EFFECTIVE PHYSICAL PLANNING CONTROL ON ENVIRONMENTAL CONSERVATION

(A CASE STUDY OF MINNA)

BY

IDRIS MOHAMMED MA`AJI
PGD/GEO/99/2000/093

A PROJECT SUBMITTED TO THE GEOGRAPHY DEPARTMENT, FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA IN PARTIAL FULFILLMENT FOR THE AWARD OF POST GRADUATE DIPLOMA IN ENVIRONMENTAL MANAGEMENT.

MARCH, 2001

CERTIFICATION

This is to certify that this project work being submitted by Idris, M. Mohammed (PG/GEO/99/2000/093 is my original work and has not been submitted before by anybody for any purpose and meets the requirements governing the award of post graduate diploma in Environmental Management, Department of Geography, Federal University of Technology, Minna Niger State.

Idris, M. Mohammed **Student**	**Date**
Dr. A.S Abubakar **(Supervisor)**	13/11/2001 **Date**
Dr. M. T. Usman **(HOD)**	14/11/2001 **Date**
Dean, PGS	**Date**
External Examiner	**Date**

DEDICATION

"Dedicated to my father LATE ALHAJI MOHAMMED MA`AJI".

ACKNOWLEDGEMENT

For a study that has taken sometimes to complete, no doubt a lot of inspiration, encouragement, assistance and criticism must have been received from various individuals. Mentioning all names would be another exercise while to those who are not mentioned, it is not belittle or spite.

This notwithstanding, mention must be made of my parents and family.

Special thanks also goes to my supervisor Dr. A.S. Abubakar, who set me thinking, helped in criticising, correcting my work and reassurance did a lot in calming me down, and the entire lecturers of department who assisted in one way or the other towards the successful completion of this study.

Mention should also be made of my friends and course mates.

Thanks all.

IDRIS, M. MOHAMMED
March, 2001

ABSTRACT

The study attempts to asses the existing situation of non-effective planning development in Minna metropolis and to suggest possible alternative framework to the present physical development in Minna.

The data used in this study are primary data obtained by the use of questionnaire administered on some selected respondents.

The result obtained from the study gas shown that 75% of the structures have been built without approved building plan and they lack adequate routine maintenance.

The study further highlighted some aspects of building proposals for the Minna Metropolis.

TABLE OF CONTENTS

Title Page		i
Certification		ii
Dedication		iii
Acknowledgement		iv
Abstract		v
Table of Contents		vi
	CHAPTER ONE	**1**
1.0	Introduction	1
1.1	Development Control	2
1.2	Statement of the Research Problem	3
1.3	Aims of the Dissertation	4
1.4	Objectives of the Dissertation	4
1.5	Scope/Limitation	4
1.6	Location and Physical Characteristics	4
1.7	Historical Background	5
1.8	Relief	5
1.9	Drainage system	6
1.10	Climate	6
1.10a	Rainfall	6
1.10b	Temperature	6
1.11	Vegetation	7
1.12	Soil	7
1.13	Geology and Topography	7
1.14	Ethnic Grouping and Composition	8
	CHAPTER TWO	**9**
2.0	Literature Review	9

2.1	Concept of Effective Physical Planning Control on Environmental Conservation	12
	CHAPTER THREE	**14**
3.0	Data and Computational Method	14
	CHAPTER FOUR	**15**
4.0	Data Analysis	15
4.1	Age of Buildings	15
4.2	Number of Households	16
4.3	Total Number of Rooms	17
4.4	House Type	17
4.5	Approval of Building Plan	18
4.6	Building Uses	19
4.7	Toilet Facilities	19
4.8	Disaster Experienced	20
4.9	Nature of Buildings	21
4.10	Infrastructure	21
4.10.1	Electricity	21
4.10.2	Water	22
4.10.3	Drainage	22
	CHAPTER FIVE	**23**
5.0	Planning Proposals and Recommendations	23
5.1	Development Control	23
5.2	Administration of Development Control	24
5.3	Development Control Regulation	24
5.4	Legal Framework	25
5.5	Criteria for Development	26
5.6	Revision of Minna Master Plan	27
5.7	Co-ordination of Strategies	27
	REFERENCES	28

CHAPTER ONE

1.0 INTRODUCTION

Physical planning is essentially concerned with changes within the physical environment. It is concerned with the prevention, control and the promotion of changes which might occur. Its distinctive feature is the fact that it is prescriptive rather than analytical even though its success or failure depends very much on the adequacies of the analyses and explanations of the phenomena which underlie changes (crook, 1974).

The physical environment in this connection refers to land on which activities of living are concentrated, that is buildings which house the activities and other artifacts which are necessary for human habitat to function interdependently. Because human habitat that is, the urban and regional systems are in a continuous process of change physical planning is also a continuous process of change physical planning is also a continuum always devising appropriate ways of controlling and effectively managing the system. This is to allow the environment created through the process of introducing changes into the physical environment to meet not only the demands of today but also of tomorrow. It is also to satisfy the pluralistic values and attendant needs of all the groups of people, while all activities arising from needs individually or collectively expressed could co-exist in harmony. By so doing investments, conveniences, functionality, living and working within the environment are maximised (NITP, 1997).

Physical planning therefore has shifted from aesthetically or economically inspired approach of solving problems to that of

championing social welfare. That is protect the public from the adverse effects of physical and economic activities on one hand, and on the other promote those activities that benefit the majority of the populace.

This class of planning assist decision makers to determine the spatial and often social implications of development projects at all levels including local levels. Its success in this direction greatly depends on both the recognition and commitment of the body policy to the manner in which solutions to problems are sought and spatially expressed (Adalemo, 1987).

1.1 DEVELOPMENT CONTROL

Development control is the process of guiding, monitoring and regulating the physical development of human habitat based on a prepared plan or scheme. Development in this case refers to building, engineering, mining or other operations on land including even the display of advertisement. The process focuses on the character, appearance and arrangement of buildings, and the provision of facilities for the comfort, health and convenience of the inhabitants of towns, cities and rural settlements (Keeble, 1969, Roberts, 1974).

The objectives of development control can be summarised as the protection and enhancement of the built environment and public investment efforts in land and property in order to ensure that land is used efficiently (Ray, 1978). These are the objectives of urban and regional planning or physical planning, thus development control is designed to achieve the goal of physical planning. It is a

means of realising schemes judged to advance certain goals at any particular time while restricting those that do not. This implies encouraging the association of compatible uses while discouraging non-conforming uses.

Development control can be regarded as a direct descendent of the 'public health bye-law' enacted in Britain towards the end of the nineteenth century. This law emerged as a result of the insanitary conditions that characterized virtually all human habitat during the late 19th century. The law aimed at restricting uses of land, a form of social control of land use which spear heads the limitation of rights attached to land ownership in terms of uses to be made of the land, but does not take away the title from the owner. It is therefore the cornerstone of plan implementation deriving its basis of operation from enabling law which Ray (1978) refers to as the teeth of development control.

The effectiveness of development control to a very large extent is determined by instruments such as master plan or planning schemes, zoning ordinance, building bye law, planning standards especially regulatory standards like density control, plot coverage/ratio open space etc. relates mainly to quantifiable aspects of site development. They attempt to maintain a functional relationship between land and various uses all in a bid to enhance the liveability of human habitat.

1.2 STATEMENT OF THE RESEARCH PROBLEM

Some of the structures especially in area like Unguwa Kaje, Barkin Sale, Soje, Sauka, etc of Minna metropolis are developed not to building standard or specification, and without the planning

permission. This lack of permission led to schemes of the structures in these areas to blight.

1.3 AIMS AND OBJECTIVES

The research work is aimed at an effective physical planning control on environmental conservation.

OBJECTIVES

(i) To determine the non-effectiveness and hap-hazard planning development in the study area

(ii) To examine the negative aspects of ill-planning development in the study area.

(iii) To suggest ways of improving the use of master plan with guidelines for the implementation.

1.4 SCOPE/LIMITATION

The scope of this dissertation is on the non-effectiveness and haphazard planning development of some selected houses in Minn. The study is however, limited to one hundred houses.

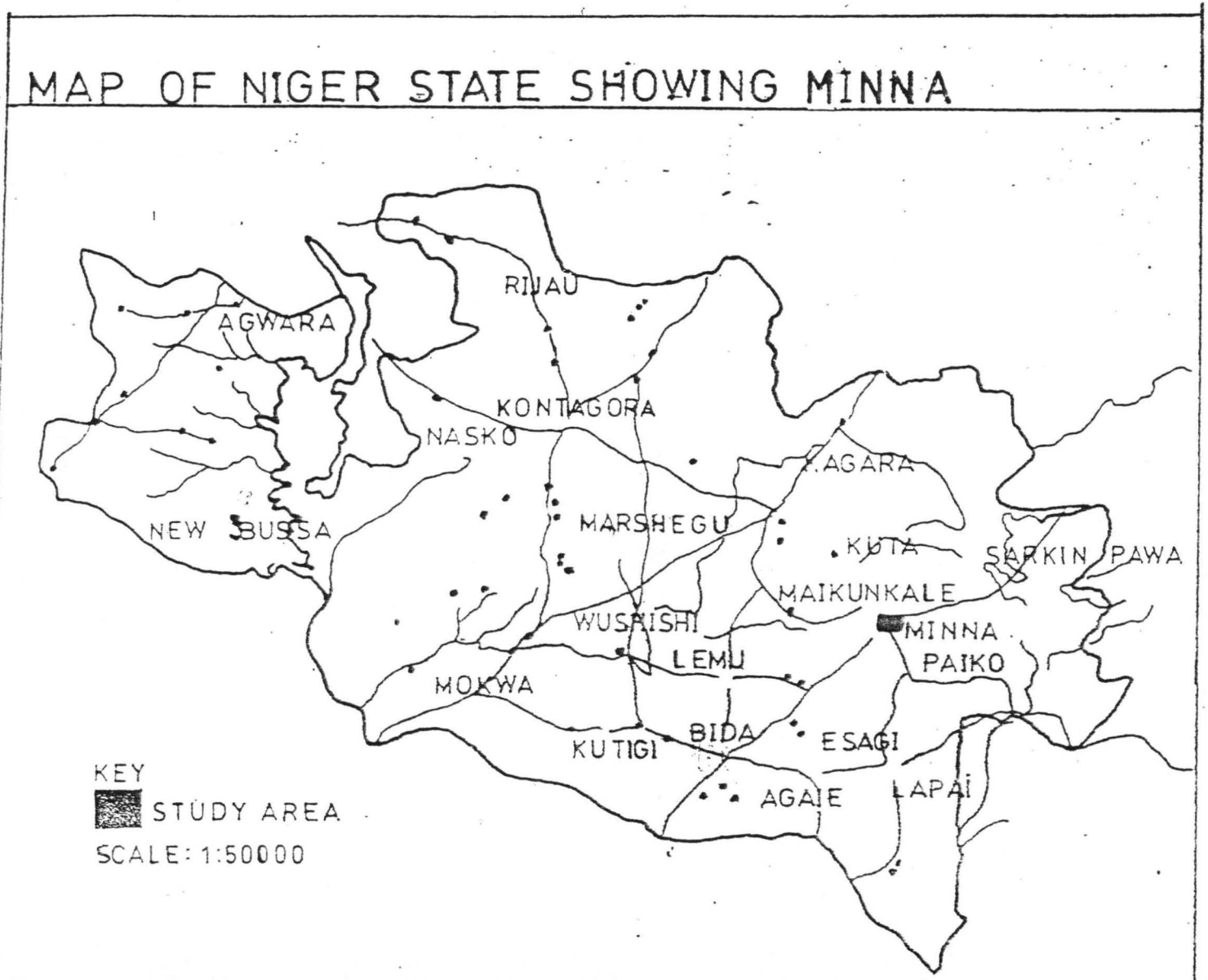
1.5 LOCATION AND PHYSICAL CHARACTERISTICS

According to Minna master plan (1987), Minna lies at latitude 90.3^0 North and Longitude 6.37^0 East in a geological base of differentiated basement complex roots of mainly genesis and magnitude. To the North – East of the town more or less continuous step out crop of granite occurs limiting any urban development in that direction.

1.6 BACKGROUND OF STUDY AREA

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 the new year. The word 'Minna' in Gwari means 'to spread fire'. It came into existence because the Gwaris used to put out every bit of fire in the area, even in all the kitchen in the town, on the last day of every year. About three days to the last day of every

MAP OF NIGER STATE SHOWING MINNA



year, the chief of the town together with his chief-priest and some members of traditional council would travel to Lafiyagi, a village on the boundary between Bida emirate and Paiko district about 60kilometers to bring new fire to Minna. Lafiyagi itself is a Gwari speaking village in the Nupe emirate. On the morning of the new year everybody would them take his fire out of the public fire to go and light again in their respective houses to mark the start of the new year. This ceremony eventually become synonymous with the town and consequently gave it the present name (Minna). The early settlers and founders of the town lived on the top of the ranges of hills which lay the eastern and northern sides of the present Minna. Evidence of early settlement on the hill top remains in the form of dilapidated foundations, broken pots and many Baobab trees that characterised ancient towns in the north. Most conspicuously at Minna house, in front of which the yearly ceremony was observed. However, before the town become the modern city that it now is, it went through some metamorphosis.

1.7 **RELIEF**

Minna town is situated in a gentle-slope valley. The nucleus of the town comprises of less continuos step granite grounds, while the east part of the town is sloppy hilly in nature.

1.8 **DRAINAGE SYSTEM**

The town has developed around the natural water uses, which originated from the hill on the North-East of the town and flows to Chanchaga river in the south-east if the town before the Chanchaga river is reached.

The confluence with the Chanchaga river is down stream of the water works.

1.9 CLIMATE

Minna is a typical middle belt town. It experiences the distinct dry and wet season.

1.9a **RAINFALL:-** According to Minna master plan (1979), the town has a mean annual rainfall of 13349mm (52inches) taken from an exceptionally mean monthly rainfall in September with almost 300mm (11.7inches) the rainy season lasted an average of between 190-200 days. Minna has a dust ladden, dry cold and often strong harmattem. Winds blow from the north to the east straight to Sahara regions has no moisture with them, therefore, they are often cold and dusty. The dry cold winds are during the season which normally starts from November to March. As these wind change direction that is from south-east, it carries moisture and these winds passes certain stages first before rain is observed, thus marks the rainy season which is April to October.

1.9b **TEMPERATURE**

Niger State generally has the highest temperature between the month of April, which ranges between 95^0F and 56^0F. The mean guage is greater than that found in temperature climates and the extremes of hot and cold in a single places which stain upon the inhabitance aggravated by considerable changes in humidity which in the dry season may be below 10% in afternoon and 30% at down, while in August which is a collar month because of rains, the humidity at mid-day can be over 70% and 90% at dawn. The mean monthly temperature is highest in March at 30.5^0C and lowest in August at 25.1^0C

1.10 VEGETATION

Northern Nigerian generally lies between (4) zones districts thus, Sahel, Sudan, Northern Guinea zone which is slightly thicker wood land and then the Guinea Savannah which is dense vegetation. Niger State lies in the slightly thicker wood land thus the genuine zone. The vegetation consist of orchard trees 10m to 12m high with grasses. Over years cultivation, burning and grazing has today becomes most places upon thereby leaving park like grass land.

1.11 SOIL

The soil of Minna are in relation to the type of solid found within Niger State generally. Generally, the soil of Niger State are laterite which is found from deposits of sedimentary rocks. The study area lies within the Kuta soil group, where the covering material may be up to 4m depth. The soil has a fine texture, which is relatively difficult to work because it tends to become water logged when there is heavy rain. When dry, the soil begins to crack, this soil will therefore favour the growth of yams, guinea corn and millet.

1.12 GEOLOGY AND TOPOGRAPHY

Minna's topography consists of hills and mountains especially towards eastern and western part of the area. Because of these gigantic rocks, development has been restricted towards the eastern and western parts. All developments follow the line of the rock which was halted by a flat rock is about 60m.

The basic geology of the study area is a mixture of rock granites. In most of the areas, the surface is decomposed of laterite, erosion and small stream that cuts deep gullies leaving the residual lateriate crops

generally eaten away by natural forces, such as rain, wind and vegetation.

1.13 ETHNIC GROUPING AND COMPOSITION

The mean ethnic group in Minna town are the Gwaris who constitute about 18% of the total population of the state, the Nupes about 33%, the Hausa about 13% and a small group including the Kambari, Dakakari, Karo, Pangu, Fakka, Kakanda, Gana-Gana, Dikko, Dukuwa, Kadara, Fulani and people from other states in Nigeria constitute 36% of the population.

CHAPTER TWO

2.0 LITERATURE REVIEW

For several decades now, urbanization as a process and a product has aroused much global concern. Available statistics in the developing countries and Nigeria in particular show a high rate of increases in urban population. According to a World Bank estimate, urban population in Nigeria which stood at around 34 million in 1990, will increase to nearly 85 million in the year 2005 A.D following from this estimate, the urban and Housing Indicators studies conducted in 1995 revealed that, as at 1995, Nigeria has seven cities with over one million people, 18 cities with over 500,000 people, 36 with over 200,000 people, 78 cities with 1000,000 and 5,000 towns with over 20,000 people.

The continuous gravitation of human population into towns and cities and the subsequent rapid urban expansion produces a number of both positive and negative outcomes. The benefit of this demographic process have been the increases in the economic importance of human settlement, and creation of wealth and provision of service, all of which bring about progress in human societies. However, the effects of these benefits are fastly being neutralised by the increasing environmental problems arising from the productive actions of man on the urban landscape. The inability of national and municipal government to manage these problems, provide adequate services and to sustain the existing infrastructure has complicated the problems at hand. The implications of all these for the quality of urban environment, people's health and the integrity of the earth's atmosphere are

grave and obvious as well. The overall effect of the existing problems is adequately summed up by UNCHS (1994) when it observed that at least 600 million people in human settlement already live in health and life threatening situation due to decaying urban environment.

Over the years, the outcome of human actions in the environment has produced an unbalanced mix in which the problems over weigh the benefits, a situation which threatens the natural and man made environment. The idea of environmental conservation is therefore borne out of the need to strike a balance between the much-desired economic production and the preservation of life. The environmental conservation approach ushered in a new era of environment friendly conservation.

A good number of communities in Nigeria have been engaged, based, however, on their needs and values, in building and maintaining their settlement. As this process requires individual member of the society being compelled to sacrifices for the common good of all, certain unwritten rules and regulations were evolved and applied through hierarchy of administrative units of family set up. These according to J.B Kaltho (1985) ensured and effective administration of our urban areas through which land development and management programmes were effectively implemented.

With the coming of the British colonial rule, formal physical planning and the involvement in control and development of land and environmental management were introduced and

consequently, a number of rules proclamations and ordinances were introduced (J.B. Kaltho, 1985). To those early legal instrument, have been added, Town and Country Planning Law of 1946, other legislations, Edicts and Decrees due to expanding scope of involvement of government in regulating land developments.

The beginning of the control of development could be traced back to the older times when the Oba, Chief, Emir, Obong and the Obi acted as Land Administrators. They protected the land and gave permission with the consent of the elders of the community before lands in their domain could be developed powers were vested into the lands of these traditional rulers who acted in accordance with the prevailing laws and customs of their territories.

However, the immediate statutory fore-runner of the modern Nigerian Town and Country Planning ordinance in Nigeria was the Township ordinance No.9 of 1917 which empowered the Government of Nigeria to compulsorily acquire land for public use.

In 1928, the Lagos Town Planning Ordinance was passed. It made provisions for the re-planning, improvement and development of Lagos. It also made provisions for the establishment of planning authority known as the Lagos Executive Development Board (L.E.D.B). All the legislations, Edicts etc. has now culminated in the promulgation of "The Nigerian Urban and Regional Planning Law. Decree 88 of 1992". These together with other instruments of land use control like zoning regulations, sub-division regulations, housing occupancy codes and Building buy-laws, building lines

(Regulations) from the legal tools for planning and plan implementation.

2.1 CONCEPT OF EFFECTIVE PHYSICAL PLANNING CONTROL ON ENVIRONMENTAL CONSERVATION

It essentially regulates any building or rebuilding operations in, on, or under the land. It involves the regulations of the detailed aspects of development about which precise guidance cannot be given by the development plan. It aims at creating functionally efficiently and aesthetically pleasing physically environment for living, working recreation and circulation. It is concerned with the balance of opportunities and the space available (Clawson and Hall, P. 1973, Olajuyin and Olayiwole 1985)

In the nineteenth century, the British, as a response to environmental problems emanating from the industrial area such as enormous deficiencies in housing, water supply, sewage, schools, electricity, hospitals, facilities, municipal services and other public utilities resulted to physical control on environmental conservation measure such as the application of plot sizes, standard and doors, windows, height of buildings, roads setback, road width and building lines as restrictive measures.

Environmental conservation cannot work without physical planning control instrument. It is a link in the planning process and a tool through which planning goals and ideas are achieved.

Margaret Roberts (1974) identifies the technical devices used in environmental conservation as land use zonning and planning standards. The planning standards consist of regulative and

prescriptive standards. The regulatory standards worked in environmental conservation by each planning authority on density, plot ratio, parking etc.

The prescriptive standards are used in plans preparation while the instrument for the enforcement of the physical planning control is in the hands of planning authorities with policy backing.

CHAPTER THREE

3.0 DATA AND COMPUTATIONAL METHOD

3.1 Primary data were used in the analysis. However, should the aims be concrete all questions that will provide solutions to the intended study should be properly evolved. The methods are:-

3.1.1 A reconnaissance survey on the study area.

3.1.2 Designing of Questionnaires.

3.1.3 Data collection

3.1.3a Through personal visits to the site and administering of the designed questionnaire.

3.1.3b The information collected either by direct interview (verbal) or questionnaire administration are compiled and mapped in a way that is readily understand

3.1.3c A research into written work or documents was made, these include collection of pamphlets, books, lecture notes, Minna Master Plan, Urban Development Board etc. and Consultation with personnel that have experience and knowledge of land speculation.

CHAPTER FOUR

4.1 DATA ANALYSIS

In the course of this study, it becomes necessary to conduct an in-depth study into existing situation of ineffective physical planning control in Minna. In order to complete the work within the stipulated time period, a sample of 100 buildings were chosen and 100 questionnaires were administered accordingly. The result of the data obtained could not be in any way meaningful without a full and complete analysis of the obtained information, hence, the following analysis.

Among the characteristics, which were studied are the age of the building, number of house-hold, total number of habitable rooms, type of ownership, possible extension etc. All these forms the basics of effective physical planning control

TABLE 4.1 AGE OF BUILDINGS

Age	No. of Building (s)	% of Building
0.10 years	5	5%
11-20 years	8	8%
21-30 years	36	36%
31- above	51	51%
TOTAL	**100**	**100%**

SOURCE: FIELD SURVEY (JANUARY, 2001).

The table reveals that 51 per cent of the respondents live in buildings that are between the age of 31 and above while 36 per cent live in buildings that are between 21-30 years old, about 8 per cent of the

respondents live in buildings that are between 11-20 years and 5 per cent in 1-10 years.

This shows that more than 50 per cent of the buildings were built in olden days, which had no regulation for planning permission. These structures lacked access road, circulation are different in terms of facilities.

TABLE 4.2 NUMBER OF HOUSEHOLDS

Household	No. of Buildings	% of Buildings
1-2	41	41%
3-4	20	20%
5-6	29	29%
7-above	10	10%
TOTAL	**100**	**100%**

SOURCE: FIELD SURVEY, (JANUARY, 2001)

Field investigation shows that most of the houses are occupied by more than one household. This shows that when a family member get married additional structures are usually needed and added. This is usually done without planning permission.

The most common type of Household obtainable in the study area is that of husband, his wife (wives) and the children only in this type of environment, the entire family live in a compound which is an ideal arrangement of effective planning for environment conservation and environmental health .

TABLE 4.3 TOTAL NUMBER OF ROOMS

ROOMS	NO OF ROOMS	% OF ROOMS
1-5	16	16%
6-10	26	26%
11-15	19	19%
16-Above	39	39%
TOTAL	**100**	**100%**

SOURCE: FIELD SURVEY (JANUARY, 2001)

Table 4.3 shows that 39 per cent of the respondents live in household, having 16 rooms and about 26 per cent live in household having rooms between 6-10, while 19 per cent between 11-15. And 16 per cent live in household having room between 1-5.

As far as room occupancy ratio is concerned most of the household are living in overcrowded rooms. This contributes to unhealthy living conditions. If there is an incidence of disease infection by one family member this easily spreads to the other member of the family.

TABLE 4.4 HOUSE TYPE

House Type	No of House (s)	% of Houses (s)
Compound	67	67%
Detached	18	18%
Bungalow	15	15%
TOTAL	**100**	**100%**

SOURCE: FIELD SURVEY (JANUARY, 2001)

The above table reveals that 67% (per cent) of the houses are compound type, while Detached houses are 18 per cent and 15 per cent are bungalow.

Compound type has the highest number in the study area with the problems of open space. There is absence of public dumps, the little open spaces that are available are used as refuse disposal points which in a way, physically obstructs legitimate human activities. The refuse points have become fertile grounds for breeding of flies and other pests which are inimical to human health. This environmental problem is caused by lack of effective planning in the area. Some people often set fire to the dumps increasing atmospheric pollution and often danger of fire accident.

TABLE 4.5 APPROVAL OF BUILDING PLAN

Approval of Building Plan	No. of Building	Percentage %
Approved Plan	26	26%
Non-Approved plans	74	74%
TOTAL	**100**	**100%**

SOURCE: FIELD SURVEY (JANUARY 2001)

The table above shows that about 74% of the houses survey are hot with approved building plans while the remaining 26 percent are with approved building plans.

This proved that some of the structures are developed without the structural plan and town planing permission. The type of development creates the ineffective planing for environmental conservation.

TABLE 4.6 USE OF BUILDING

USES	NO OF BUILDING	% OF BUILDING
RESIDENTIAL	79	79%
COMMERCIAL	2	2%
RESIDENTIAL/COMMERCIAL	19	19%
TOTAL	**100**	**100**

SOURCE: FIELD SURVEY (JANUARY 2001)

The above table shows that 78 percent of the sample size of buildings are residential, 19 percent are residential/commercial and 2 percent are purely commercial.

Majority of the buildings in the study area are residential, out of which about 25 percent of them have structural approval. Some of the residential buildings are modified to accommodate commercial uses according to the desire of the household.

TABLE 4.7 TOILET FACILITIES

TYPES OF TOILET	NO OF HOUSES	% OF HOUSE
FLUSH TOILET	14	14
PIT LATRINE	82	82
BUCKET LATRINE	4	4
TOTAL	**100**	**100**

SOURCE: FIELD SURVEY (JANUARY 2001)

From the above, it shows that 82 percent of the respondent houses are using pit latrine, 14 percent are using flush system and 4 percent are using bucket latrine.

This shows that more people in fact, more than half of the population of the householders are using pit latrine. Where pit toilet and well are so close there is always the danger of sewage from the pit toilet to the well, thus creating health hazards.

TABLE 4.8 DISASTER EXPERIENCED

EXPERIENCE	NO OF BUILDING	% OF BUILDING
FLOOD	31	31%
COLLAPSE	43	43%
POOR SANITATION	26	26%
TOTAL	**100**	**100**

SOURCE: FIELD SURVEY (JANUARY 2001)

From the above table, investigation shows that 43 percent of the respondent houses have at one time or the other experienced building dangers, 31 percent have experienced flood disaster and 26 percent of the buildings are faulted with poor sanitary condition.

The houses that experienced flooding are mostly found in swampy areas and when there is over floodings, they are forced to contend with reptile such as toads, ducks, and frogs. This is a great danger to their health, have, the deserve effective planing for their environmental conservation.

TABLE 4.9 NATURE OF BUILDINGS

TYPE	NO OF BUILDING	% OF BUILDING
TRADITIONAL	81	81
MODERN BUILDING	3	3
BOTH	16	16
TOTAL	**100**	**100**

SOURCE: FIELD SURVEY (JANUARY, 2001)

The table above reveals that 81 percent of the respondent's buildings are traditional, 16percent are traditional building extended to modern building and 3 percent are modern planned building.

These traditional structures are over aged structures with some of them having cracks. The traditional houses resituated into slums congested, no drainage system is available apart from the natural drainage of the household dwelling unit. These often provide breeding ground for flies and mosquitoes. Also domesticated animals contributes tremendously to environmental problems by their waste (dungs).

4.10 INFRASTRUCTURE

4.10.1 ELECTRICITY

Apart from the natural light, i.e. sun and moon and even the cooking fire, man needs light to clear the darkness of his room at night and for his activities. Electricity is a basic requirement of mains needs in order to improve on his standard of performance. From the survey carried out, it was discovered that 75% of the household rely on the electricity supply.

There are enough transformers in the study area whose capacities are not known, but has been providing adequate light.

4.10.2 WATER

Water supply is adequate for the most of the houses interviewed, however, few that lack water supply from public mains always make what they could for themselves for instances, these who has no accessibility to pipe borne water, provided wells for themselves. Since water is an indispensable facility in any given environment, something must be done about the improvement of potable water supply to enhance the standard of living of the people.

4.10.3 DRAINAGE

Generally, the drainages in the study area are not maintained and because of this. Some areas are filled with foul smell. In the event of flash flood, the excess run off follow their natural course with the result that a lot of damage is experienced during the rainy season. Service industries like grinding mills did not have any from of drainage channels for discharge of effluent, hence some made an improvised open ditches to serve the purpose. The open ditches formed good breeding grounds for mosquitoes, apart from the fact that they were an eye sore.

5.2 ADMINISTRATION OF DEVELOPMENT CONTROL

Development control by nature is restrictive in that it dies not allow for haphazard development, that is, it does not allow people absolute control over what they do with their lands or building.

Development control exercised enforcing the Town Planning bye-laws, building codes zoning regulations etc. enacted by the public authority (Urban Development Board) extended by the town planning authority and enforced by the judiciary. In essence the town planner has the duty of making sure that a proposed building has toilet facilities, drainage etc. He regulates land used and any kind of development. Also for any change of use of land or building permission must be sought from the planning authority. Some kinds of structural alternations to an existing building e.g. conversion of one bedroom flat to two or more, residential building to commercial, industrial, educational or medical, construction of wall (fence) above certain height, display of advertisement on residential buildings etc. are considered as development.

5.3 DEVELOPMENT CONTROL REGULATION

The primary objective of development control is to guide and regulate the growth of an environment in order to create an orderly environment conducive for living, working, recreating and circulation. It is carried out in order to ensure that bulding are structurally sound, sufficiently ventilated, accessible and are properly located at reasonable distance to the public facilities such as clinic, market places etc. and can be reached by ambulance and fore service vehicle in case of emergencies.

necessary for the purpose of complying with any direction that may be given by the authority

5.4.1c Pull down the building and re-in state the land to the condition in which it was prior to the commencement of the work.

If the person fails to comply the authority will carry out the work and the expenses still be borne by the person.

5.5 CRITERIA FOR DEVELOPMENT

It was noted that the criteria for development are not in hierarchial order as the relative importance of different criteria ar expected to be site specific.

5.5.1 **SUSTAINABILITY:** Any strategy to develop marginal area must be sustainable or a long term basis. There is a real danger that in our effort to develop marginal areas on a crisis basis, we may adpot strategies that could be self defeating in the long run. One can foresee that we may find ourselves in a far more precarious situation in the mid or late time when the demand for food and other resources will predictably be much higher than it today owning to both large population and increase levels of affluence (Puddle and Grand Staff 1988).

5.5.2 ENLIGHTENMENT

The various control measures instituted have not yielded the desired results due to policy implementation constraints arising from poor perception and understanding of physical planning as well as the growing laissez faire or poor development habit of the

majority. As the drive to make human settlements safe, livable and sustainable again both national and global ascendancy, it become imperative to educate our people on the need, importance and operations of physical development planning and control as well as basic requirements to make the environment livable.

5.6 REVISION OF MINNA MASTER PLAN

It is noted that most of the provisions of the Minna Master plan prepared in 1979 are no more relevant or adequate. There is therefore the need to review the plan so as to take care of the dramatic changes that have taken place in Minna metropolis. In view of this, the government should invite a suitable and capable planning firms to summit new proposals for the review of Minna master plan.

5.7 COORDINATION OF STRATEGIES

To coordinate the strategies and to improve the condition of Barkin Sale, Kpankungu etc. Niger State Urban Development Board should be charge with the urban renewal programmes for the areas.

REFERENCES

Adalemo, A (1987) Rural Development - The New Imperative in Journal of NITP Vols. Viii and Ix.

Crook G. R. (1974) "Physical Planning" in the Spirit and Purpose of Planning by Bruton M.J. (ed) Hutchinson London.

NITO (1997) Nigeria Institute of Town Planning at 30 Lagos, Nigeria

Jinadu A. M. (1997), The Sustainable Cities Approach and the Relevance of Women in the Management of Urban Environment. A paper presented at the National Conference of College of Engineering, Kaduna Polytechnic, December, 1997.

UNCHS (1992), Improving the Living Environment for Sustainable Future. United Nations Centre for Human Settlement Nairobi, 1992.

UNCHS (1994), Sustainable Cities: Concepts and Application of a United Nations Programmes, United Nations Centre for Human Settlement, Nairobi, 1994.

J.B Kaltho, (1985)	"Legal Tools for the Effective Implementation of Development Plans" A. B. U. Zaria.
Federal Republic of Nigeria Official Gazette, 1992	"The Nigerian Urban and Regional Planning Laws, Decree No. 88"
Federal Republic of Nigeria Official Gazette, 1978	"Land Use Decree 1978", Lagos: The Federal Government Press.
Adeniyi, E.O (1976)	"The Management of Urban and Regional Planning in Nigeria". The Quarterly Journal of Administration Vol. X No 4 Pp 399 – 408
Awoniyi, P. B (1989)	Management Control in Lagos State, Part 1 Report. UNDP, Lagos
Clawson M and Hall P (1973)	Land Planning and Urban Growth: An Anglo-American Comparison. Johns Hopkins University Press
Cowan P (ed) (1973)	The Future of Planning Heinemann Press.
Olajuyin, L.O and Olayiwola, L.M (1985)	Problems and Prospects of Development Control. JNITP, Vol iv and v ---- pp 23-32.
Roberts, N.A (1976)	The Reform of Planning Law. The Borrowing of Town Playmouth.
Keeble, L (1969)	Principles of Town and Country Planning Estate Gazette, London.
Hagman, D.G (1971)	Urban Planning and Land Development Control Laws.
Max Lock (1979)	Minna Master Plan