing problem, it is evident that the combine effort of the public and private sectors over successive development plans has continued to fall far

short of need (Daramola, 2005). The Government has traditionally tended to leave the field solely to private effort, restricting itself to the provision of limited number of residential quarters for its Officers. The late 1950s and early 1960s had increase in the number of houses, but still limited intervention by Government in the provision of housing. This took the form of the development of few middle class housing estates (using the newly created regional housing co-operation), the introduction of lending through the establishment of the Nigeria Building Society and the Housing Loan Scheme designed to promote owner occupied by Civil Servants. Until very recently the government did not deem it necessary to participate actively in housing programmes, apart from re-housing scheme necessitated by occasional slum clearance activities. Private investment in housing on the other hand has been growing too slowly to be able to meet demands because of well-known problem and bottle necks such insufficiency of private savings, inadequate credit facilities, the high cost of labor and difficulties of obtaining land in some urban centers, and the recent sharp increase in cost of building materials (Third national development plan 1975-1980).

2.1 Housing Facility in Nigeria

In Nigeria, the fact concerning housing facility and environmental quality has never been taken seriously by urban development policy decision (Zubairu, 2001). In fact both old and new housing environment in most of Nigeria's urban centers, large or medium size, suffer inadequate supply of water, rudimentary system of sewage, refuse and storm drainage disposal and lack of park, overcrowded houses and poor vehicular access (Abiodun, 1985).

Generally, the housing related environmental problem in Nigeria has an adverse effect on members of the urban community for example. Lack of sewage disposal, as well as being an aesthetic nuisance is also a dangerous contributor to the pervasive nature of some communicable diseases and also infant mortality rate (Ayoade, 1979).

In many cases the quality of toilet amenities available in a residential neighborhood affects not only the quality of individual houses as per value added but also the quality of the entire environment where the units are located (Onibokun 1990; Sule, 1988). Such standards have been established by various committee and technical commission recommending the two basic necessities as the minimum if the normal provision of healthy living is to be achieved (Oguntoyinbo, 1978). These standards cannot be lowered, whatever the community, whatever be the location whatever the economic situation in the country, sub-standard housing is but a step toward slums (Adetibo, 1980).

2.2 The Nature and Scope of Housing Development in Developing Countries

In respect of the technological variable, (James, 2006) points out that so far the main thrust of research on housing in the developing countries has been very much directed towards the supper structure" that is the building itself, its layout and overall layout of the town. Very little has been done on devising appropriate utility systems. There is yet no corresponding choice of materials, components and technical solution as far as the driving itself. For human waste disposal for example, the choice is limited to archaic

traditional systems, such as which are clearly unsatisfactory for urban population, while fully modern systems such as water borne, sewage collection and treatment plants are too expensive, (Atoyebi, 2000)

In terms of cost of housing, heaviest burdens are placed on the lower income earnes who are forced 'to live under crowded conditions in inferior dwellings which are badly maintained and where sanitary facilities, light air and privacy are at a premium (Sule, 1988) such conditions are pervasive in cities and they constitute slums and blighted areas, affecting the community as a whole. These are the areas where the poor, the unemployed, the destitute, and the racial and religious minorities are concentrated. Such areas are characterized by high death sickness rate, high incidence of juvenile delinquency and crime, high city cost and low tax collection.

Similar studies that have been carried out by Onibokun (1990) in some of the Nigeria Urban Centers indicate the poor state of housing conditions in selected Nigerian towns. In 1970/71, the study revealed that about 35.5 percent of the houses in Lagos had flush toilets, in Benin City it was only 4.0 percent and in Kano a mere 1.8 percent of the houses had flush toilets. In Ilorin Capital of Kwara State, only 28.4 percent of the houses had electricity and in the same city 30.7 percent of the houses had tap water. The situation was worse in Benin where only 24.9 percent of the houses have tap water. The vast majority of the respondents of the cities surveyed relied on pipe-borne water supply. However, a lot of these residents also have a share with others as their houses do

not have internal tap water and have to rely on public water supply. Often there may be one tap for a whole neighborhood (Onibokun 1990).

As (Gordon, 2001) once puts it, housing is all. Once a physical entity, social artifacts, an economic good, a Capital stock, a status symbol, and at times a political "hot potato". The most important lesson here is that our conceptions of housing must transcend its physical dimension. In this vein, the World Health Organization defines housing as residential environment which includes, in addition to the physical structure that man uses as shelter, all necessary services facilities equipment and devices are needed or desired for the physical social well-being of the family and individual (Onibokun, 1990).

2.3 Housing quality

It has been established that the satisfaction people derive from housing depends on the degree or availability of essential social services and infrastructural facilities (Daramola, 2004). The study also indicated the poor sanitary problems facing Nigeria Urban Centers. The collection and disposal of sewage liquid and solid waste is a major public health problem and vital factor affecting the quality of the Urban Environment.

Waste disposal is a major problem in the resident perception of the quality of urban neighborhood and it also affects the value of properties. Some areas in the cities such as the Victoria Island and Ikoyi in Lagos, Bodija in Ibadan, Ikpoba Hill in Benin City, are fashionable and regarded as prestigious neighborhood that relate not only to the type of houses found there but also the clean environment.

CHAPTER THREE

MATERIALS AND METHODS

3.1 Description of Data

3.0

Two major sources of data were employed for this research and these include the primary source and the secondary source. The primary source is in the form of prepared questionnaires administered to the sampled population by the researcher. The secondary sources used were in the form of journals, other research works, pamphlets, workshops and conference papers and other relevant literature. These were used in the preliminary chapters and literature review o the research work.

3.2 Sampling procedures

The procedure adopted in this study was a multistage sampling process. The study area was divided into three zones namely low density, medium density, and high density area based on building density and location of the area. Listing of enumeration at the area and listing of building obtained during the 1991 census exercise were used as a sampling frame. A total number of 15 enumeration areas were selected randomly, five enumeration areas in each zone. Finally, houses to be interviewed were selected randomly from the 1991 census list of buildings approximately 10% of the total number of houses in each of the zone selected using systematic random sampling.

The numbers of houses selected in each of the zones were 100, 90, and 82, for high medium and low densities, respectively. Research assistants were recruited and trained on

how to administer questionnaires to the respondents. A standard questionnaire was used to collect information from respondents. Two types of questionnaires were prepared.

The first questionnaire covers a comprehensive question on housing conditions in terms of the basic facilities and quality of building materials. Questions were asked on the type of problems the occupants are facing in their houses. The second questionnaire deals with factors that determine the low housing quality production. Questions were asked on the types and sources of building financing and materials used. The target audience of the first questionnaire was the head of each selected houses, while the target audience of the second questionnaire were the landlords.

3.3 Data Analysis

Various statistical techniques were used for the analysis. The mean, mode and percentages were among those used. The project also used Tables graphs and other methods in the discussion part of the work.

CHAPTER FOUR

4.0

RESULTS

This chapter presents the analyses of the data collected from the sampled population of target audience of the questionnaires administered.

4.1 Results of the accessibility to the residential Areas

Table 4.1: Accessibility to the Residential Areas

Accessibility To Building	High Density	Medium Density %	Low Density	Total %
Foot path	76.0	60.0	34.15	58.1
Motorable	24.0	40.0	65.8	41.9

The accessibilities to buildings are only by foot-path and motorist as shown in table 4.1. Their percentage distributions in the High density, Medium density and Low density Areas are also shown in this table.

4.2 Results of the Physical Conditions of the Buildings

Table 4.2: Physical Conditions of the Buildings

Condition of Buildings	High Density %	Medium Density %	Low Density %	Total %
Floor	24.0	36.0	44.0	34.7
Wall	16	28	61	35
Roof	18.0	37.0	55.8	36.9

The conditions of the floors, walls and roofs are the physical conditions of the buildings as shown in table 4.2. It also shows the percentage distributions in the High density, Medium density and Low density Areas.

4.3 Results of Ages of the Buildings

Table 4.3: Age of the Buildings

Age of Buildings	High Density %	Medium Density %	Low Density %	Total %
0-5 years	14.0	45	52	37
5 - 10years	26	33	36	31.7
10 years above	60	22	13	31

The ages of buildings shown in the first column of table 4.3 are in the interval of 0-5yrs, 5-10yrs and above 10yrs. Each of the percentages distribution of ages of the buildings in High density, Medium density and Low density Area are also shown in the table.

4.4 Results of Buildings Ownership

Table 4.4: Buildings Ownership

Use of Buildings	High Density %	Medium Density %	Low Density	Total %
Owned	72.0	45.6	39.0	53.3
Rented	0.0	41.1	61	28.7
Private	0.0	2.2	13.4	4.8
Govt.	0.0	4.4	15.9	6.3
Others	9.0	6.7	4.9	6.9

The building ownership includes those Owned by the occupants, Rented, Privates, Government and other buildings. Table 4.4 shows these building ownership in the High density, Medium density and Low density Area each with their percentage distributions.

4.5 Results of Quality of building materials

Table 4.5: Quality of building materials

%	Medium Density %	Low Density %	Total %
57	33	11	35.3
34	38.4	62.2	45.2
9	24.4	26.8	19.5
38	18.9	29.3	29.0
24	38.9	19.5	27.6
19	23.3	30.5	22.0
21	16.7	19.5	19.2
26	21	30	28.8
40	48	45	48.9
34	21	71	22.8
49	33	25	39.3
23	38	48	40.1
28	19	9	20.6
	34 9 38 24 19 21 26 40 34	34 38.4 9 24.4 38 18.9 24 38.9 19 23.3 21 16.7 26 21 40 48 34 21 49 33 23 38	34 38.4 62.2 9 24.4 26.8 38 18.9 29.3 24 38.9 19.5 19 23.3 30.5 21 16.7 19.5 26 21 30 40 48 45 34 21 71 49 33 25 23 38 48

The material of buildings includes Walls; which are the muds, cement or burnt bricks, Windows; which are woods, metals, Glasses or, combinations, Ceilings; which are of wooding product, asbestos or combinations and Doors; which are woods, metals or combinations. The percentage distribution in High density, Medium density and Low density Areas are as shown in table 4.5.

4.6 Results of sources of water supply

Table 4.6: Sources of Water Supply

Source of water supply	High Density %	Medium Density %	Low Density %	Total %
Тар	40.0	54.4	44	45.5
Borehole	22	27.8	23.2	24.1
Stream	10.0	22.4	13.4	15.3

The source of water supply includes Taps, streams and Boreholes supply. Table 4.6 also shows the percentage distribution of water supply in High density, Medium density and Low density Area of Keffi Local Government council, Nasarawa State.

4.7 Results of Sources of Power Supply

Table 4.7: Sources of Power Supply

Source of power	High Density %	Medium Density %	Low Density %	Total %
Kerosene lamp	18.0	15.5	7.0	13.9
Generator	9.0	14.4	14.7	12.5
Electricity	73.0	70.0	78	73.5

The source of power supply includes Kerosene lamp, Generators and Electricity supply as shown in table 4.7. The table also shows the percentage distribution of water supply in High density, Medium density and Low density Area of Keffi Local Government council, Nasarawa State.

4.8 Results of Provision of Toilet Facilities

Table 4.8: Provision of Toilet Facilities

Toilet Facilities	High Density %	Medium Density %	Low Density %	Total %
Nearby bush	8.0	13.3	23.2	14.3
Pit latrine	67.0	64.0	50.0	61.3
Water system	27.0	22.2	26.8	25.4

The toilet facilities are the nearby bush, pit latrine and water closet whose percentage distributions in the High density, Medium density and Low density are shown in table 4.8

4.9 Results of Provision of Parking Facilities

Table 4.9: Provision of Parking Facilities

High Density %	Medium Density %	Low Density %	Total %
20.0	33.3	41.5	54.9
49.0	46.7	51.2	48.5
31.0	20.0	9.32	20.2
	20.0	% % % 33.3 49.0 46.7	% % % 20.0 33.3 41.5 49.0 46.7 51.2

The parking Facilities were shown in the first column of table 4.9 which includes the Garage, Open space and Not available. Their respective percentage distributions in the High, Medium and Low density Area were also shown in this table.

4.10 Results of the Provision of Drainage System

Table 4.10: Provision of Drainage System

Drainage System	High Density %	Medium Density %	Low Density %	Total %
Open Drainage	36.0	32.2	40.2	36.0
Covered drainage	29.0	31.1	23.2	27.9
None	35.0	36.7	36.4	33.1

The Open drainage, Covered drainage and none drainage are the drainage systems in Keffi Local Government as shown in table 4.10. It also shows the percentage distribution of the drainage Systems in the High density, Medium density and Low density Areas.

4.11 Results of Waste Collection Systems

Table 4.11: Waste Collection Systems

Collection Systems	High Density %	Medium Density %	Low Density %	Total %
Collection By Private	43.0	36.67	23.17	34.93
Collection By Local Govt.	39.0	30.0	17.1	29.4
Disposal By Self	18.0	33.3	59.8	35.7

Table 4.11 shows the methods of collection of waste water which includes collection by Private, collection by Government and Disposal by Self. It also shows the percentage distributions of these methods of collection of waste water in the High, Medium and Low density Areas.

4.12 Results of Frequencies of Waste Collection

Table 4.12: Frequency of Waste Collection

frequency of collection	High Density %	Medium Density %	Low Density %	Total %
Twice a week	16.0	5.7	3.7	8.8
Once a week	21.0	20.0	9.76	16.9
Twice a month	24.0	26.8	26.8	25.74
Once a month	39.0	59.8	59.8	48.2

The frequencies of waste collection are twice a week, once a week, twice and once a month as shown in table 4.12. The percentages of these frequencies in the High density, Medium density and Low density Areas are also shown in this table.

4.13 Results of the Sources of Finance

Table 4.13: Source of Finance

Source	High Density	Medium Density	Low Density	
Total of finance	%	%	%	%
Through Personal Savings	81.0	71.0	58.6	70.9
Through bank Loans	4.0	11.1	20.7	11.4
Through private loans	15.0	10.0	14.6	13.2
Others	3.0	4.8	6.1	4.4

The source of finance includes personal savings, Bank loans, private loans and others. Their percentage distributions in the High density, Medium density and Low density Areas are as shown in Table 4.13.

4.14 Results of types of Labour

Table 4.14: Types of Labour

Labour Type	High Density %	Medium Density %	Low Density %	Total %
Skilled labour	15.0	27.8	39.0	26.5
Unskilled labou	ır 61.0	57.8	46.4	56.3
Personal labour	r 24.0	14.4	14.6	18.0

The types of labours in the High density, Medium density and Low density Areas are the skilled labour, unskilled labour and personal labour. Their percentage distributions along these areas are as shown in table 4.14.

4.15 Results of the Sources of Building Materials

Table 4.15: Source of Building Materials

Source of Building Materials	High Density Medium Density %		Low Density %	Total %	
Within the locality	60.0	53.3	29.3	47.9	
Within the State	20.0	31.1	37.5	29.0	
Outside the Locality	20.0	15.6	23.2	20.2	
Outside the Country	0.0	0.0	9.9	2.9	

Table 4.15 shows the sources of building materials which includes those within the Locality, within the State, outside the Locality and outside the Country. Their percentage distributions are also shown in this table.

4.16 Results of the Literacy Level

Table 4.16: Literacy Level

Literacy level	High Density %	Medium Density %	Low Density %	Total %
Primary school	45.0	30.3	17.4	34.9
Secondary school	25.0	31.1	36.5	40.5
Tertiary institution	n 10.0	18.6	21.2	16.6
Non formal	20.0	10.0	7.1	9.0

The rate of literacy level in High density, Medium density and Low density Areas are expressed in percentage distributions as shown in table 4.16. These literacy levels are the primary schools, secondary schools, tertiary institutions and non-formal level which are also shown in the table.

4.17 Results of Income Level

Table 4.17: Income Level

	High Density	Medium Density	Low Density	
Total		0.4	0/	0/
Level	%	%	%	%
Less than 1000/mont	h 40.0	15.5	4.9	21.3
1000-2500	20.0	27.8	12.1	20.2
2500-6000	15.0	16.7	30.5	20.2
6000 above	10.0	25.6	46.3	26.1
Unemployed	15.0	14.4	6.1	12.1

The income level includes less than N1000 per month, N1000-N2500 per month, N2500-N6000 per month, above N6000 and unemployed as shown in table 4.17. The percentage distributions of these income levels in the High density, Medium density and Low density Area are also shown in the table.

4.18 Results of Indices of Housing Quality

Table 4.18: Indices of Housing Quality

Indices	High Density %	Medium Density %	Low Density %	Total %
Housing materials	s 17	33	44	31.3
Facilities Within the Buildings	12.0	23	37.8	21.2
Facilities Outside the Buildings	10.0	15.6	23.2	16.2
Sanitary facilities	s 8.0	20.0	49.9	28.8

The indices includes Housing materials, facilities within the building, facilities outside the building and sanitary facilities as shown in table 4.18. It also shows the percentage distributions of these indices in the High density, Medium density and Low density Areas.



Plate I: Drainage Littered with refuse at Karofi; An area classified as High density



Plate II: A Community well and pipe-borne water at Emirs palace; An area classified as High density



Plate III: An untarred motorable access at NTA junction; An area classified as Medium density



Plate IV: An on going blockwork building at Angwan waje; An area classified as Medium density



Plate V: Drainage littered with dry leaves at GRA; An area classified as Low density



Plate VI: Tarred motorable access at GRA; An area classified as Low density

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

5.0

5.1.1 Accessibility to the Residential Areas

Keffi like many other towns in Nasarawa state is an un-planned city. The most striking feature of the city is the poor layout of the existing roads. As a result of the poorly defined street system in the town, the existing buildings are extremely crammed in space and inter-street vehicle traffic is almost impossible, most especially some areas like Akwanga road and Tsohon kasuwa streets where the only access to buildings is through foot path. About (58 %) of the buildings in this study area has access road through footpath and only 42 percent are accessible through motorable roads (plates III & VI). The condition of the road network is not encouraging either with the exception of few roads and the expressway which provides access to the town from the west and south respectively, most of the roads are in poor condition. As it is expected, accessibility in the low-density area is better than the high-density area. The percentage of buildings accessible by motorable road is 65 percent compared to only 24 in the high density area.

5.1.2 Physical Conditions of the Buildings

With regards to the physical condition of the building, most houses in the study area are quite recently built (within the past 10 years) and they are still in good state only few are in bad condition either (cracking or dilapidated) houses in low density areas are slightly in a better condition than those in high density areas (table 4.2).

5.1.3 Building Ownership

Apart from the age of the buildings (table 4.3), with (31%) built 10years and(37%) less than 5 years it shows that new buildings are springing up giving a relatively good physical condition of buildings in Keffi which is related to the fact that most of the houses (53.3%) are owned by the occupants (table 4.4) it is expected that maintenance by owner is higher than by tenants, with 72% ownership in the high density areas and just 39% in the low density areas.

5.1.4 Quality Of Building Materials

It is apparent from the findings of this study (table 4.5) that low quality of building materials is widely used with the exception of the material for ceiling in which asbestos (48.9%) is commonly used in low, medium and high density areas, while other building materials for wall, doors, and windows are of low quality. However, cement blocks are equally important accounted for about (45.2%) of the total sampled). The use of cement blocks is more apparent in the low-density area than in the high-density area. Wood is the common material used for windows and doors. There is significant difference in the quality of materials for windows and doors between the low and high-density areas.

5.1.5 Basic Facilities Within the Building

The survey revealed that there are not many changes in the provision of housing facilities in the study area. In most cases, majority of the urban residents rely on public pipe borne water supply and others have to share as their houses do not have internal water tap.

5.1.6 Sources of Water Supply

However, it was observed that, there was no residential area that has less than 40 percent (table 4.6) of its houses supplied with pipe-borne water. The reason here could be the introduction of water rate, which might have discouraged people who could not pay for the rate, instead they prefer public pipe borne water supply or wells (plate II).

5. 1.7 Sources of Power Supply

Although Keffi is still experiencing frequent power interruption, most of the houses in Keffi rely heavily on electricity as source of power. Similarly, the supply of electricity had become epileptic in most houses in the study area. About 70 percent of houses in the study area have electricity (Table 4.7). However, 60 percent of the sampled houses have electricity supply because the electricity is supplied from the national grid.

5.1.8 Provision of Toilet facilities

The situation with regards to the provision of toilet facilities is less encouraging. Only about one quarter (25.4%) of the houses in the sampled area are provided with water system. Majority of the houses use pit latrines (61%). The use of pit latrines is common in the high and medium density areas. It is however, to be noted that even in the low-density area there are still found houses which neither have pit neither latrines nor water system facilities. This implies that the quality of houses in Keffi with respect to the provision of toilet facilities is still very poor (Table 4.8).

5.1.9 Basic Facilities outside the Building

Among the various facilities in the study areas which are grossly inadequate and inefficient are the drainage system and waste collection system. It is clear from the findings of the study that has exceptions even in the town as a whole. Many road surfaces and building foundation have been partially washed away due to menacing effect of uncontrolled and unchannelled storm-water which has seriously affected the quality and durability of the concerned roads and building and in addition causing major flooding and public health problem such streets like Karofi Street (plate I).

5.1.10 Provision of Parking Facilities

An observation of the study area shows that most of the residential houses have no proper parking facilities or spaces due to unplanned nature of the study area. However, almost half of the houses in the sampled areas have no garage provision, they still have an open space which can be used as parking facilities. Only 20% of the houses do not have parking facilities at all with worse case in the high density areas (table 4.9).

5.1.11 Provision of Drainage System

Roads within the town especially those that provide access to the inner part of the town remained dilapidated and many of them are found to have been damaged by erosion due to inadequate drainage facilities and the little that remain are in most cases are partially blocked by fences in some residential buildings. It is however surprising (table 4.10) that the percentages of houses with open drainage in the low density area (40.24%) is higher than those in the high and medium density respectively). The reason that could be advanced for this is because the topography of Zango, Angwan waje are are undulating

with the result that there is no arrangement for the provisions of covered drainage system to enhanced or channel the flood about 33.1% of the study area has no drainages. The low density area has some defined open drainages that are unattended to as such it get blocked by fallen dead leaves (plate V)

5.1.12 Waste Collection Systems

Majority of the residents in keffi area "make private arrangements for the disposal of household waste (see table 4.10). Generally, residents in the high-density areas enjoy waste collection service from their local governments more than their counter parts in the low-density areas. In general the level of sanitation in the town is very low. There is no doubt that since the number of houses with in improper attention for waste collection is very low as such the number of houses with frequency of waste collection will also be very low. Most of the residents reported that refuse collection does not exist at all in their environment, and even where it existed, the services were made only once in a month. In terms of waste collection, Keffi is virtually lacking because majority of the population do not enjoy waste collection service from their local Government. Only 29% of houses in the study area enjoy such services.

5.1.13 Frequency of Waste Collection

Table 4.12 shows that the frequency of waste collection is more in the high-density areas. The percentage of houses with frequency of waste collection of once a week is 16% in high-density areas as contrasted to only 3.6% in the low-density areas. Similarly, the percentage of houses with frequency of waste collection of once a month is 39% in the high-density areas as compared to 59% in the low-density areas.

5.1.14 Factors Contributing to Low Housing Quality

In recognition of the fact that housing involves the consumption of neighborhood services, the survey revealed that most of the factors that constitute the most bottle-neck to housing in the study area, are finance, sources of building materials and labour type. With regard to finance sources, the respondents agreed that the government does not make adequate provision for housing loans. As a result majority of the people depend mainly on their personal savings. The respondents also agreed that the existing practice and system of granting loans makes it difficult for the really low-income people to benefit from the loan.

5.1.15 Sources of Finance

The result of this survey shows that (70.9%) over two thirds of the total sample depend on their personal savings (table 4.13). Source of funding through bank loans is very low in the high density area (4%). The reason that could be advanced for this is on the grounds of interest and finance. It was however also found out that some of the residents preferred to live in the houses where their great grand fathers lived in order to uphold tradition.

5.1.16 Types of Labour

In terms of the labour used in the construction of building, table 4.14 shows that most people no longer prefer skilled labour to build houses, instead they use unskilled workers. The cursory observation of the houses sampled in the periphery of the town indicates that unskilled workers were prominent. At least, 56.3 percent of the total sample depends on unskilled labour,

compared to 26.42 from the total sample) while only 18.08 percent from the total sample built their houses by themselves.

5.1.17 Sources of Building Materials

With the result of this study a (table 4.15), it is glaring that majority of the people 47.9% prefer materials obtained locally. Only 2.94% of the houses surveyed used imported building materials. This could be due to the high cost of imported building materials most houses in the high-density area (60% of them) and 53.3% in the medium density (plate IV) used materials which can be "obtained from Keffi vicinity as compared to only 29.3% in the low density areas which used mostly materials obtained outside Keffi. This explains why the quality of houses in the high-density area is lower in quality than those houses in the low-density areas.

5.1.18 Literacy Level

The result of the study reveals that the literacy level (table 4.16) is below average most especially at the high density area which has 45% primary schools and only 10% are at tertiary levels also at the low density area tertiary institutions is only 21.2%.. A lot of public schools are evenly sited in the study area (appendix III) and the development of private schools are concentrated in the medium and low density areas.

5.1.19 Income Level

The income level is also a major factor that determines the type of facilities that individual can afford to provide for his needs. The result from table 4.17 shows that 40%

of the residents in the sampled areas in high density areas earn about N1000/month with an employment up to 15% only 10% earns above N6000. Been a local council with very little source of revenue one could vividly see why the quality of houses is generally low.

5.1.20 Comparison of Quality of Housing in Different Types of Residential Areas
In previous sections the quality of housing in terms of building materials, facilities within
and outside the building as well as sanitary conditions have been discussed. However, to
have a general overview of the quality of housing between various types of residential
areas, the quality of material and facilities have to be taken into consideration. To achieve
this objective four indices of housing quality have been constructed which can serve as
measurement of housing quality the four indices are:-

- a. Index of quality of housing material
- b. Index of facilities within the housing
- c. Index of facilities outside the building
- d. Index of sanitary facilities

Each of these indexes is a composite index, which was constructed by adding values assigned arbitrarily according to its quality. Table 4.18 shows the percent distribution of houses according to various indices of housing quality and types of residential areas. It is clear from the table that in general the quality of houses in terms of their building materials and facilities are still poor. However, it is encouraging to note that about 30 to 40% of houses can be considered to have medium quality of materials and facilities. It is

also apparent that there is no significant difference in the quality of houses between various types of residential areas (table 4.15).

5.2 Conclusion

Based on the findings from the survey and what has been discussed earlier in the previous Chapter we can now know that Keffi is relatively sparsely populated urban area. The housing quality in the Study area is generally poor. Generally, the findings conform with the findings of other studies to other selected Nigeria urban towns; Onibokun (1973), Sada (1975) and Prothero (1965) that low quality of building materials is widely used.

- Poor quality of building facilities is available with most houses enjoying the provision of electricity and using pipe-borne water as their source of water supply. Bathrooms and toilets also have poor facilities.
- Lack of adequate drainage and waste collection system in most of the area (plate I). Private arrangement is made for most disposal of household waste. This is not very effective.
- 3. The study revealed that there was no significant difference in quality of houses of the High, Medium and low-density areas.
- 4. The major contributing factor to the low housing quality includes difficulty in obtaining loan. The use of unskilled labour as well as cheap quality materials.

5.3 Recommendations

For the fact that housing involves the consumption of neighborhood services, the following recommendations are important.

- People complain of high cost of building materials and its maintenance,
 Government should improve on the access of people to building materials at
 reasonable cost. Though the encouragement of local production of building
 materials, sale depots in all Local Government areas to be sold at Government
 controlled prices to members of the public.
- 2. The policy of encouraging the construction of new buildings should be adequately complemented by a policy of encouraging people to renovate their houses and rehabilitate their neighborhood.
- 3. It may be advisable to reduce the cost of water cost reticulation as a deliberate policy. The use of central septic tanks and effective sewage disposal may be a factor in the reduction of indiscriminant waste disposals and attendant exposures to epidemic diseases, as the ancillary structures needed for solid waste disposal and consideration to the cost of the system.
- 4. There is the need for a massive building programme. While the Government should not directly build houses, it should have the responsibility to take necessary steps, to encourage individuals and groups who wish to undertake the dwelling unit's development.
- Government should assist in providing finance and technical skilled manpower, for the construction of the drainage pattern.

6. All compounds in the residential areas should be serviced by private collection of refuse waste hence feasible legislation be introduced to provide for this and charges made either as part of a rate able system or in some other form. While vehicular accessibility is a problem in public areas such as market places etc. the present method of communal bulk bin container-collection from accessible location on properly constructed concretes platforms should be continued. A number of vehicles are required in order to maintain the desirable standard and more open spaces communal bin collection.

REFERENCES

- Abiodun, J.O. (1985) The provision of Housing and urban environment problems in Nigeria University of Ife press E. T. D lle -Ife.
- Abiodun J.O. (1985) (edit) Urban and regional planning problems in Nigeria University of Ife press E. T. D lle -Ife
- Acquaye E. (1973) A Technological Review of the housing problems in developing Countries and International Conference on Housing Ibadan.
- Adetibu, A.A. (1980) Housing modernization in Ilorin *The Nigeria Geographical Journal*, Vol. 23 Nos 1 & 2 people and Housing in Third world Cities
- Aina, T.A. 1990. "The urban poor and the commercialisation of land in Nigeria". Baker, J. (ed.). Small Town Africa: Studies in Rural-Urban Interaction. Uppsala, The Scandinavian Institute of African Studies.
- Atoyebi, O. 2000: Overview of Environmental Problems in Nigeria National Centre for Economic Management and Administration (NCEMA), paper Presented at the Conference on Environmental and Sustainable Development. Ibadan, 17-18 August.
- Ayoade, J. O. (1979): *Towards Environmental Policy in Nigeria*, Proceedings of 22nd Annual Conference on the Nigerian Geography Association held at the University of Benin City, 28 March April 1.
- Daramola, A. (2004) Planning Policies and Affordable Housing in Nigeria An analysis of the Abuja Master-Plan Scheme and the re-certificate of Occupancy Syndrome paper presented at the Housing Studies Association Conference, Belfast, UK, 9-10 September, 2004.
- Daramola, A. (2005b), Global Climatic Change, Environmental Resource and Pastoral Management In Nigeria, Paper presented at IHDP National conference, Department of Urban and Regional Planning, University of Ibadan, Nigeria, 2-3 March, 2005.
- Daramola A., Wole A., Bridgette E., Ogbiye S. (2005d) Public Private partnership in housing Delivery in Nigeria, 'Urbanisation in Africa', African Union of Architects, Abuja, Nigeria.
- Federal Ministry of Works And Housing (2001) Publication in Policy News Journal June 4, 2001.
- Gordon, A., Davis, J., Long A. and Meadows, K. (2001): *The role of Natural Resources in the Livelihoods of the poor*. Policy Series 9, Social Sciences Department, NRI Chatam, U.K.

- Habitat, 1992: *Improving the Living Environment for sustainable Future*. United Nations Centre for Human Development (Habitat), Nairobi.
- James C.N. (2006) Environmental Impact Assessment for Sustainable Development, 1st Ed. New Haven, EDPCA, El-demak publishers.
- Mabogunje, A.L. (1973) Toward an Urban policy in Nigeria, Nigeria Journal of Economic and social Studies Vol. 16 No. 1.
- Oguntoyinbo, I.E. and Sada P. O. (1978) Urban processes and problems in Nigeria. Ibadan University press.
- Onibukun, R (1990): Urban housing in Nigeria, (NISER, Ibadan)
- Onokerhoraye, A.G. (1977) The spatial pattern Residential District in Benin, Nigeria. *Urban study*, Vol 14, no. 3, pp. 291-302.
- Raji, O. (2008): Public and private developers as agents in Urban Housing delivery in subsaharan Africa. The situation in lagos state, *Humanity of social sciences Journal*, Vol.3, No.2: pp 143-150.
- Rod, B. (1977) Self-help Housing: a new Imperialist Strategy? A Critique of the Turner School, *Antipode*, Vol 9, issue 2, pp. 52-59
- Sada, P.O. (1975) Urban Housing and the spatial pattern of modernization in Benin City. *The Nigeria Geographical Journal* Vol 18 No 1.
- Sule, R.A. (1988) A Synopsis on Urban development on planning. Third national development plan present position and problems.
- Zubairu Mustapha (Dr) Restructuring Institution to "Jump start" the housing delivery Process in Guardian Newspaper 23rd April, 2001.

APPENDIX I

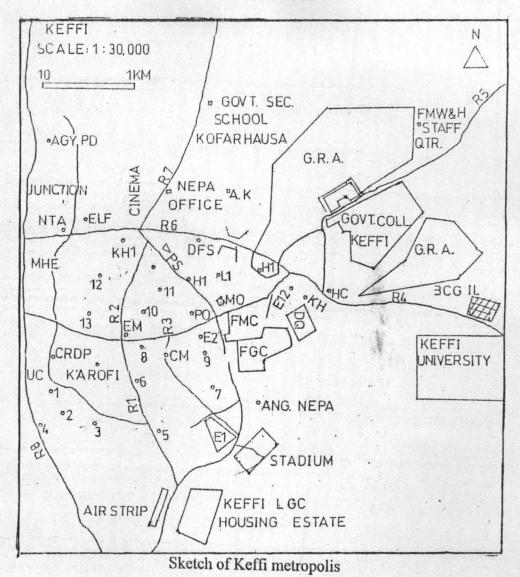
QUESTIONNAIRE

- 1. What problem do you encountered when building
- (a) Finance
- (b) Land acquisition
- (c) Building Plan approval
- (d) All of the above
- (e) None of the above
- 2. Which labour type do you prefer?
- (a) Skilled labour
- (b) Unskilled labour
- (c) Personal labour
- (d) All of the above
- 3. Do you seek advice of professionals before building
- (a) Yes
- (b) No
- 4. What type of advice
- (a) How to plan building
- (b) How to secure loan for financial institution
- (c) On types of materials to be used
- (d) The environmental problems
- (e) All of the above
- 5. Does competitive influence your building programme
- (a) Yes
- (b) No

Waste	Frequency of waste	Ownership	Painting	Income Level
Collection	collection	of building		
system				
1.Collection by	1. Irregular	1. Owned	1. Painted	1. Self employed
	2. Twice a week	2. Rented	2. Half painted	2. Less than
2.Collection by	*	*		N1,000
Local Govt.	3. One a week	3. Govt. Qtrs	3.Not painted	p.a.
3.Disposal by	4. twice a month	4. Others		3. N1,200-2,500
	5. Once a month			4. N2,401-6,000
				5. N6,000-above
		,		

Type of	Use of	Accessibility	Age of	Wall materials
Building	Building	Of building sites	Building	
1. Residential	1. self	1. footpath	1. 5 years	1.mud
2. Commercial	2. rented	2. motorable	2. 5 -10	2.cement blocks
3. Public		3. non-motorable	4.10above	3. burnt bricks
4. others		4. Others		

APPENDIX II



Legend

High density

EM: Emirs Palace

El: Ahmadu Maikwato Pri. Sch.

CM: Central Market

E2: Baptist Pri. Sch.

Po: Post Office

Antau Bridge via Akwanga Rd

KH1: Kofar HouseA

PS: Police Station.

R1: Tudun Kofar Road

R2: Tsohon Kasuwa road

R3: Abdu Zanga Way

R5: Ang Jaba Road

6Tudun Kofa

7 & 9 Kofar Goriya

8: Limbita

10: Ang. Rimi

11: yan Kokwara

12: Majama

Medium density

H1: Keffi Local Govt. Sec. Sch.

1 & 2

L1: Low Cost Housing Estate

FMC: Federal Medical Centre

AK: Angwan Kwara

R4: Akwanga Road

R6: Ang. Bye-Pass

R7: Old Kaduna Road

R8: Nasarawa Bye Pass Road

1: Yawan Lamma

2: Zango

3: Ang. Kofa

5: Ang waje

Low density

E12: 12 Man's Qtrs

KH: Keffi Hotel

DQ: Doctors Qtrs

UC: University Campus

FGC: Federal Govt. College

BCG IL: Industrial Layout

GRA

FMW&H Staff Qtrs

APPENDIX III

Institutions of Learning

Public primary schools in keffi

- 1. Ahmadu Maikwato
- 2. Abdu Zanga
- 3. Angwan Maiganga
- 4. Angwan Ninzom
- 5. Baptist
- 6. ECWA
- 7. Gauta
- 8. Islamiya
- 9. Jigwada
- 10. Kaibo Mada
- 11. Kaibo Normadic
- 12. LGEA Staff school
- 13. Kofar Hausa
- 14. Model Science
- 15. Nur-Ud-Deen
- 16. Qura'nic
- 17. St. Williams
- 18. St. Peter's Pilot
- Sabon Gari
- Salamu
- 21. Sabilurrashad
- 22. Yelwa I
- 23. Yelwa II
- 24. Yarkadde
- Yarkadde Nomadic
- 26. Angwan Lambu
- 27. Saura
- 28. Majema
- 29. Angwan Jaba

APPENDIX IV

Other Establishments

- The NADP
- Ministry of Justice Inspectorate office
- Fire Service
- Area Audit
- Library
- Area Education Inspectorate
- Board of Internal Revenue
- National Orientation Office
- INEC
- Federal Inland Revenue
- Immigration
- NEPA
- NYSC camp
- Standard stadium that can accommodate both local and national matches, and host of others.
- Also many staff who are serving the Federal Government and Private firms in Abuja reside in Keffi.

Administrative Set-Up

Keffi Local Government Area is administratively set up as follows:

- Executive Chairman
- Deputy Chairman
- Elected Honourable Councillors

APPENDIX V

Mineral Distribution in Nasarawa State according to Local Government Area

			S/N	LGAs	Minerals
S/N	LGAs	Minerals Overtz	8.	Lafia LGA	Clay, Silica sand
1.	Keffi LGA	Clay, Tale, Quartz, Gemstones, Mica, Granites Clay Silica sand,	9.	Nasarawa	Cassiterite, Clay,
2.	Karu LGA	Clay, Silica saild, Granites		LGA	Granite, Columbite, Tantalite
3.	Kokona LGA	Gemstones, Quartz. Clay, Granites	10.	Nasarawa Eggon	Cassiterite, Gemstones, Quartz, Clay, Granites
4.	Keana	Sodium Chloride, Clay Limestone	, 11.	Obi	Barytes, Clay, Coal
5.	Awe	Barytes, Clay, Gulena Limestone, Sodium Chloride, Sphalerite		Toto	Marble, Iron Ore Dolomite, Clay
5.	Akwnaga	Cassiterite, Clay Columbite, Feldspare Zircon, Limenite, Mica Gemstones, Granites	,	Wamba	Gemstones, Clay, Granites
·	Doma	Clay, Silica sand	7		