

**URBAN FRINGE MANAGEMENT IN MAIKUNKELE AND
ENVIRONS, MINNA, NIGERIA**

BY

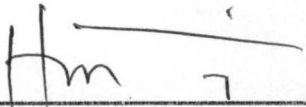
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M.TECH/SSSE/2005/1411**

**A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL,
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA IN PARTIAL
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THE DEGREE OF MASTER OF TECHNOLOGY (M.TECH) IN
GEOGRAPHY WITH ENVIRONMENTAL MANAGEMENT
(NATURAL RESOURCES MANAGEMENT).**

OCTOBER, 2008

DECLARATION

I hereby declare that this project is written by me and it's original. It's the final presentation of my research, titled "Urban Fringe Management in Maikunkele and environs, Minna, Nigeria" all source have been acknowledged by way of references


Signed 
Muhammad, Wabi Hussain

Date 22/05/09


CERTIFICATION

This thesis Titled: **Urban fringe Management in Maikunkele and Environs, Minna, Nigeria** by: **Muhammad, Wabi Hussain (M.Tech/SSSE/2005/1411)** meets the regulations governing the award of the degree of M.Tech. of the Federal University of Technology, Minna and is approved for its contribution to scientific knowledge and literary presentation.

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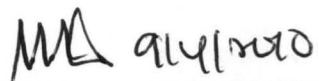
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DEDICATION

To my Dad. Engr. Muhammad Ibrahim Wabi who always gives education the highest priority.

ACKNOWLEDGEMENT

All praises be to Almighty Allah, whose mercy and blessing has reached me that I was able to complete this programme.

I would also like to thank my supervisor Dr. P.S. Akinyeye who despite his tight schedules supervised this research work, I am highly and sincerely grateful.

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ALHAMDU-LILLAH

ABSTRACT

The alarming rate at which the fringe of Nigeria's urban centres are growing deserves attention from planners which unfortunately the planners seem not to have noticed. This could pose as problems for many of our cities in their bid to get developed socially, physically and economically. Thus, the danger that lies in the continued uncoordinated growth of the urban fringes especially in Minna city is what prompted this study. The study among other things is able to identify the land use pattern and socio economic characteristics of Maikunkele area, which serves as a case study. The planning administration over the area by Minna planning Authority is also examined. In the light of the analysis of facts, and figures (data), series of inadequacies ranging from physical, socio-economic to environmental problems were revealed. Major problems discovered include, the existence of on land use control, lack of necessary infrastructural amenities, poor environmental sanitation and problem of poverty and unemployment. Factors responsible for the problems of the study area are also identified and extensively discussed. Principal among the factors are those bordering on political interference, institutional inefficiency, obsolete laws, low annual income and nefarious activities to land speculators. On the basis of the identified problems and factors responsible, a land use proposal and a number of policy recommendations are put forward towards finding a lasting solution to the problems identified in the study area.

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CHAPTER ONE

INTRODUCTION

In nearly all the countries of the world, the process of urbanization has significantly contributed to the manipulation of area of population concentration and more importantly to the increase in the size of village and city concentrations.

At the initial stage of urbanization, there were sharp contrast between villages, cities and the country-side due to some physiographic and socio-economic factors such as employment opportunities, income level, educational status, good road network, standard of living etc.

But with time these differences often disappear through several urban growth which soon completely obliterate the rural – urban dichotomy. Consequently the rapid expansion of the urban environment often leads to the degradation of the rural environment due to inefficient planning that often prevail.

In developed countries of the world, problems associated with the urban fringe at present are minimal and largely different from one country to another but generally similar to those of the industrial and post industrial revolution in Europe. However, on the part of developing countries, they have been faced with rapid urbanization process, and at present, cities where urbanization is currently highest continue to expand with alarming rapidity due to continued drift of able bodies (but jobless) youth from rural to urban centres. Other problem factors include deplorable environmental condition to haphazard development, urban sprawl and squatter.

In Nigeria, these developments seem not to be limited to the inner (traditional central) city but are now manifested at the outer

parts of many cities and villages, a situation which has received very little attention to date. This study is therefore motivated by the desire to advance practicable solution to the problems of the environment focusing on the urban environmental development in Minna town in Niger State taking Maikunkele as a case study.

1.1 STATEMENT OF THE PROBLEMS:

This study becomes a subject for research because of the need to advance solutions to improve the degenerating conditions of the study area manifested in the following ways;

- i. Poor living and environmental conditions at the outskirts of the town
- ii. Uncoordinated development at the periphery of the town.
- iii. Inadequate infrastructure and social amenities at the city's fringe areas.
- iv. Land use abuse through uneconomic estate planning.

The above listed problems are associated with the activities of, and error of omission by local, state and Federal government land speculators, local planning authorities, property developers or land owners and also the residents of the study area themselves.

1.2 AIM AND OBJECTIVES:

The major aim is to study the nature, pattern and characteristics of a typical urban environment development with its existing problems and and suggest possible solutions to them. Thus the main objectives of this study are:

- i. To identify the peculiar landuse pattern and the socio-economic characteristics of the people of Maikunkele

- ii. To assess the problem affecting the efficiency of planning agencies and government regulations (laws, Act, Decree) in the area.
- iii. To provide useful guide towards improving the condition of people living in the outskirts of the town

1.3 JUSTIFICATION OF THE STUDY:

The outcome of this study is expected to motivate a new orientation in urban planning process. This will create an awareness on the need for standards in infrastructural, standard and qualitative housing accommodations in better planned environment not only for a proper and functional urban development but as well as for the city and the emerging metropolitan region as a whole.

1.4 SCOPE OF THE STUDY

As is the case in many other studies carried out in developing countries especially in Nigeria, obtaining accurate, reliable and adequate data for the purpose of this research work may pose problems. In the process of collecting the secondary data, some information may be undependable where they are available and some unavailable due to the delay in publishing the population data for the local government areas. Some data may be insufficient or even difficult to obtain in some cases. To obtain all these information, a high level of tolerance and patience is required.

Other problems likely to be encountered in the course of the field survey include poor responses or complete refusal at some stages, and also financial constraints. Despite all the problems

anticipated, the project still continued. This study is therefore concerned or concentrate on Maikunkele and its environs

CHAPTER TWO

LITERATURE REVIEW

Interest in the urban fringe has been increasing rapidly in recent years. This is evident from the different studies and contribution from several authors and researchers on various aspect of the issue. This review concentrates on the earlier studies that focused attention on when the urban fringe phenomenon started or become noticeable; the various definitions of the urban fringe; the characteristics of the fringe as well as the problems associated with the fringe and the solutions proffered by different authors and researchers.

The fringe is not an easily defined geographical area that begins and ends at a distance from the city centre. It contains substantial, if discontinuous, area of urban development mixed with stretches of more intensive and traditionally rural setting for instance, Agriculture and forestry which may not be strongly affected by the presence of urban activity, hence the rural environment is sometimes synonymous with urban fringe.

It was smith (1937) who discussed the “urban fringe” that marked the first use of this term signifying the built-up area just outside the corporate limit of the city.

Pryor (1968) however suggested that it is possible to give the term “urban fringe’ more precise definition as the proportion of the total land area under urban use and to subdivide the fringe into ‘rural – urban’ and ‘urban –rural’ components.

Sada (1970) outlined two major approaches in the definition of the rural –urban fringe: firstly, it is an area outside the city boundary where there is concentration of the ‘non-village –rural and non-farm

population”; secondly, it is an area outside the city boundary where full city services are not available. He (Sada) therefore defined the rural –urban fringe of Lagos as “the continuous built-up area outside the city boundary where full city services are not available and the population is mostly non-farm and non-village”. In describing what an urban fringe is, James (1974) identified it as a phenomenon which has been in existence since urban civilization first emerged and settlements gradually began to expand at the expense of rural land. In the same view, Bennet (1969) had earlier noted that the first half of the 18th century for the same seasons as today.

He argues further that in a land use and often in an administrative sense, the area is only partially assimilated into the growing urban complain. This is the area which has termed the urban fringe.

The country side commission for Scotland (1977) defined urban fringe as the zone 5-10 miles wide immediately adjacent to the area and regard it as a particular type of country side in so far as it is located and functions within urban structures.

In contrast Davidson et; al (1977), the fringe is an environment in which many value are at stake and where there exist potentials for rapid change. The fringe in at the extreme of the fringe as the “town’s back garden” which is countryside appearance but has undergone physical changes due to urban-type intrusion leading to a decline in the Agricultural base. Where the urban fringe is expanding actively as in development of new towns; it is necessary for a number of farms to be vacated at an early stage of the development since all the released is likely to be required at this stage, developing authority were able to

lease some of the land on short term tenancy to the remaining farmers. This allows short term expansion in increasing cropping and the uncertainty regarding when and if such land will be ultimately required for development makes medium to long term planning impossible.

All these point to the diversity in views on the definition of the "urban fringe". Countries like the United State of America refers to the 'urban fringe' as the portion of an urbanized area that lies outside the central city.

The composition of the urban fringe is found to vary from place to place, for instance, in France, it is characteristically the working class who are forced to live in the urban fringe and the French, claa it pavilloius, but in the fringes of Lagos in Nigeria, the low income earners occupy these areas.

Rodehaver (1947) found out that the fringe areas are characterized by a high proportion of married couples as compared to the urban and rural areas adjacent to it.

Other studies suggest that with respect to resident of urban fringe, demographic and other related parameters commonly shows the attraction of the fringe to a particular group; young couples in their early years of marriage, that are just establishing their first home. The age distribution is usually positively skewed with a greater proportion in younger age groups.

Myers et al; (1947) conclude that "that substantially higher ratio of the fringe point to the fringe as a significant area where relatively larger number of children are produced and a place in which problems of the youth are of major importance".

Pryor (1968) concludes that the fringe is characterized by incomplete network of utility and services such as reticulated water, electricity, gas and sewage mains, fire hydrants and sealed roads.

Thomas (1974), identifies "urban fringe as a zone of mild landuse elements and characteristics in which rural activities which are the mode of life are in rapid retreat and into which not only residential, but also structures for commercial, Education, recreation, public services and other largely extensive uses of land are intruding.

The "fringe" is an area characterized by functional and visual uncertainty about its dominant use.

The fringe area faced is with numerous problems as well amongst which is accessibility. For instance, mass transport modes and degree of access of an individual to places of work, schools and market, tend to be dis-satisfying to the fringe residents because of the incapability of such services.

Other writers also share similar views by identifying the major problem of the fringe as that of capacity of social amenities, and found that regular pipe borne water supply is a 'luxury' in the case of urban fringe areas and the authorities concerned pay little attention to providing these amenities because of the low tax generated from these fringe areas before the industrial boom of the seventies.

Another problem of the urban fringe is the high crime rate. Crime at the urban fringe is highest in most Nations of the world. Thus Wilsher et al; (1975) note that "the latest United States government statistics show crime falling in many large cities and rising in urban fringe"

There is also the problem of inadequate network of public transport modes; this is mainly as a result of the lack of good roads in the developing countries, and in the developed countries, it is as a result of the need for commuting population since the fringes are occupied by high rate of car ownership. This lack of public transport modes causes problems, because majority of the fringe residents prefer to work in the urban areas rather than the fringe itself, especially in the developing countries. However, Cruickshank (1981) note that almost all the problems of this environment carry landscape implications. He argued further that the edge of most large towns and cities in Britain provides worst examples of vital decay. The problems of the urban fringe could be caused by the location of incompatible landuses and non-conforming activities such as quarries, Airports, Cemeteries, manufacturing, commercial Enterprises, storage depots slaughter houses, refused dumps which assault the unprotected environment by polluting it. This pollution brings with it, the problems associated with land, water and Air pollution.

Another environmental problem of the urban fringe is the Landuse abuse through uneconomic planning. This is because the growth of settlements in the fringe are unplanned and unpredictable, and these sometimes lead to productive farmlands being allowed to lie idle for several years.

The urban fringe is also faced with administrative problems which includes;

- i confused planning framework between the city and the local administration.

- ii. Lack of plan by the local government for the urban fringe, which leads to zoning inadequately geared towards the present and future needs of expanding urban area.
- iv. Lack of basic data on which researches could be based to enhance adequate planning.

Analysts argue that it is not simply an intermediate environment which exhibits with less intensity, some urban problems and some rural ones; at any one time, the fringe is a particular and unique environment with its own set of problems, and so, therefore solutions to the nature and degree of the problems. For an urban fringe where the problems have manifested, urban renewal or upgrading could be used to improve the condition of the area and solve the problems, but in an area which is just development, maps master plans and subdivision plans could be best used to reduce uneconomic planning and eradicate uncoordinated and piece meal speculation and incompatible landuses.

From what has been discussed so far, the definition of urban fringe as well as its characteristics, problems and solutions to the problems have been analyzed. The next stage of the study discusses the background information on Minna and the study area.

2.1 Historical background of Minna.

Minna is basically a Gwari town and got its name from a ritual performed yearly by the Gwari founders of the town to observe the beginning of New Year.

The word itself in Gwari means 'to spread fire'. It came into existence because the Gwari used to put out every bit of fire in the area, even in all the

kitchens in the town on the last day of every year so that the chief priest and some other members of the traditional council could travel to Lafiyagi to bring new fire to Minna. The original name of the settlement on the hill top was Paida and surrounding villages like Dabo, Fadi, Jempina, Tayi, Dnayi, Pasin and Shakwo were all under its domain. The early settlers and founders of the town on the top of the range of hills which line the Eastern and Northern sides of the present Minna.

However, before the town become the modern city that is today, it went through four stages. The first was when the construction work of the railine started in the area in 1905. as there was no local labour at that time, the construction workers were mainly Nupes, Gwaris and the Hauses located in different camps.

In 1908, the second 'face-life' for the town took place when an alkali (Judge) was provided for the camps and a prison for convicts established. Later, the first contingent of police was introduced.

The third stage took place in 1910 when the Gwari decided to move from hill top to settle down in the area of the present Paida. In 1911, the railway line passing through Minna was completed and the first locomotive engine arrived in the town station, now known as the Minna railway station.

The Minna town council was established in 1934 when the railway workers' camps started developing into permanent settlements. In 1950 a chief for the whole of the new Minna area was enthroned, known as Alhaji Ahmadu Bahago I.

Another significant event that took place was the construction of the aerodrome in 1929 as one of the first three in the country. The Bosso dam was constructed in 1949 to serve the city until the late sixties when the chanchaga water-works was built. In 1962. The National Electricity power

Authority (then known as the electricity commission of Nigeria.) extended its services to the town.

The last improvement of status came in February 1976 when Minna was made the capital of the newly created Niger State which to date has made tremendous socio-economic impact on Minna and environ.

2.2 Location and Geographical Setting of Minna

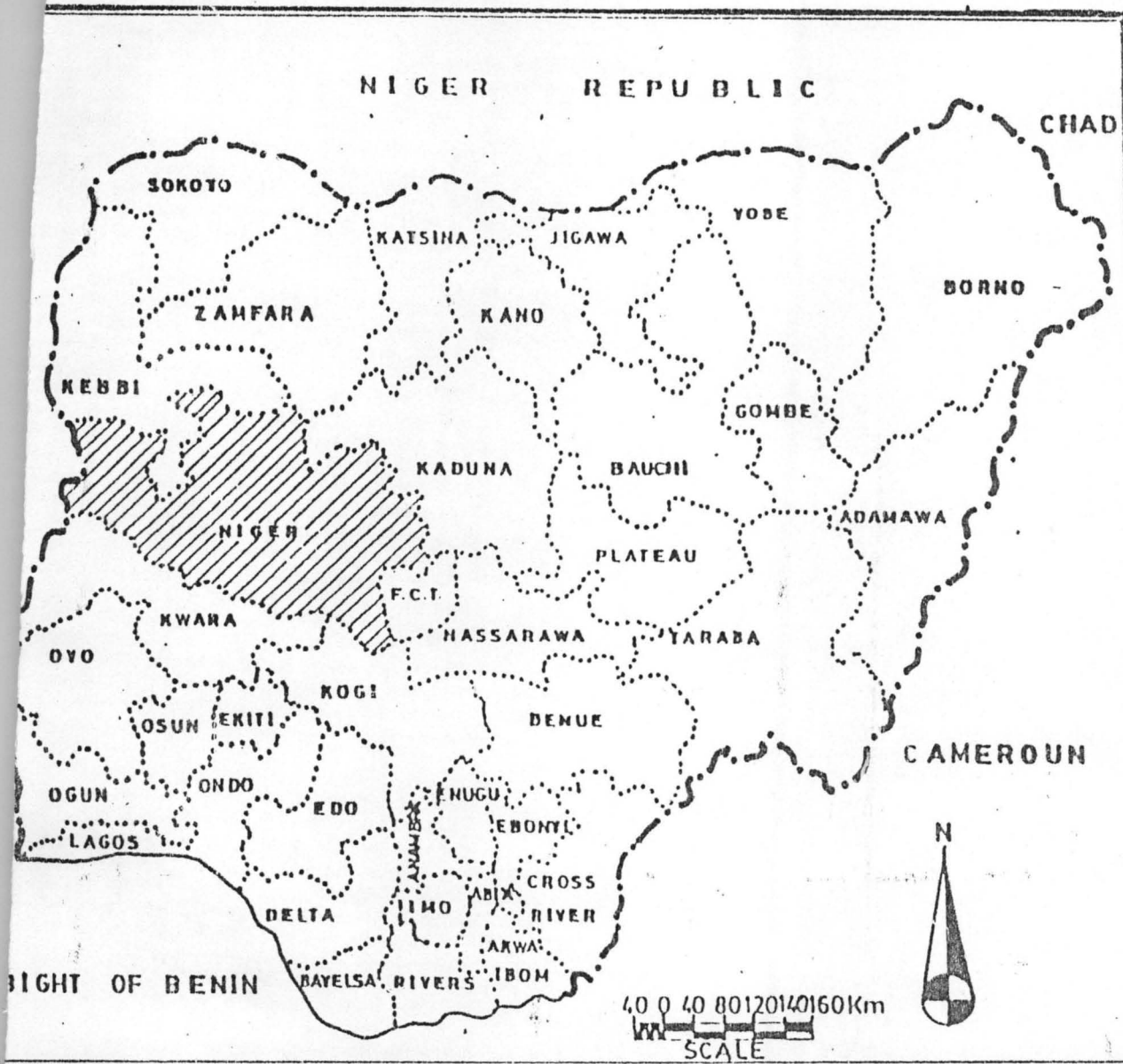
Minna lies at latitude $9^{\circ} 37'$ North and Longitude $6^{\circ} 33'$ West. To the Northeast of the town, a continuous steep outcrop of granite limits any urban development in that direction.

The town has an annual rainfall of 1334mm (52 inches) taken from a long record of 54 years. The rainy season starts on average between the 11th – 20th April and last between 190-200 days with its highest mean monthly rainfall at September with about 300mm (11%.7 inches).

The mean monthly temperature is highest in March at 30.5°C (87°F) and lowest in August at 25.1° (77°C)

2.3 THE CITY STRUCTURE.

Ever since the town's movement from the hilltop and its resettlement in the valley, it has flourished and expanded due to the exploits influenced by the construction of the rail-line in 1905. With the location of the civil service secretariats (Federal and State), the University and other educational, medical, recreational, commercial and transportational facilities in the city, Minna has continued to grow in importance. The town's accessibility through several means and its



LEGEND

- National Boundaries.....
- State Boundaries.....
- Study Area.....

Fig.1 NIGERIA MAP SHOWING THE STUDY AREA

nearness to the new Federal Capital (Abuja) is contributing to its rapid development with an immediate potential market for many products and services.

2.3.1 Spatial Growth

The growth of Minna from 1950-1960 was gradual with 37.1 hectares at the rate of 3.4% per annum. From 1960-1972, it rises to 108.0 hectares at the rate of 2.9% per annum, it was 516 hectares at 1972-1979 at the rate of 13.4 per annum. This is because Minna became the State Capital in 1979, this helped in the rate of growth.

The main aims of Minna has grown in a Northwest to Southeast direction which originate from the core area around the railway operations and the market. To the Northwest it has expanded with large scale land allocation to engulf the village of Bosso and Maikunkele marks the Northwest boundary of intense influence, especially now that the airport has been sited close by.

To the Southeast there is no open space up to Tudun Wada. The village of chanchaga at the bridge crossing of the river chanchaga marks the Southeastern boundary,

2.3.2 Population Growth

The population of Minna has grown tremendously through the years. This growth is due to both Natural increase as well as influx of migrants from other parts of the country.

2.3.3 Commercial Structure

Firms began to spring up in Minna after the creation of state in 1976 when Minna was made the capital of Niger state. This creation of state brought in investors and hence the establishment of commercial institutions to develop the area. Banks were established for transaction purposes and some super markets selling of agricultural produce were also established, for instance the Gwari and the main markets, bigger than the 'kasuwan dare' which was initially in use.

The central business district (CBD) which is the commercial nerve central of the city is around the railway and the main market; this is due to movement along the railway line.

There are other small retail and service centres scattered within the city. At the lowest hierarchy is the street trading which consists of hawking along the roads and residential quarters.

2.3.4 The residential structure:

The growth of the residential district of Minna is in response to the increasing population which is the result of development in the city. The development brought about job opportunity and hence the need for more settlement in the city, the expansion has brought about the new residential areas.

Following the hierarchy of the residential areas based on the population density and houses available; we have the core areas with the highest population density and comprises of low income earners. These areas are often slum areas with hardly any open space, and few roads pass through; often occupied by indigenes.

The structure spreads outward to the new suburb which is also occupied by the indigenes but with less concentration of houses and

people than the core area, even through their social characteristics are the same.

With the creation of Niger State in 1976, newer residential areas were built to accommodate the government officials.

These areas are referred to as the Government Reserve Area (G.R.A.). There are also the Estates, lowcost houses e.g. the chiromawa estate and Bosso low-cost respectively and also zarumai quarters. The most recent is the Bosso estate.

Finally, further away from these estates and lowcost houses are the fringe areas of which Maikunkele is one. People move to the fringe area in search of more land for various landuse types.

2.3.5 Employment and industrial structures.

The creation of state has opened up more industries and hence more Job opportunities. In Minna, the Mona Juice factory was established and so also are some small firms and construction companies such as the Julius Berger, P.W., John Holt and a lot of others. The establishment of the secretariat and other Federal government offices have also increased job opportunities and hence employment. The improvement in the road network has led to the establishment of several commercial institutions such as the Banks which provide Job opportunities as well. These activities grew continuously over the years.

2.3.6. Existing road network

Minna has a major road which passes from chanchanga, through Bosso to get to Maikunkele and from there continues out of the town. This is the busiest road in the town and its being fed by other roads. Some of the

Minna roads feeding this road are: Kuta road, Airport road, Shiroro road. These minor roads, are also being fed by local roads like; hospital road, maitumbi road and lot of others.

Moving further down the hierarchy are some foot-paths feeding the local roads.

The existence of this straight road facilitated the movement to and from Maikunkele area.

2.3.6 General landuse pattern of Minna.

Different area of Minna have been zoned for specific use in order to control the development of the town. In Minna the residential aspect dominates other uses being intermingled. The public institutional landuse also cover huge land area, this is followed by the Airport then the industrial landuse and then the rural use followed by agricultural landuse and then others.

2.4 THE STUDY AREA.

The study are is Maikunkele, situated on the North Western side of Minna. Maikunkele area like all other fringes (e.g. chanchaga) in Minna was a village mainly used by the urban and rural dwellers as farmlands before the creation of Niger state in 1978. Noticeable development have since changed this situation.

The congestion of the inner city of Minna was as a result of the creation of Niger state which brought in many people, and also the sitting of the new capital of Nigeria (Abuja) which is 130km away. Minna also increased the influx of people. This congestion of the inner town has lead to the movement of people to the periphery, including

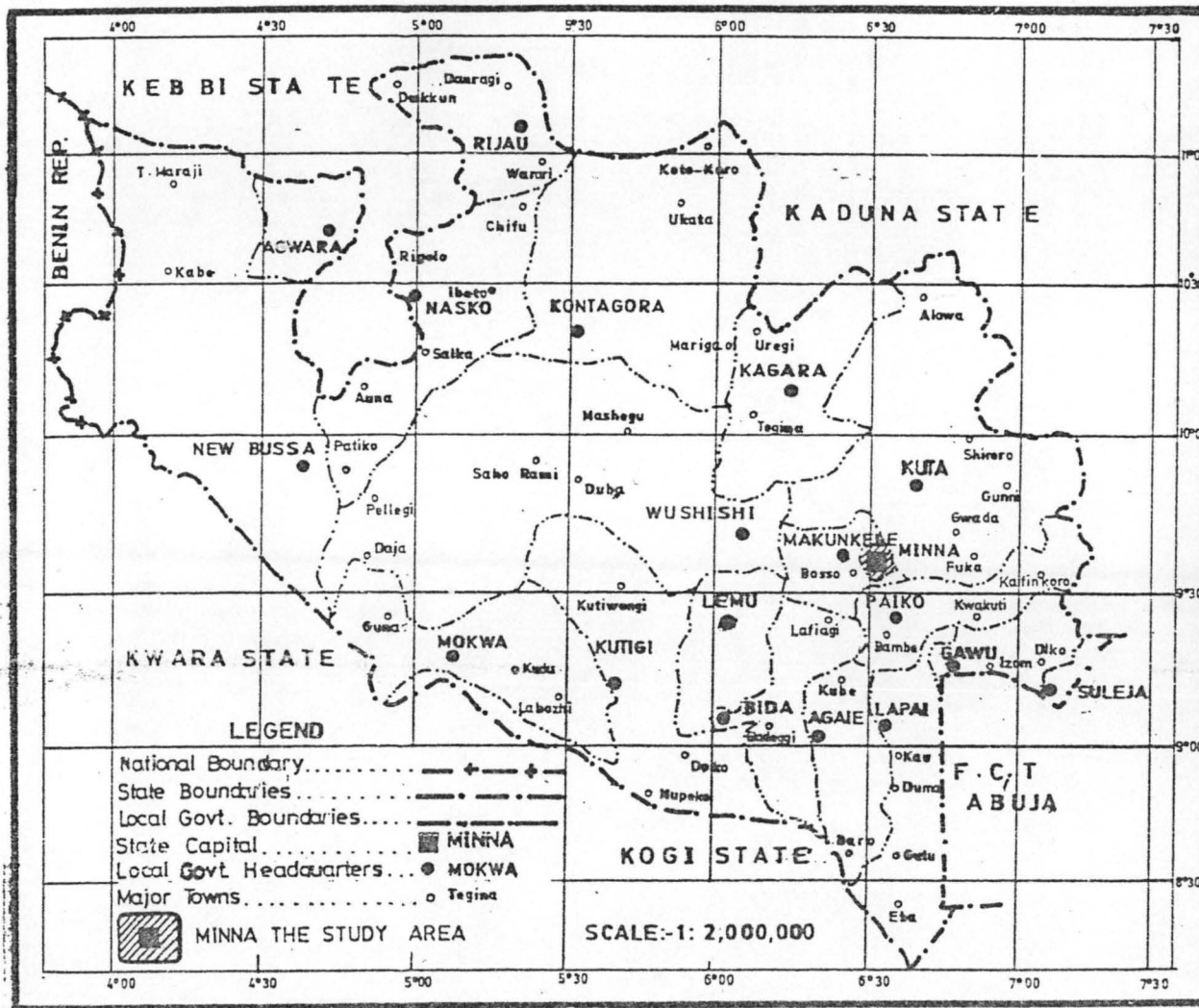


Fig.2: MAP OF NIGER STATE SHOWING THE STUDY AREA

Maikunkele. The location of the new airport close to the study area has contributed to the development of the fringe, this is people working at the airport would prefer to live close to where they work.

The location of the flour mill industry at Tudun Fulani which is very close to the study area (Maikunkele) has also attracted people to both Tudun-Fulani and Maikunkele. The location of this industry and the new airport has necessitated the construction of a better road from Bosso to the airport junction.

2.4.1 Political and planning administration.

Politically, the study area is the capital of Bosso local government area and so the physical planning of this area is the responsibility of the Bosso local government. However, the Bosso local government is under the Niger state ministry of land and survey which is suppose to be directly or indirectly contributing to development of the area

2.4.2 Existing Landuse

Based on the survey carried out by this researcher, Maikunkele consists of various landuse types among which are:

Residential landuse which occupies the larges share of the developed area. The commonest residential building design in the study area is found to be the traditional area includes bungalows and storey building both detached and the face to face type.

2.4.2.1 Industrial.

The industries found in the study area include; motor mechanic, furniture, welding and vulcanizing industries.

2.4.2.2 Commercial.

The central commercial area is the market which operate to its fullest capacity on Fridays, since this is the Maikunkele market day. Other places where commercial activities take place include under the trees because the market is too small, little shops or Kiosks and other parts of some residence.

2.4.2.3 Public/Semi Public

The public or semi public buildings existing in the study area include; Hospital, Primary School, Secondary School, Mosque and Church

2.4.2.4 Recreationa/open space/vacant land.

The study area does not have any planned or organsed public recreational areas and facilities and does not have any organized open space either. This is because the area is generally unplanned and no special provision for recreational activities. However, the people in the study area, especially the children are seen using some vacant lands for various recreational activities mostly football and cultural dances.

CHAPTER THREE

3.0 MATERIALS AND METHODS

In obtaining the required data, information will be gathered using primary source with the use of prepared questionnaires and also door to door interviews.

Secondary data will be collected from the following source which will include

1. Niger state department of land and survey.
2. Niger State housing cooperation.
3. The Polytechnic of Ibadan, North campus Library.
4. Niger state National population commission.
5. Niger state ministry of Economic planning.
6. Chanchaga Local Government Headquarter (Minna)
7. Bosso Local Government Headquarter (Maikunkele)
8. The Federal University of Technology Minna Library which will also provide facilities on literature through the use of Journals and papers of previous authors.

The method to be employed in questionnaire administration is as follows:

- i. Sampling Unit: The whole of Maikunkele.
- ii. Sampling Frame: Reliance was to be placed on the National population commission's Enumeration Areas. However initial attempts to obtain information from the commission failed.

It was then decided that manual counting of buildings at the study area will be done. Roughly three hundred building were counted. Because of the small size, it was decided that two hundred and fifty houses be surveyed excluding institutional buildings.

Five research assistants were employed from urban and Regional planning Department of the University and the questionnaires were administered in two days.

In all two hundred and twenty three questionnaires were successful administered representing about 89% of total.

3.1 PROBLEMS OF THE STUDY AREA:

In this chapter the various problems facing the study area are identified from the analyses of data extracted from the physical and socio-economic survey carried out on the study area. Also used are the data collected from other secondary source such as; the department of land and survey, Economic planning office, Maikunkele zonal planning office etc. These problems were identified as follows;

3.1.1 Physical planning problem:

The physical planning problems are those arising from the direct use of the land for any development purpose (could be for Residential, commercial, industrial, institutional etc.) Those problems identified focus on those relating to lack of definite form for the study area, poor condition of buildings, inadequate Amenities, utilities, facilities and services and also other environmental problems.

3.1.2 Lack Of Definite Form For The Study Area

The most dominant land use type in the study area is the residential, though other various types of landuse development also exist. Many of these landuse developments involve without any formal planning and this lead to the haphazard or scattered manner in which the whole

area is developed. The developments in this area have no definite form or pattern and this resulted in the poor arrangement of the houses to one another and hence portraying the picture of overcrowdiness.

CHAPTER FOUR

RESULTS

TABLE 4.1 ACCESSES TO THE BUILDING

TYPE OF ACCESS	NO. OF BUILDING	PERCENTAGE
ROAD	95	42.6
FOOTPATH	128	57.4
OTHERS	-	-
TOTAL	223	100

Sources: Personal field survey

Table 4. 2: WALL MATERIAL

MATERIAL	NO. OF BUILDING	PERCENTAGE
MUDD	52	23.3
MUD BRICK	26	11.6
MUD BLOCK PLASTERED	94	42.2
CONCRETE	51	22.9
TOTAL	223	100

Source: personal field work.

TABLE 4. 3: WALL CONDITION

CONDITION	NO. OF BUILDING	PERCENTAGE
Dilapidated	6	2.7
Dilapidating	13	5.6
Cracking	41	18.4
No defect	163	73.1
TOTAL	223	100

Source personal field work.

TABLE 4. 4 CONDITION OF ROOFING MATERIAL

CONDITION OF ROOFING MATERIAL	NO. OF BUILDING	PERCENTAGE
Part missing	18	8.1
Leaking	13	10.3
Sagging	20	9.00
Rusting	54	24.2
No defect	108	48.4
TOTAL	223	100

Source: personal field work.

TABLE 4.5: CONDITION OF WINDOWS

CONDITION	NO. OF BUILDING	PERCENTAGE
Fallen off/none	34	15.2
Broken	40	17.9
No defect	149	66.8
TOTAL	223	100

TABLE 5. 6 CONDITION OF DOOR

CONDITION	NO. OF BUILDING	PERCENTAGE
Fallen off/none	7	3.1
Broken	37	16.6
No defect	176	80.3
TOTAL	223	100

Source: Personal field work.

TABLE 4.7: RATING THE DRAINAGE SYSTEM

RATING	NO. OF RESPONDENT	PERCENTAGE
Good	118	52.9
Bad	9	4.0
Not Available	96	43.0
TOTAL	223	100

Source: personal field work.

TABLE 4.8 RATING REFUSE DISPOSAL SYSTEMS.

RATING	NO. OF RESPONDENTS	PERCENTAGE
Good (Removal by vehicle)	5	2.5
Fair (By burning)	49	24.0
Poor (Dumping on open space)	150	73.5
TOTAL	223	100

Source: personal field work.

TABLE 4.9: TIME TAKEN TO REACH SECONDARY SCHOOLS

TYPE OF ACCESS	NO. OF RESPONDENTS	PERCENTAGE
Under 10 minutes	96	51.1
10 -30 minutes	76	40.4
31 mins -1hr	15	8.0
over 1hr	1	0.5
TOTAL	188	100

TABLE 4. 10: TIME TAKEN TO GET TO THE MARKET

TIME TAKEN	NO. OF RESPONDENT	PERCENTAGE
Under 10 minutes	138	65.7
10-30 minutes	52	24.8
31 mins -1hr	20	9.5
over 1hr	-	-
TOTAL	210	100

Source: Personal fieldwork

Table 4. 11: RECREATIONAL ACTIVITIES PURSED DURING LEISURE TIME

ACTIVITES	NO. OF RESPONDENTS	PERCENTAGE
Walking	34	16.3
Field sports (e.g. soccer)	34	16.3
Swimming	1	0.5
Indoor games	45	21.6
Cultural dance	21	10.1
Matching	44	21.2
Television/video sets	29	13.9
TOTAL	208	100

Compiled by the author

TABLE 4. 12: OCCUPATION TYPES

OCCUPATION	SAMPLE POPULATION	PERCENTAGE
Trading	22	10.4
Farming	79	37.4
Professional	4	1.9
Civil servant	79	37.4
Craftsmanship artisans	16	7.6
Students	6	2.8
Unemployed	4	1.9
Clergyman	1	0.5
TOTAL	211	99.9

Source: Compiled by the author

TABLE 4. 13 AVERAGE ANNUAL INCOMES.

INCOME	RESPONDENTS SAMPLED	PERCENTAGE
0 -N1,000	11	9.2
N1,001 –N2,000	11	9.2
N2,001 – N3,000	17	14.2
N3,001 – N4,000	19	15.8
N4001 –N5000	10	8.3
ABOVE N5000	52	43.3
TOTAL	211	100

Source: Compiled by the author

TABLE 4.14: PLACE OF WORK

PLACE OF WORK	WORKING FORCE	PERCENTAGE
In the city	53	61.6
In the study area	33	38.4
TOTAL	86	100.

Source: Compiled by the author

TABLE 4.15: MODE OF TRANSPORT TO WORK

MODE	WORKING FORCE	PERCENTAGE
Foot	18	20.7
Bicycle	5	5.7
Motorcycle	34	39.1
Public transport	8	9.2
Commercial (Taxi)	15	17.2
Private Vehicle	7	8.0
TOTAL	87	100

Source: Compiled by the author

TABLE 4.16 EDUCATIONAL STATUS

EDUCATIONAL STATUS	SAMPLE POPULATION	PERCENTAGE
Pry/Adult school	48	22.9
Post primary	53	25.4
Post Secondary	43	20.6
No formal Edu.	65	31.1
Total	209	100

Source: Compiled by the author

TABLE 4.17 TENANTS ANNUAL EXPENDITURE ON HOUSING:-

ANNUAL EXPENDITURE	NO. OF RESPONDENTS	PERCENTAGE
Free	27	48.2
N 120 –N360	26	46.4
N480 –N720	3	5.4
N480 – N1,200	-	-
Above N1,200	-	-
Total	50	100

CHAPTER FIVE
DISCUSSION , SUMMARY, CONCLUSION AND
RECOMMENDATIONS

5.1 POOR ROAD NETWORK AND LOW STANDARD OF BUILDINGS

Among the problems of the study area is that of poorly defined street system. There is only one main road passing through the centre of the town and that is where the activities of the town are centred. Building and activities crammed together making the area almost impossible for vehicular movement between street.

In the study area 57.4% of the houses surveyed are reached through footpaths and 42.6% by road, this is due to the poor layout of the roads (both motorable and non motorable roads).

In addition to poor road network is the poor condition of the only major road. This road has been eroded along the sides and having pot-holes here and there, the coaltar are almost all removed creating a bad state which need urgent attention.

From the table above, 42.2% of the walls of the buildings sampled are made of mud block plastered, 23.3% are made of mud while 22.9% and 11.6% are made of concrete and mud bricks respectively.

From the table on wall condition above, it is clear that 73.1% of the walls of sampled buildings have no defects while the remaining 26.9% are either dilapidating or cracking.

From the table above, we could see that over 50% (51.6%) of the buildings sampled have one defect or another. 8.1% have some of their parts missing, 10.3% have leaking roofs, 9% have sagging roofs and 24.2% have Rusty roofs, leaving only 48.4% of the sampled building

The total percentage of 99.9 is due approximation error.

Most of the doors of the sampled buildings in the study area were found to be good and materials used is mainly wood. 80.3% of the sampled building doors have no defects while the remain 19.7% have either broken, fallen off or none at all. There are no special facilities like the sink, cooker and electricity. The kitchens are either attached to the buildings but usually without doors or detached, in some cases. The space within the kitchens is too small to occupy the number of people it is meant for, so many people take turns in some compounds.

5.2.1 BATHROOM AND TOILET

The bathrooms are mostly made of Zink and open at the top and they are mostly without shower, where there is shower, no water to run the shower. The bathrooms are mostly separated from the main buildings, though there are very few houses with the modern type but these are very insignificant in terms of generalization. The toilets are mostly the pit or Laterin some go to the bush; in very few houses do we field the water closets type.

5.3. INADEQUATE UTILITIES, FACILITIES AND SERVICES:

Inadequate Public Utilities: _The various utilities in the study area are not adequate and efficient enough to meet the people's demand. Such utilities ranging from drainage system refuse disposal system, communication (Telephone land phone). System (see plate 5)

5.3.1 Parking Facilities:

The study area does not have any planned parking facilities therefore, people park their vehicles anywhere along the road, this compounds the problem of movement in the study area.

5.3.2 Drainage System

In this study area, only the buildings along the drainage system constructed by Julius Berger Company (Federal project) enjoy the use of good drainage system and these buildings accounted for 53.0% (52.9%) of the sampled buildings while 4.0% of the sampled houses have blocked and bad drainage and 43% of the buildings do not have drainage at all.

The blocked drainages have become breeding places for mosquitoes and other dirty animals while the water runs out flooding the door steps of buildings.

It's obvious that 52.9% of the respondents claimed to have good drainage because of Federal Government intervention which a major drainage was constructed and their houses are along this drainage line, however the rest 47% have a bad drainage or not available at all.

In rating the communication system (Telephone) in the study area, all the respondent interviewed claim that they have not even seen the poles not to mention the telephone services itself.

This means that 100% of the buildings sampled do not have telephone system.

5.3.3 Refuse Disposal

The study area (Maikunkele) is faced with the problem of refuse disposal means and points. In assessing the means of disposing refuse in the area, only 2.5% remove their refuse by means of refuse vehicle (good), 24% dispose of their refuse by burning which is rated as being fair and 73.5% dispose of their refuse on available open space which is rated as poor means

5.4 INADEQUATE COMMUNITY FACILITIES.

Another problem of the study area is the inadequacy of essential community facilities. Such as schools (nursery, primary and secondary), health facilities, post offices and portal agencies, cinema, theaters, markets, recreation and other cultural facilities.

5.4.1 Nursery/Primary Schools:

The study area has no nursery schools for the use of the residents and this brings the problem associated with having to go to the city every morning and afternoon. In some cases, others don't take their children to nursery schools at all because they can't afford to make the trip to the city everyday.

Another inadequacy discovered in the study area is that of secondary school. The available secondary school does not have enough seats for comfortable learning atmosphere and since there is no boarding house anymore, some children have to go to the city to attend secondary schools and thereby face the problem of transportation or sit on the floor for lessons.

From the table above 51% (51.1%) reach one secondary school or the other under 10-30 minutes, 8% and 0.5% reach their secondary schools in 31 minutes – 1 hour and over 1 hour respectively. These figures give the total of 48.9% of children who have to go to the city everyday by public transport to be able to get to school.

5.4.3 Market:

The problem facing the market is lack of facilities for proper coordination of activities. The traders are seen displaying their wares any how because the place is unplanned and the area set aside for marketing is not big enough to accommodate the trader and their wares especially on Fridays when the market is to its maximum capacity; the traders are seen encroaching on the roads.

According to the table above, 65.7% of the respondents reach the market under 10 minutes. This is because the market forms the centre of all commercial activities and therefore many people tend to locate their houses

near to the market. 24.8% of the sample claim that they reach the market between 10 min – 30 minutes and 9.5% reach the market between 31 mins
1 hour

5.4.4 Health Facilities:

There is one small general clinic serving the residents of the study area. In this available clinic, there are no enough drugs, staff and other facilities needed for any emergencies or operations. For any emergencies, the patients are rushed to the hospitals in the city. This could be very dangerous in cases where there is no means of transportation readily available or in very fatal situation.

5.4.5 Recreational Areas and Facilities.

The study area faces the problem of lack of facilities and recreation area due to its unplanned nature. There are no areas reserved for parks, cinema houses, theaters and children's playgrounds. According to the sampled houses, most people stay indoor for their recreational activities such as Ludo, Ayo, Watching television or video sets etc.

Table 4. 11:

According to the table above, 16.3% rather go for a walking during their leisure time, another 16.3% (mostly children) play field sports using undeveloped open space for games,(0.5 %)Those that use their time for swimming, 21.6% play indoor games, 10.1% use their time for cultural dances, 21.2% stay indoor to watch Television and video sets while 13.9%

use their time for other activities such as, like just sitting at home or sleeping etc.

5.4.6 Lack of Community Services.

The study area lack some community services like the post office Telephone street lights, fire station or hydrants and no provision for proper disposed of refuse and also Banks, usually, houses burn down before the arrival of the fire brigade which normally comes from the city.

5.5 SOCIO-ECONOMIC PROBLEMS.

The problems regarded as socio-economic activities include overcrowding, lack of proper security, poverty, transportation and unemployment.

5.5.1 Overcrowding

As observed during the survey for this project problem of overcrowding is not due to lack of space, but because the people are traditional local people, they build their houses in the form of traditional compound houses and a great number of people from the extended family live in the compounds. The compounds are concentrated along the road thereby creating an overcrowdiness appearance and thus creating little space for free movement or inter-street transportation. Some compounds are found to contain as many as five house holds. In some instances, the overcrowdiness is caused by the landlords who build as many houses as possible on a small piece of land in order to maximize profit.

5.5.2 Lack of Proper Security.

The study area has only one small police station where people report cases but there are no check points to check movement of people coming or going out from both ends of the study area despite the fact that it's an outlet to Zungeru and out of the state. The residents have formed a vigilante group to parade at night since there are no police to parade and check movement of thieves and armed robbers which normally operate at night

5.5.3 Problems of Poverty and Unemployment

The problem of poverty could be as a result of the occupation types which in the study area are of the low level type. The residents of the study area are mainly the traders, farmers, craftsman/Artisans, students, the unemployed and few civil servants and professionals. The problem is compounded as the able youth now look for treasures away from the land.

From the table above, it could be seen that 37,4% and 1.9% of the sample population are civil servants and professionals respectively which altogether sums up to 39.3% while the remaining 60.3% students, unemployed or either some unemployed people that have taken to farming or trading. These also explain the high level of poverty in the area.

From the table above, 43.3% earn above N5000 annually while the others of about 56.7% earn between 0-N1000 and N4, 000 – N5000. There are only about 8.3% earning N4, 001 – N5,000. 15.8% earn between N3,001 –N000

and 14.2% earning between N2,001 –N3000, 18.4% earn between 0 – N2000.

5.5.4 Transportation Problem

Going to and moving about in the study area has been a problem due to many causes such as; bad roads, unmotorable streets and unprofitable movements.

5.15, above only 8% have private vehicles, 5.7% get to work by using bicycles, 9.2% use the government owned public transport, 17.2% use the commercial transport (Taxi) which really go there because of the road condition and the unprofitable movement, this is because many people have decided to use the motorcycle which accounted for 39.1% and 20.7% get to work on foot instead of waiting endlessly

5.5.5 Pollution

The problem of noise pollution emanates from the uncontrolled blasting of music from the audio cassette seller and from the pepper and cereal grinder which makes a lot of noise during grinding. The cereal grander, most of the motorcycles used for transport and the use of fire wood for cooking also give out carbondioxide which pollutes the air and could be dangerous to health when inhaled in large quantity. Streams are also polluted by the dumping of refuse feaces into them.

5.5.6 Sanitation Problem

The problem of sanitation could be seen from the general appearance of the study area. This area does not have proper and organized refuse dumping areas to control indiscriminate dumping of refuse and that explains why everywhere looks so filthy. The inadequate and unplanned drainage system result into unhealthy passage of dirty water in front of many buildings and homes.

5.5.7 Problem of Flooding

This problem occurs along the streams. Flooding in these areas is due to the blocking of the stream channels by people trying to divert the stream to their farmlands. This is usually not properly done, thereby causing overflowing of the river and thus flooding takes place. This flooding in the study area usually affects farmlands and some local Fulani houses usually.

5.6 CAUSES OF THE PROBLEMS OF THE STUDY AREA

During the course of this study, many factors have been identified as the causes of the problems in the study area, these include governmental laws, political and institutional factors, and the activities of land speculators, and local planning authorities, lack of interest in the area by private organizations and also the attitudes of the residents of the study area .

5.6.1. Political and Institutional Factors

The study area was formally under Chanchage local government which covered a large area of the state and comprise of many other villages which were of high priority thereby leading to the neglect of some smaller villages of which Maikunkele is one. The problem of planning between the two tiers of government authorities; this is because there were no clear boundaries between the rural and urban areas. This also arose a big problem for the planners as regards the boundary with which to extend their planning operations as regards development controls most buildings were overlooked due to this. The land developers in this area do not contact the authority for plan approval.

The inactivity of the state ministry of land and survey (town planning section) as regards the proper planning of the study area.

The unscrupulous attitude of some town planning officials is another factors responsible for the planning problems of the study area; some land developers interviewed have confessed to have bribed some planning officials so that their buildings could not be tampered with even though they (buildings) are contravening the planning law.

Inadequate manpower and equipment is another factor which have contributed to the problems of the study area- lack of site inspectors and vehicles have limited the areas covered by the available inspector and hence some areas are left uninspected.

5.6.2 Activities of Land Speculators.

The illegal trading of land by the land speculators. These land speculators buy land from the local dwellers in the study area and sell out in piece at a higher price to landlords and other land developers without regards for the allocation pattern. This results into the haphazard development of the study area.

5.6.3 Non enforcement of government laws.

The inefficiency of the state government to implement the content of the decree of 1978 (the landuse act 1978) which requires that only the government can allocate land to developers and nobody or families should sell or buy land except from the government became so frustrating that many developers result into illegal sources (land speculators)

5.6.4 The weak economic and education background of the study area.

This is one of the most important factors responsible for the problems of the study area. The low educational background of most people in the study area is responsible for the nature of their jobs which ranges from farming, petty trading and some other jobs which provide low annual income or revenue. This affect the quality of houses the landlords can provide and the amount a tenant can pay for a house rent.

According to the table above, 31.1% of the sampled population do not have formal education while only 20.6% went as far as post secondary school level and 25.4% and 22.9% have only post primary and primary/Adult school respectively. This result shows that while 79,4% have

very low level or no education at all only 20.6% have standard level of education to qualify them for good jobs in the country and hence the level of income.

5.6.5 Attitude of Residents

The non-chalant attitude of the residents of the study area is also responsible for some problems like the overcrowding and poor sanitation. These occur due to the pattern of building in the study area which is predominantly the traditional compound where there are two to three families living together. Another of the residents attitude is the indiscriminate dumping of refuse and feaces all over the place and also the non-compliance of the environmental sanitation rules. The desire to leave in free family houses and cheap houses which is affordable has resulted into the accommodation in any type irrespective of the poor standard.

According to the table above, 84.2% stay in free family houses or houses of their own while 46.4% pay between N120 – N360 per annum for their houses and 5.4% of the respondents pay between N480 – N720 for the houses they are occupying. These are rather cheap compared to the cost of housing nowadays and that is why the essential facilities are lacking, but since the people prefer to go for cheap houses that they can afford, they disregard these facilities.

5.6.6 Lack of interest by the government and private organization.

Another major factor responsible for the problems of the study area is its neglect by the government and private organization in locating important offices and projects in the study area and also some institutes which could attract private firms. The private firms and also organization have ignored this area because they feel it is of no profit to them since the residents are mainly of low and very few middle class families. The philanthropic organizations in the state could no longer help in upgrading areas like the study area due to state of the economy of the country.

One could note with regret the sitting of Maizube water factory around the study area, but production is at minimal capacity and made for the city consumption.

5.7 RECOMMENDATIONS

Having observed the activities of the residents of Maikunkele, the idea of any improvement or development programmed is likely to be a much welcomed issue.

This is because

- i. People in Maikunkele are aware of the low standard of living condition and that is why any programmed to improve the condition will be welcomed.
- ii. Landlords will want to make more profits on their house to be able to meet the recent escalation of prices of other goods in the market, so they will welcome the idea of the improvement in housing quality

- iii. Various public efforts have been made in the partial upgrading of the roads, building of fallen parts of the school and in others Agricultural area.
- iv. The problems are common to everybody in Maikunkele.
- v. Heterogeneity of the places of origin of the residents. This is important for commitment towards any integrated development programme in the area
- vi. There is enough land for further development. With above mentioned potentials which could permit any proposed improvement on the existing situation in Maikunkele, the best approach to solving the identified problems has been identified to be the community upgrading considering the limited available sources of funds, residents convenience and the proper implementation of the project. This involves the provision of infrastructure and social amenities that are not available and improving the condition of existing ones

This approach in solving the problems of the study area is considered suitable having observed similar projects assisted by the World Bank in some parts of Nigeria, for instance, the upgrading of Unguwan Kudu slum area in Kaduna State and also having identified the advantages of this approach which include

1. Unlike total clearance approach, it saves cost.
2. It preserves the existing community structures.
3. It involves less destruction which makes it acceptable to the community.
4. It preserves the low-cost housing stock already existing in the area.

5. project unplementation is much faster with this project.
6. Sources of funds should easily be obtained unlike the other approaches.

Due to the advantages and relevance of this community upgrading towards solving the planning problems of urban fringes in the developing countries, it is hereby recommended as the planning approach to be applied in solving the planning problem of the study area (Maikunkele).

To improve the standard of living of residents of the study area and also to improve the quality of their environment, the following facilities and services should be provided in the study area:

The renovation of the dilapidating and cracking buildings as well as the rehabilitation the buildings lacking essential amenities like the Bathrooms, Toilets, Kitchens and water supply.

The resurfacing of the only major road passing through the centre of the village to blend with the Bosso road which terminated at the Airport junction. Upgrading of some footpaths to roads, for instance the one passing by the secondary school and other by the chiefs, palace.

Provision of a planned and organized children playing ground as well as, a well landscaped areas for recreational activities for adult residents. Findings revealed that these facilities are not available in the study area

At present there is only one hospital in the study area but what is lacking is adequate wards and facilities to keep the place running smoothly based on the above observations, and to make health care facilities more readily available to the people provision of more wards and facilities become essential.

The present market at the study area is of very low standard and lacks essential amenities such as; toilets and drainage.

Based on the problems associated with these standards of market, provision for a better and bigger market becomes necessary and also the provision of the absent amenities.

in the study area, the nursery school is lacking completely while the available primary school is not conducive for both teaching and learning due to the bad conditions of the walls, doors windows and the available facilities

The secondary school in Maikunkele also lack essential facilities that makes a school comfortable, these include desks, chairs, Toilets and playground where the students can have various games. Due to all these deficiencies which could affect the smooth running of the schools, the provision of these facilities become quite necessary

Other proposed facilities include

- (i) Provision of public toilets, lavatories or convenience.
- (ii) Provision of refuse collecting sites at convenient locations.
- (iii) Provision of a postal agency.
- (iv) Provision of drainage system to pass through areas liable to flooding.

In locating these proposed infrastructural amenities, undeveloped land at different locations within Maikunkele should be used. It is therefore recommended that the displaced owners should be compensated.

The policy recommendations are usually long term measures complimenting the community upgrading programme proposed for an area. These help to minimize and eventually eradicate the various problems of these areas, including Maikunkele.

These policy recommendations include the following;

To be able to control the pattern of growth in Maikunkele, a local plan should be prepared by the authority concerned. The local plan will control the direction of development and hence prevent the problems associated with the fringe area and the economic development of Bosso local government as a whole.

For proper implementation of the planning programme it is hereby recommended that the general public should be enlightened by the planning officials. The campaign programmes could be through the media such as the Radio, Television and the press. The town planning authority should organize seminars in order to create public awareness of the planning programmes. The topic for discussion could be on 'Applying for planning permission, contraventions e.t.c.

Refuse disposal contracts should be awarded to private contractors who collect the refuse from the collection points for proper disposal.

It should be made mandatory for each household to provide refuse drums and pay a token of N10 monthly to the contractors.

To improve the sanitary condition and ensure good sanitation at all times, it is thereby recommended that sanitary inspectors should go around once in a while to inspect the area and any offender should be fined.

This will go a long way to improve the sanitation.

It is important to know that there is a great correlation between effective physical and social planning of towns and cities and economic development of any area. For instance without good road network and communication systems, business activities will be affected negatively. It is thereby recommended that the government

should allocate more funds for proper physical and social planning of towns and cities and also for provision of adequate facilities in these areas.

There is the need to revise those aspects of the planning laws and standards which are too difficult to be understood by the populace and too high to be met. These include laws that regulate physical aspects of buildings such as room sizes, height, coverage, density etc.

To solve the problems of unemployment, illiteracy and other socio-economic problems facing the residents of the study area, a programme is recommended to provide adult education through the programme like MAMSER (mass mobilization for social justices and economic recovery), training the unemployment youth for new jobs through the national directorate of employment (NDE) scheme for the unemployed should be handled by NISER (national institute of social and economic Research) Also most recent programme like the National Poverty Eradicating programme (NAPEP) is a landable one.

The upgrading of the study area is expected to be carried out by several financial actors which include;

1. The federal government
2. Niger state government
3. Bosso local government
4. Public corporation, ministries and establishments.
5. Private organizations and international bodies.

The federal government is expected to prepare aerial survey maps for both urban and rural areas, and allocate special grants towards community upgrading scheme.

The Niger state government is expected at the implementation stage to;

- (i) Pay compensation for the land acquired or provision of other alternatives for the displaced people.
- (ii) Provide building materials at low prices to land developers.
- (iii) Provide fund to the local government towards successful unplementation of the upgrading programme.
- (iv) Provide technical assistance for the construction processes.
- (v) The Niger state government is also expected to prepare master plan for the state in general.

The Bosso local government are directly involved in the upgrading process, hence they are responsible for the provision of the proposed infrastructural amenities in the study area which are;

- (i) Provision of public toilets, refuse collection points, market, health centre, primary schools, police post, and recreational areas.
- (ii) Construction of drains, culverts and bridges.
- (iii) Upgrading of footpaths and resurfacing of the local roads within maikunkele.
- (iv) The health department of the local government is to make available enough sanitary inspectors.

The public corporation, ministries and establishments are expected to play a role in the implementation process as well. For instance the Nigeria postal service (NIPOST) is expected to provide the proposed postal agency while the expansion of the primary and secondary school in the study area is to for the Ministry of Education, while National Electric Power Authority (NEPA), Nigerian Telecommunication (NITEL) and Water Corporation of

Niger State are responsible for the provision of adequate electricity, communication means and efficient water supply respectively.

The state ministry of works is expected to resurface the state roads in the study area and provide drainage facilities and street furniture. (NEEDS) National Economic Empowerment and Development strategy just like the (MAMSER) did in the past, is expected to handle adult education process while the Radio Niger, Nigerian Television Authority (NTA) handles the public enlightenment programme.

(NAPEP) National Poverty Eradication Programme, (LEEMP) Local Empowerment and Environmental Management projects will help in handling the construction of borehole, upgrading of footpaths in the study area just like what DFFRI (Directorate of food Roads and Rural Infrastructure) did in the past are expected to help in handling the construction of borehole, upgrading of footpaths in the study area.

The Niger state ministry of land and survey are expected to handle the coordinatoring, monitoring supervising and inspecting of the whole construction and upgrading of the study area.

International body like the unicef and also the private organizations like the Lions Clud, Rotary club etc. could also help a great when called upon to do so

5.8 CONCLUSION

At the beginning of this project, the aim was study the nature, pattern and characteristic of a typical urban fringe development. These lead to the need for the following;

- (i) Studying the landuse pattern and socio-economic characteristics of Maikunkele.

- (ii) Assessment of the efficiency of planning agencies responsible for the physical planning of the maikunkele and other government laws as it affects the area. Applying a workable methodology, the study was able to achieve its set objectives and the planning problems associated with the maikunkele revealed; among which are the poor road network, poor sanitation, lack of basic infrastructural amenities and low standard of housing.

These problems were found to be as a result of some factors such as; institutional and political factors, Activities of land speculators, non enforcement of government laws, weak economic and educational background, attitude of residents themselves and lack of interest by government and private organizations.

To solve the problems identified in the study area, certain proposals and policy recommendations were offered taking into account the socio-economic and characteristic of the study area, especially the income capacity. Based on these considerations, the community upgrading was recommended. The policy recommendations were made within the contexts of the identified planning problems peculiar to the study area. This study did not assume that solution to urban fringe problems in one city can be imported to solve the problems of another fringe area

It is important to emphasize the fact that this study is not entirely faultless because some few relevant data were either unavailable or hold back by the resident of the study area during the interview despite the effort made at obtaining them. Human error cannot be ruled out completely, though all these are negligible and not enough to affect the validity of its use.

It is hoped that with proper and effective implementation of the proposed and recommended actions, the living standard of people and the physical condition of the study area will improve from the present situation (slum) to a preferred planned condition.

REFERENCES

- Cruickshank, A. B.(ED); "Where town meets country" Pg.59,69,100,117
(1981) Aberdeen university press.
- Davidson, J & Wibberley, G. "Planning & the Rural Environment Vol . 18.
pg 109.(1977) pergamen press
- Martin, W.T. ; "Ecological change in satellite Rural areas, American
Sociological Review. Pg. 173-83.
- Meyers, R.B& Beegle J.A; "Delineation and analysis of the Rural – urban
Fringe "Journal of Applied Anthropology. Vol. 6, (1947)
- Obateru, R I.; "Controlling residential Densities" (1947), Printed by sketch
Publishing co. Limitation Ibadan.
- Omekerhoraye,A.G & Omuta, G.E.D.; Urbarn system & Planning
Geography and Planning series University of Benin.
- Payor, R.J; "Defining the rural – urban fringe" American Journal of social
forces vol 47, pgs 202 -215 (1968)
- Rodehaver, M. W.; Fringe settlement as a two- directional movement,
"Rural Sociology.

Sada, P.O.; "The rural –urban fringe of Lagos: Population and Land use ",
Nigerian Journal of Economic. Social studies. Vol. 12, No.2,
1970.

Smith, T.L; The population of louisians: Its composition and changes
"Louisiana Bulleting" Pg.293. Nov. (1937)

Vagale, L.R et al; Manual of space standards for urban development in Oyo
State. Department of town planning, technical college (Now
Polytechnic) Ibadan (1971)

Wilsher, P. & Righter, R.; The Exploding cities Andre Dentsch,
pg.69.(1975).

APPENDIX 1

QUESTIONNAIRE ON HOUSING AND SOCIO-ECONOMIC SURVEY

FEDRAL UNIVERSITY OF TECHNOLOGY, MINNA

LOCATION MAIKUNKELE

1. What is the NAME?
2. What is your marital status?
 - (i) married
 - (ii) single
 - (iii) divorced
 - (iv) separated
3. What is your occupation?
 - (i) trading
 - (ii) farming
 - (iii) professional
 - (iv) civil servant
 - (v) craftsmanship/artisans
 - (vi) student
 - (vii) unemployed
 - (viii) clergy/ clerrice
 - (ix) destitute
4. What is your education status?
 - (i) primary school /Adult
 - (ii) post primary
 - (iii) post secondary
5. where I your place of work
 - (i) in the city
 - (ii) within the study area

(6) What is your average annual income?

- i. 0 – N1, 000
- ii. N1, 001 – N2, 000
- iii. N2, 001 – N3, 000
- iv. N3, 001 – N4, 000
- v. Above -N5,000

7. How do you get to work?

- i. Foot
- ii. Bicycle
- iii. Motorcycle
- iv. Public transport
- v. Private vehicle
- vi. commercial transport (Taxi Cabs)

8. What time does it take your child/ward to reach the nearest Nursary/School?

- i. under 10 minutes
- ii. 10 min. -30 mins
- iii. 31 “ – I hour
- iv. over one hour.

9. What time does it take your child/ward to reach the nearest Secondary School?

- i. Under 10 mins.
- ii. 10 mins. – 30 mins
- iii. 31’ – 1 hours
- iv. Over one hour.

10. Which type of toilet facility do you use in your houses?

- (i). Water closet
 - (ii). Pit laterin
 - (iii). Bush
11. Do you have drainage system around your hou). Yes
- (ii). No
12. How do you rate the drainage around your house?
- (i). Good
 - (ii). Fair
 - (iii). Poor
13. Do you have telephone system in your house?
- i. Yes
 - iiNo
14. How do you rate the telephone system in your house?
- (i). Good
 - (ii). Fair
 - (iii). Poor
15. By which means do you dispose off your refuse?
- (i). Removal by refuse vehicle
 - (ii). by burning
 - (iii). Dumping on open space
 - (iv). Dumping in streams.
16. Through which access do you get home?
- (i). Road
 - (ii). Footpath
 - (iii). Others

17. What time does it take you to reach the market?

- (I). Under 10 minutes
- (ii). 10 mins. – 30 mins
- (iii). 31 “ – 1 hour
- (iv). Over one hour.

18. Which recreational activity do you do at your leisure time?

- (i). Field sports (e.g. football)
- (ii). Walking
- (iii.) Swimming
- (iv) Indoor games (e.g. Ludo)
- (v). Watching television /vedio set
- (vi) Cultural dances
- (vii). Others

19. Are you a Landlord?

- (i). Yes
- (ii) No

20.(a) If you are a landlord, how much do you pay on housing every month per room? (I). Free

- (ii.) N110 – N30
- (iii). 40 – N60
- (iv). N70 – N100
- (v). Above N1000.00

20b. If living in a flat, how much do you pay every month?

- (i). N100 - N200
- (ii.) N201 - N400
- (iii). N401 - N600

(iv) Above N600.00

21. From which source do you get your water?

(i). Pipe borne

(ii). Well

(iii.) Borehole

(iv). Stream

(v). Others.

22. How regular is your supply of pipe borne water?

(i). All days in a week

(ii.) 6 days a week

(iii.) 3 -5 days a week

(iv). 1-2 days in a week

(v). Not at all

23. From which source do you get your light?

(i). Electricity

(ii). Lantern/Bush lamp

(iii). Generator

(iv.) Gas lamp

(v). others

24. How regular is the supply of electricity in your house?

(i) Constant

(ii) Fairly regular

(iii) irregular

(iv) highly irregular

(v) not at all