TITLE PAGE

A STUDY OF HOUSING AND ENVIRONMENTAL CONDITION OF MAIKUNKELE IN NIGER STATE.

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MARCH, 2001.

CERTIFICATION

I hereby certify that this work was carried out by Ibrahim Musa Jemaku, supervised, read and approved meeting part of the requirement for the award of post Graduate Diploma in Environmental Management at Federal University of Technology Minna, Niger State.

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DEDICATION

This work is dedicated to my family for their patience and understanding.

ACKNOWLEDGEMENT.

It is a great duty on me to register my thanks to Almighty God, whose guidance, source of strength and wisdom saw me through in undertaking this project.

I would like to express my appreciation to my project supervisor, Dr. P.S. Akinyeye, who made constructive criticism, in depth scrutiny of the manuscripts and gave valuable suggestion through out the project period. So also, my acknowledgement goes to all academic and non-academic staff of the Geography department for their supports; a particular mention of Dr. M.T. Usman must be made. I also acknowledge the authors of all books that were referred in the course of this project work.

My sincere thanks go to Mallam Abdul Hussaini for his relentless moral and professional guidance toward the success of this project.

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Also worthy of mention are my parents and family for their encouragement and support towards achieving success in all any endeavour.

Finally I would not forget my colleagues in the 1999/2000 class of PGD in Environmental management, to them I say, "your company was a joy to me". My special regards to Rifkatu Zacharia and Mohammed Abdool Lapai for their assistance in typing out this project work.

ABSTRACT.

Maikunkele is a settlement that came into existence due to agglomeration of smaller neighboring ethnic groups. This dates back to the end of the inter tribal wars. The town grew rather spontaneously. The growth in population, physical, socio - economic structure, the location of the Minna International Airport and most importantly the sitting of Bosso Local Government Headquarters are responsible for the poor housing and Environmental Situation. The people living within the settlement are mostly Gwaris. They are found living in very large compound which are often separated by low partition of walls. These walls form enclosure of the compounds and further promote privacy. A compound may have 18-27 people living in it. Occupancy rates are relatively high. i.e three persons per room.

There is inadequacy in educational health facilities, poor drainage, refuse collection. The use of the standard construction materials and essential facilities and services are also evident. The low levels of income of the subsistence farming system have all led to the deploring housing situation in the settlement.

Attempts were made to suggest ways to avert the existing problems. Policies were also formulated to tackled the problems undermining the improvement of shelter. The provision of a modern market, Motor Park, shopping and housing areas, the supply of water and telephone services, the provision of loan by government and other financial institutions will in no doubt create a pleasant and aesthetic environment for Maikunkele.

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CHAPTER ONE.

1.0   INTRODUCTION.

Housing is one of the three basic needs of mankind and it is the most important for physical services of man after the provision of food. It is also one of the best indications of a person's standard of living and his place in society. In addition, housing either in unit or multiple form is a significant of the physical form and structure of a community, while the human and family content of the house Is part of the spirit of life and property of the society. In spite of the fact that housing is part of the urbanisation process and a measure of a country's level of development as well as standard of living, housing continues to be regarded as an economically non-productive investment. This attitude by policy makers has resulted in the production of substandard houses.

In view of this ugly situation, Government all over the world has accepted in principle that their citizens should have a decent and habitable accommodation. How ever, this good gesture by the government has not been extended to include rural areas where many live in substandard houses and unhygienic environment. This is particularly true of most developing countries, for example, Nigeria where housing provisions are only sited in towns and cities. In the developed world, the situation is much better with their stage of development and increasing awareness of the people knowledge as to their privileges and rights.

The negligence of the rural areas in the provision of housing has resulted in the production of many substandard houses because of the economic status of the people, poor design, lack of technical skill, lack of development control, poor orientation and substandard room sizes.

Housing in the rural area, is therefore, not more than merely a physical shell since they are without ancillary services and community facilities which are necessary for human well being. This substandard type of houses and environmental degradation is one of the causes of rural urban migration. The reason is to look for better environment where facilities like electricity, pipe borne water, habitable houses etc are available.

The influx of rural populace to towns has resulted in excessive high population densities, substandard living conditions and slums. Hence, inadequacy of housing, physical structure, food, economic and social problems, traffic congestion's etc become the features of our towns and cities. It is, however important to note that in order to ease urban problems, the rural areas must be developed to the level where rural - urban migration should be minimize in the developing countries like Nigeria. A greater majority of its people still reside in the rural areas and for this reason, the response of the government to the issue of housing to the rural poor must be seriously taken up if an even development is to be achieved.

1.1 STATEMENTS OF PROBLEMS. ✓

i.   Maikunkele has been allowed to developed in a haphazard manner.

ii.   Deteriorating surrounding environment.

iii.   Most houses are substandard.

iv.   Inadequate facilities and amenities in the area.

1.2 AIM ✓

The aim of the study is to examine the existing housing and environmental condition of Maikunkele with a view to providing good housing and efficient environment.

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OBJECTIVES

1. To highlight the factors that gives rise poor environmental condition.

2. To examine the existing housing stock and their conditions within the area.

3. To examine the social - economic characteristics of the area.

4. To make proposal and recommend policies that will improve quality of housing and environmental condition of the area.

1.3   SCOPE AND LIMITATION.

This study is intended to cover 100% of the study area in all aspect of housing. But due to manpower, finance, and time problems only 50% of the sample will be conducted to obtain information of Socio-Economic characteristic of the people. However, for the land use and building use, 100% sample is necessary and will be conducted.

1.4   JUSTIFICATION

The relevance of the study is to enable the relevant authority to assess the pattern of growth of Maikunkele in order to control the development and ensure provision of amenities.

CHAPTER TWO

GEOGRAPHICAL LOCATION/CHARACTERISTICS.

2.0 NATIONAL SETTING.

Nigeria is situated between 3^0 and 15^0 East of the Green winch and between 4^0 and 14^0 North of the Equator. Benin Republic in West, Niger in Northwest, Chad in Northeast, Cameroon in the East and the Atlantic Ocean in the South surround Nigeria. Nigeria is divided into 36 states with an estimated population of over 100,000,000. It covered an approximate total land area of 923, 765 square kilometers. It is within this landmass of Nigeria that the town - Maikunkele - Situates.
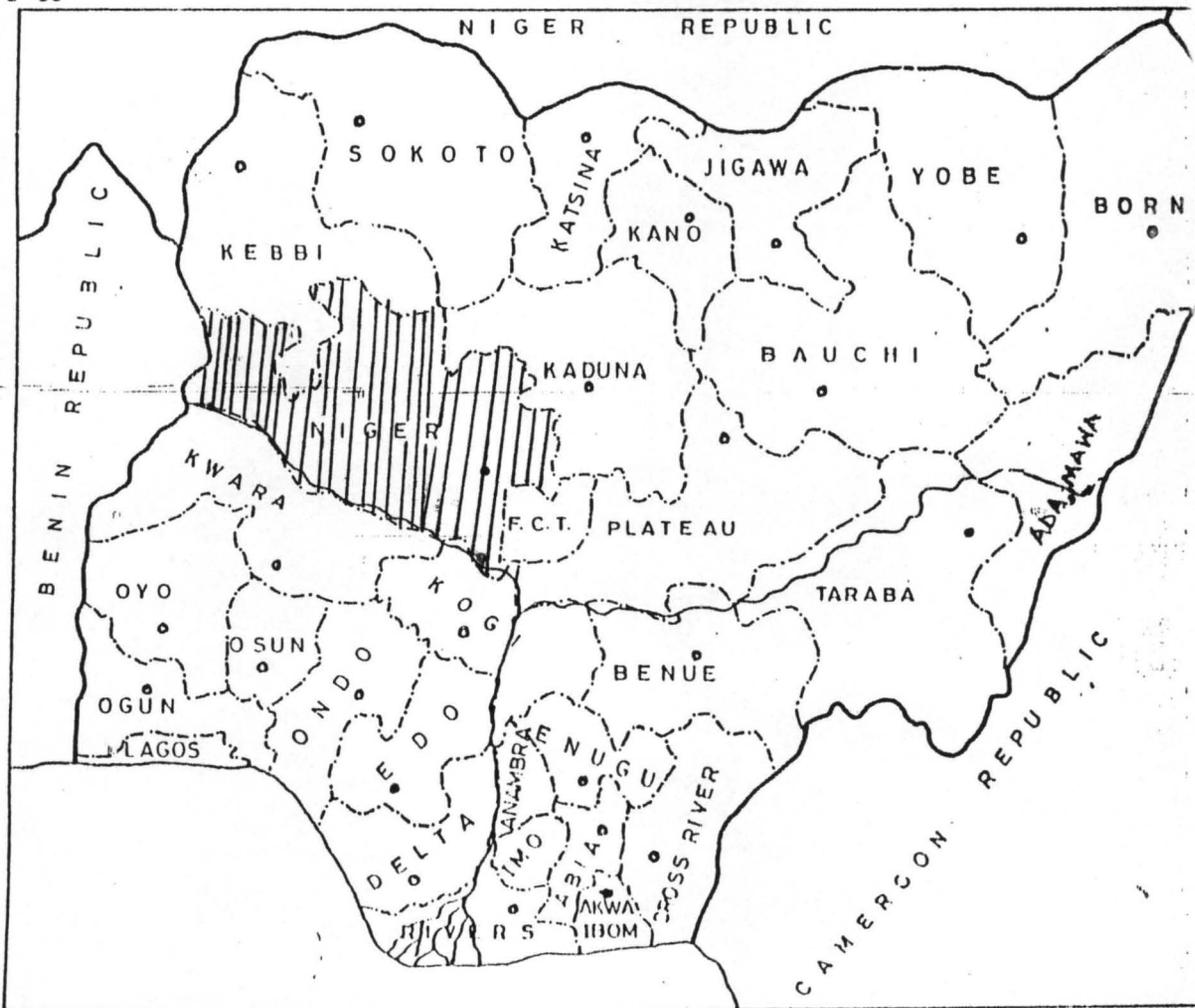
2.1 REGIONAL SETTING.

Niger State is one of the 36 states of Nigeria. It has a peculiar natural feature that predominates the country at large and its location in particular and it is often referred to as the River Niger.

Niger State lies between latitude $3^020'$ east and longitude 8^0-11^0 North. Sokoto State bounds it to the North, while Kebbi State is in the West, to the South is Kogi State and south west is Kwara State. Kaduna and Federal Capital Territory bounded the state to both North-East and South-East respectively. It covered an approximate area of 8million hectares of land. It has a population of about 2,482,367 (1991-population census). The state is characterised with flood plain soil of considerable variation. The state is presently sub-divided into 25 Local Government areas.
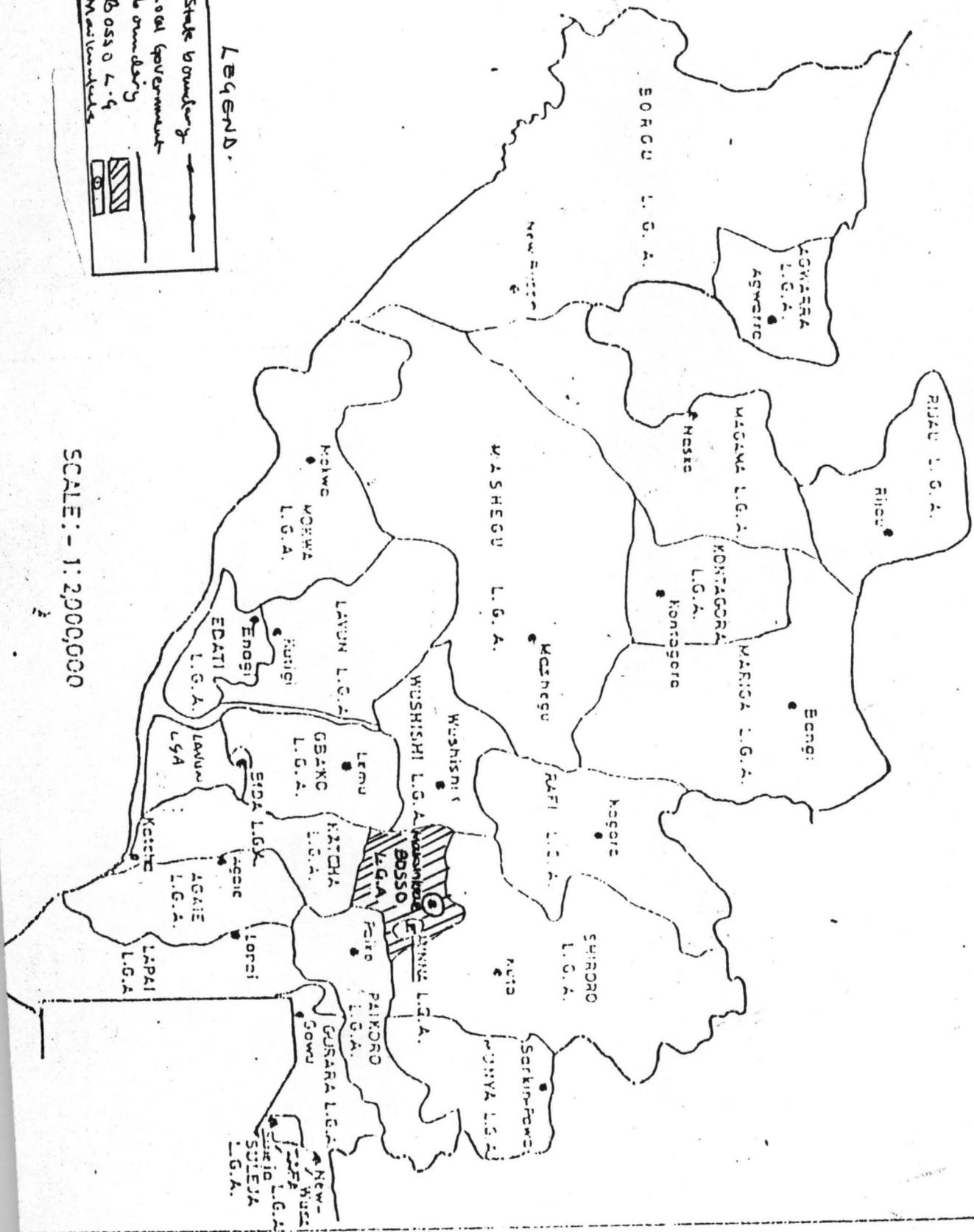
MAP OF NIGERIA

2° 00′

NIGER   REPUBLIC

SOKOTO   KATSINA   JIGAWA   YOBE   BORN

KEBBI   KANO

BENIN   REPUBLIC

KADUNA   BAUCHI

NIGER

ADAMAWA

KWARA   F.C.T.   PLATEAU

OYO   KOGI   TARABA

OSUN   ONDO   EDO   BENUE   CAMEROON   REPUBLIC

OGUN   ANAMBRA   ENUGU

LAGOS   IMO   ABIA   CROSS RIVER

DELTA   AKWA IBOM

RIVERS

2° 00′

SCALE:-1:8,000,000

LEGEND

INTERNATIONAL BOUNDARY............	———
STATE BOUNDARY....................	—·—·—
NIGER STATE......................	▥

LEGEND.

State boundary
Local Government
boundary
Bosso L.G
Headquarters

SCALE:- 1:2,900,000

BORGU L.G.A.

KONTAGORA L.G.A
Kontagora

RIJAU L.G.A
Rijau

MAGAMA L.G.A.
Nasko

MARIGA L.G.A.
Bangi

MASHEGU L.G.A.
Mashegu

MOGWA L.G.A.
Mokwa

EDATI L.G.A.
Enagi

LAVUN L.G.A.
Kutigi

GBAKO L.G.A.
Lemu

WUSHISHI L.G.A.
Wushishi

BIDA L.G.A
Lavun
Katcha

KATCHA L.G.A.
Lapai
AGAIE L.G.A.

LAPAI L.G.A.

PAIKORO L.G.A.
Paiko

GURARA L.G.A.
Gawu

BOSSO L.G.A

MINNA L.G.A.

RAFI L.G.A.
Kagara

SHIRORO L.G.A.
Kuta

MUNYA L.G.A.
Sarkin-Pawa

SULEJA L.G.A.

2.1.1 LOCAL SETTING.

Bosso Local Government is situated North East of Minna. It is bounded by chanchaga Local Government in the South, Wushishi Local Government to the North, Katcha Local Government to the West and Shiroro Local Government to the East.

2.12 DISTRICT SETTING

Maikunkele is situated in Bosso Local Government along Minna - Zungeru Road. It is about 6 Kilometer away from Minna. The Minna international Airport is located there. It is bounded by Bosso in North, Beji in the South, Minna International Airport in West and Manta in East.

2.2 CLIMATE:

The climate of Maikunkele can be best expressed in terms of temperature, rainfall, wind and humidity.

The temperature of Maikunkele is relatively a mixture of cool and heat climate. This is because of the average in temperature every where brought about by altitude. The average daily temperature ranges from 15°C to 24°C. The months of December, January and February are particularly colder while March and April have higher record of temperature in the year.

The annual average rainfall of Maikunkele is about 146cm. Maikunkele experience a single maximum rainfall of relief or orography type. The wet and the dry season excert a major and permanent influence on the socio-economic activities of the inhabitants.

The area enjoys the warm moisture-laden wind which originate from Atlantic Ocean and blows in a North-East direction between the months of May and October. It also experience the cold dry dust - laden hamattan wind which originate from the Sahara desert, it blows in a South-West direction between the months of November and March.

The relative humidity is over 80% in the morning and falls to between 50% and 70% in the afternoon. The period of high humidity is in August with 70% midday and 95% at down.

2.3   VEGETATION

Although Maikunkele falls within the Savannah vegetation yet it has a peculiar vegetation which is similar to that of Montane vegetation. This development is due to the fact that the settlement is situated on high altitude or relief. The vegetation is characterized with shorter grasses and few trees. It should be mentioned that man has tempered and transformed the vegetation.

2.4   TOPOGRAPHY.

The most attractive physical feature of Maikunkele is the beautiful landscape. The area is relatively flat and undulating and good for all purpose development. There are dotted spot of rocks as well as streams and river that filled-up during the raining season and mostly dry during the dry season.

2.5   SOIL AND GEOLOGY.

The soil of Maikunkele is composed of mixture of gravel and dead vegetable matter.

The soil is grey (literate soil) in color due to the nature of the land.

CHAPTER THREE.

3.0 LITERATURE REVIEW.

Charles Abraham in his book titled: "Strongly for shelter in Urbanising World" discusses rural housing problems in Ghana, Bolivia and Nigeria. He observed that most people in Ghana lived n hamlet. Houses are generally made of sun-back swish (literate) with thatch roofs and buildings are mostly accomplished by self-help; everybody in the rural areas is a builder of a sort. However, he stressed that the low-income family, the subsistence economy and the family self built housing system pose great problems towards improving shelter in rural areas of Ghana

The Government therefore introduced the "roof - loan scheme". A mortgage bank was established in 1960 with an initial loan of $1,850,000. Three Rural Assistants with some social Welfare and community development members of staff were also provided to help execute the scheme. The scheme was a success as noted by a Town planning officer with the Ministry of Works and Housing. "The roof- loan scheme has intensified building activities in those villages where it was operated" said the Town planning officer.

In Bolivia, he stated that it is a country that is blessed with abundant building raw materials such as straw, clay, sand etc straw and water makes bricks suitable for the construction of building. Despite this, Bolivia is faced with the same problem of housing like any other developing nation. There is the problem of building houses in large number with limited funds and other resources available.

Bolivia also adopted the loan scheme. A revenue loan pool of about a million dollars was made available with interest rate of 9%. Loans for roofs, windows and doors were also

provided. Demonstration houses were erected and rented at very low rents. This generated revenue for replaughing or reinvesting to provide more houses and communal facilities. With over million dollars allocated, only 3000 housing units were constructed. In like manner, the scheme took-off well but failed to meet the pressing housing shortage.

In Nigeria, rural areas cover about 80% of the total area. The 1963 census revealed that about 10.7 million of the population were found living in urban areas while the remaining 44.9 million people lived in rural area. In other words 20% of the country's population lived in the urban area while 80% were rural dwellers (now only 60% are rural dwellers, refer 1991 population census).

He equally noted that Nigeria is blessed with traditional building materials which can be modified for cheap housing construction. The rural dweller use mine to construct the foundation and walls (even roof in the far northern states are made of mine). In northern Nigeria and southern states, thatch roofs are common especially in areas of high rainfall.

In 1962, a loan scheme was introduced and specially trained government inspectors were to check the beneficiaries. However, this failed like in order countries. No emphase was made toward rural housing unit in the third National Development plan (1975-1980) which stressed the need for developing rural areas but failed to promote any machinery to achieve such need. During that period the government participated directly and actively in the provision of housing and directed the state housing corporation to extend the low cost housing scheme to cover rural area but this directive stopped and ends there.

3.1 HOUSING NEEDS. ✓

It needs to be stressed that housing needs of any nation is not required only for immigrant and this should be realised when accurate assessment is made. Such assessment must be based on the following-needs: -

i.   The need to house those at present without homes.

ii.   The need to relieve over crowding in existing house.

iii.   The need to replace the existing dilapidated house.

iv.   The need to provide for the increase in population.

3.2 HOUSING POLICY IN NIGERIA. ✓

The private sector in earlier times were solely responsible for the construction of residential houses in Nigeria. The developer ceasing the opportunity of increasing demand for accommodation built houses but most of which are expensive for majority of the people to afford. With increase in population and urbanisation, the effort of the private sector alone to provide accommodate is in adequate. Not only that, the private sector could not meet expectation of the people in term of a satisfactory affordable price.

Before independence, the Government restricts itself to only providing accommodation for its workers. In 1950's and 1960's there was increased but limited intervention by government in the provision of housing. At that period, the Housing corporations were created and engaged in direct construction. The houses constructed were given to the middle income earners. The Government did not embark on comprehensive housing scheme that would favour all classes of people.

The Government as stated earlier on declared in the third National Development plan that "Government now accepts it as part of its social responsibility to participate actively in the provision of housing for all income groups and will therefore intervene on large scale in this sector during the plan period". This intervention by government is quite fundamental as Lansley said "market factors alone would provide neither an adequate stock nor its fair distribution". Government will provide where the need arise and not just where demand arise on like the private sector that only provide where they expect to make maximum profit.

Within the plan period, the Federal Mortgage Bank was established to provide mortgage lending. In the fourth National Development plan, the government increased the housing unit construction. A Ministry of Housing and Environment was created and was responsible for direct construction of houses. The policy of government on housing takes the form of policies on building materials, land, private sector participation, credit facilities, infrastructural facilities, implementation and allocation of houses.

CHAPTER FOUR.

4.0 METHODOLOGY.

4·1 Data collection:-

There are two sources of data collection namely Primary and Secondary sources.

The primary sources includes:-

a. **Field survey**:- This research involved identification and survey of the houses in Maikunkele, the land uses, the material for construction, maintenance and condition of building, housing facilities and services.

b. Direct interviews were also conducted with aim of knowing the people's view toward government policies as it affects housing and environmental conditions.

The secondary source of data collection has to do with information relevant to the study that were obtained from text books, journals and post thesis that are related to the research work.

4.1 DATA ANALYSIS.

The need for orderly development of land is one of the basic concerns of planning which can only be achieved through detailed study and analysis of existing landuse of an area for which development is proposed. Knowing about the existing landuse is of paramount importance as regard future development.

In order to get satisfactory information on Maikunkele existing landuse, a landuse survey was carried out. This information is required for the purpose of identifying existing landuses.

CHAPTER FIVE.

5.0 DISCUSION OF RESULT.

The use of table and graphs were employed in discussing the data collected from field.

The table and the graph below show the result of the use survey.

Table:5.1 LAND USES.

Land uses	Hectare	Percentage (%)
Residential	34.2	56.1
Commercial	3.2	5.5
Industrial	0.5	0.9
Education	0.5	0.9
Roads	2.1	3.5
Open space.	20.1	33.1
Total	60.6	100

SOURCES: FIELD SURVEY FEBRUARY, 2001.

The table above reveals that about 56.1 of the total landuse is for residential purpose, this marks the highest. Next to this is the open space whose percentage is 33.1%. Industrial and education were the least (0.9%. and 0.9% respectively). This can be seen in fig 5.1.

Information on the condition of the existing housing stock in any settlement is extremely important and pretty needed for planning policies and programs. This is because the design and layout of dwelling in any settlement is aimed at maintaining the health and

social well-being of the population expressed in terms of density, facilities and structure condition. Thus, the physical structures of dwelling have profound effects on the provision and distribution of public services. Information on housing also enable us to know whether the orientation of the dwellings are placed in position to enjoys adequate natural light and ventilation to all rooms and space, privacy for each living unit, convenient and easy access to dwelling and circulation around them; sufficient land for expansion, adequate area for water supply and sanitary installations and utilization of the site for possible outdoor activities like gardening, laundry and land scaping.

It is on this basis that it has became necessary to seek information on the housing type, use, age, physical condition, and tenure density in Maikunkele. With these informations, one will be able to plan the future needs of the people and determine policy in respect of rehabilitation conservation and redevelopment.

Table 5.2. Housing stock.

Uses	No.	%
Residential	152	70.7
Commercial	33	15.3
Residential/comm.	28	13.0
Residential/industrial	2	1.0
Total	215	100

The table 5.2 above shows the use of the existing housing stock with 70.7% for residential 15.3% for commercial, 13% for Residential/commercial, and 1% for Residential/Industrial. This shows that residential uses in the dominant landuses of the study area as can be seen is fig. 5.2 above.

Table 5.3 (Building type)

Types	No	%
Modern	195	90.7
Traditional	20	9.3
Total	215	100

Both table 5:3 and fig 5.3 shows the existing housing types with 90.7% being modern and 9.3% as traditional. The above discussion shows that the study area is dominated with modern buildings. Traditional buildings were only seen in the center of the study area. These types of building are fast fading away.

Again the physical appearance and condition of building depend on the materials used for their construction. The higher the quality of the materials, the better will be the fitness of the building structure. In addition, good quality building materials makes building life span longer. Table below shows the material used for construction of buildings in the study area (Maikunkele).

Table 5.4 Roof

Roof Types	No	%
Iron/Aluminum	199	92.
Asbestos]	10	4.6
Thatch	6	2.8
Total	215	100

Table 5.5

Wall Types	No	%
Sandcrete blocks	97	45.1
Burnt bricks	8	3.7
Mud bricks	99	46.0
Mud	11	5.2
Total	215	100

Table 5.6 foundation.

Foundation types	No	%
Stores	47	21.9
Concrete	161	75
Mud	7	3.1
Total	215	100

SOURCES:- FIELD SURVEY FEBRUARY, 2001.

Table 5.4,5.5 and 5.6 shows the materials used for the construction of the sampled housing stocks in Maikunkele in terms of roofs, walls and foundation respectively. Table 5.4 shows that 92.6% of the material used for roofing are iron/Aluminum, 4.6% are Asbestos and 2.8% are thatch. This means that most buildings are in good condition in term of roofing and also account for why most buildings are modern.

Table 5.5 shows that the condition of the walls of building in Maikunkele with 45.1%, 3.7%, 46% and 5.2% for sandcrete blocks, burnt bricks, mudbricks and mud

respectively. Given consideration to the tables result, the research conclude that wall condition of the building are fair.

Table 5.6 shows that 21.9%, 75% and 3.1% of the foundation of the building are stone, concrete and mud respectively. With this result, it is concluded that the condition of the buildings in terms of foundation is fair.

Also, the maintenance of building structure is of great importance in planning, because, it adds strength to them thereby extending their life span. In order to know the extent, to which buildings are maintained in Maikunkele, a field survey was conducted in respect of roofs, walls and foundation of the building. Tables 5.7, 5.8 and 5.9 show how buildings are maintained in Maikunkele.

Table 5.7 Roof

Leaking	No	%
Yes	25	11.6
No.	190	88.4
Total	215	100

Table 5.8 walls.

Cracked	No	%
Yes	30	14
No	185	86
Total	215	100

Table 5.9 foundation

Exposed	No	%
Yes	25	11.6
No	190	88.4
Total	215	100

Tables 5.7,5.8 and 5.9 show how buildings at Maikunkele are being maintained in terms of roofs, walls, and foundation respectively. The survey and observation revealed that 88.4%, 86% and 88.4% of the building are with roof not leaking, walls not cracked and foundation not exposed respectively, from the above result, the research deduced that the condition of the buildings are fair in term of maintenance.

A survey was conducted to know the building condition so that buildings that are good, fair and poor can be identified. The table below show building conditions:-

Table 5.10 (Building Condition)

Condition	No	%
Good	80	37.2
Fair	110	51.2
Poor	25	.11.6
Total	215	100

The table above shows that 37.2%, 51.2% and 11.6% of the buildings are good, fair and poor respectively. Given consideration to housing policy to address situation, it will mean that 80 building representing 37.2% of sampled building will be conserved, 110 of the sampled buildings representing 51.2% will be reconditioned and 25 of the sampled buildings representing 11.6% will be redeveloped this can be seen in fig 5.10.

Housing does not only encompasses the shell of the building but also include the anxillary services and community facilities which makes it functional and necessary for human well being. In order to know and assess the level of performance of such services and facilities, a survey was conducted for housing facilities. Table 5.11 below shows toilet facilities:-

Table 5.11 Toilet facilities

Provision	No	%
Yes	180	83.7
No	35	16.3
Total	215	100

The table 5.11 and fig 5.11 revealed of a glance that 83.7% of the sampled houses have toilets and 16.3% of the houses are not provide with toilets facilities. This indicates that toilet facility is not adequate.

Also, table 5.12 and fig. 5.12 revealed that 9.39. of the sampled houses have water closet type of toilet facility while 69.8% and 20.9% of the sampled houses have pit toilet facility and other types such as V.I.P toilet facility respectively. The researcher observed that the usage of pit toilet facility could be very dangerous to health where the source of drinking water is underground as the waste water from the pit could filter or discharge into the water sources. However, this could be minimised or prevented by prompt sanitary control.

Table 5.12 (Toilet types)

Types	No	%
Water closet	20	9.3
Pit	150	69.8
Others	45	20.9
Total	215	100

Again, tables 5.13 and fig 5.13 revealed that 9.4% of the sampled houses in Maikunkele have bath tubes, 87.5% have enclosure type of bath facility while 3.1% of the sampled house use other means. The high percentage of the enclosure bath rooms is an indication that in old plan no provision were made for bath in many houses.

Table 5.13 (Bath facility)

Types	No	%
Bath tube	20	9.4
Enclosure	188	87.5
Others	7	3.1
Total	215	100

A look at table 5.14 and fig 5.14 will show that the existing kitchen types in Maikunkele. About 81.7% and 18.7% of the kitchen are parts of the building and not part of the building respectively. This result tends to have a peculiar characteristic of traditional settlement as well as a hamogenous society the 81.3% and 18.7% of the kitchen are part of the houses is an evidence and indicator for this.

Table 5.14 (Kitchen provision)

Types	No	%
Part of building	175	81.3
Open air	40	18.7
Total	215	100

In order to provide decent housing condition for the entire people of Maikunkele, there is need to examine the existing condition of services and facilities so as to assess the level of their performance in terms of adequacy and inadequacy. These facilities and services include water supply, electricity clinics and recreational centers.

Table 5.15 Source of Water Supply

Sources	No	%
Bore holes	7	3.3
Well	173	80.4
pipe borne water	35	16.3
Total	215	100

Table 5.15 above, reveled that 3.3%, 80.4% and 16.3% of the houses in the study area uses boreholes, Wells and pipe-borne water as their sources of water supply respectively.

In the area of electricity, the study revealed (as shows in table 5.16 and fig 5.16) that the study area enjoys adequate electricity however, few houses still use kerosine and generators as their sources of energy/light.

Table 5.16 sources of Energy supply.

Sources	No	%
Electricity	189	87.9
Generator	5	2.3
Kerosine	21	9.8
Total	215	100

From above, it could be seen that 87.9%, 2.3% and 9.8% of the houses in Maikunkele uses Electricity, Generator and kerosine as their source of power/light respectively.

In terms of Education facilities, Maikunkele was observed to enjoy the services of only one public primary school and one public secondary school. However, there was three private Nursary/Primary school. The survey conducted shows the distance of these schools from various houses.

Table 5.17 (Distance to school)

Distance	No	%
Less than 100m	19	8.8
100m - 200m	21	9.8
201m - 400m	43	20
401m - 1km	52	24.2
above 1km	80	37.2
Total	215	100

Table 5.17 and fig 5.17 revealed that only 8.8% and 9.8% of the houses in Maikunkele are within less than 200m distance to schools while 20%, 24.2% and 37.2% of the houses are within a distance of between 200m -1km and even more than 1km. This distance is not convenient for pupils in junior class of primary school and this could discourage them from going to school.

A survey was conducted to ascertain the level of facilities for recreation in order to accommodate activities such as social gathering for the convience and comfort of the inhabitant. The survey result revealed that recreational facilities are inadequate. Similarly, there is little consideration for the provision of children playgrounds. Table 5.18 and 5.19 shows recreational facility and open space for children play ground respectively.

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Table 5.18

Remarks	No	%
Adequate	Nil	Nil
Inadequate	215	100
Total	215	100
Total	215	100

Table 5.19

Remarks	No	%
Adequate	27	12.5
Inadequate	188	87.5
Total	215	100

Fig. 5.1: LAND USES
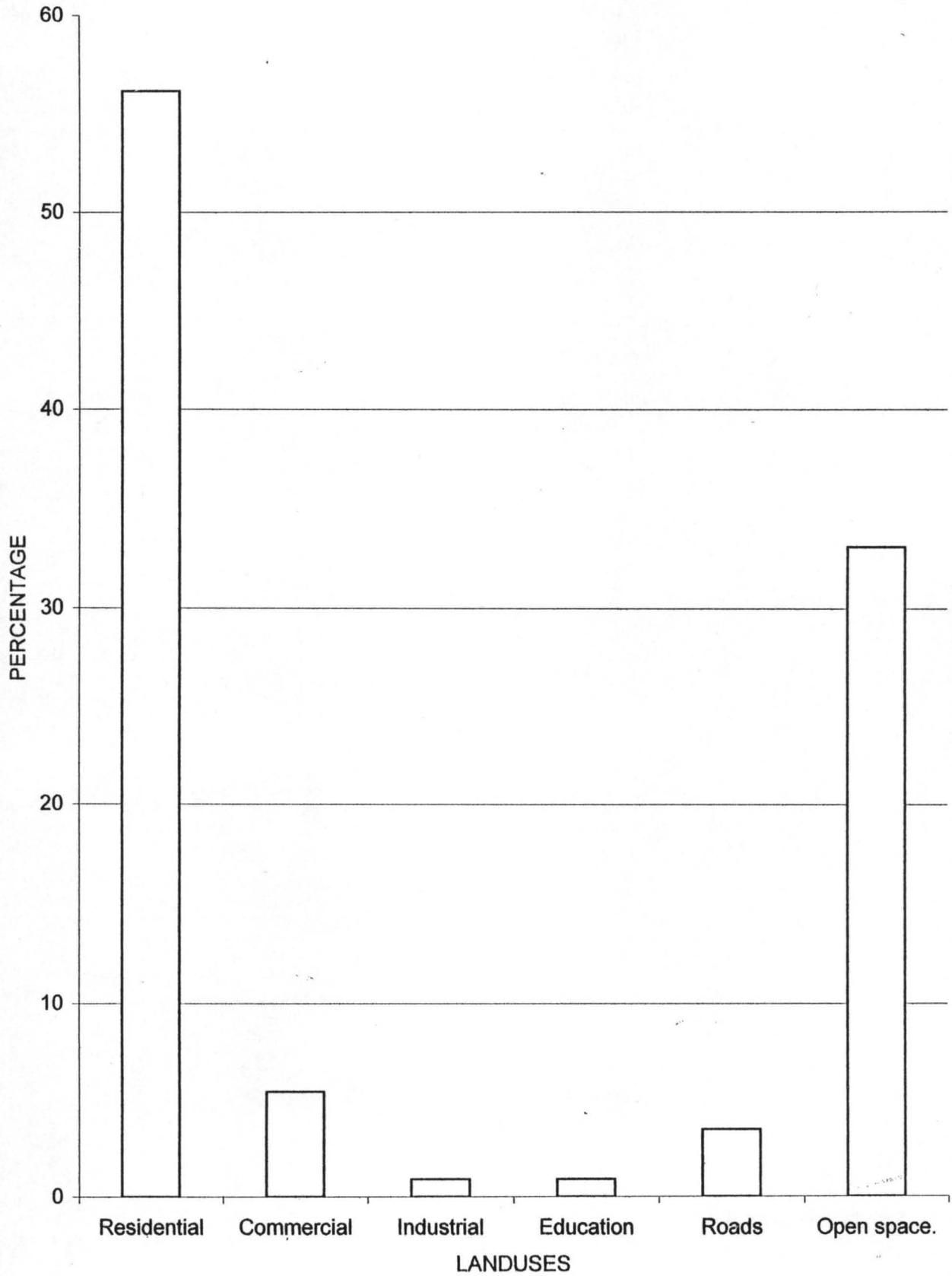
Fig. 5.2: HOUSING STOCK.
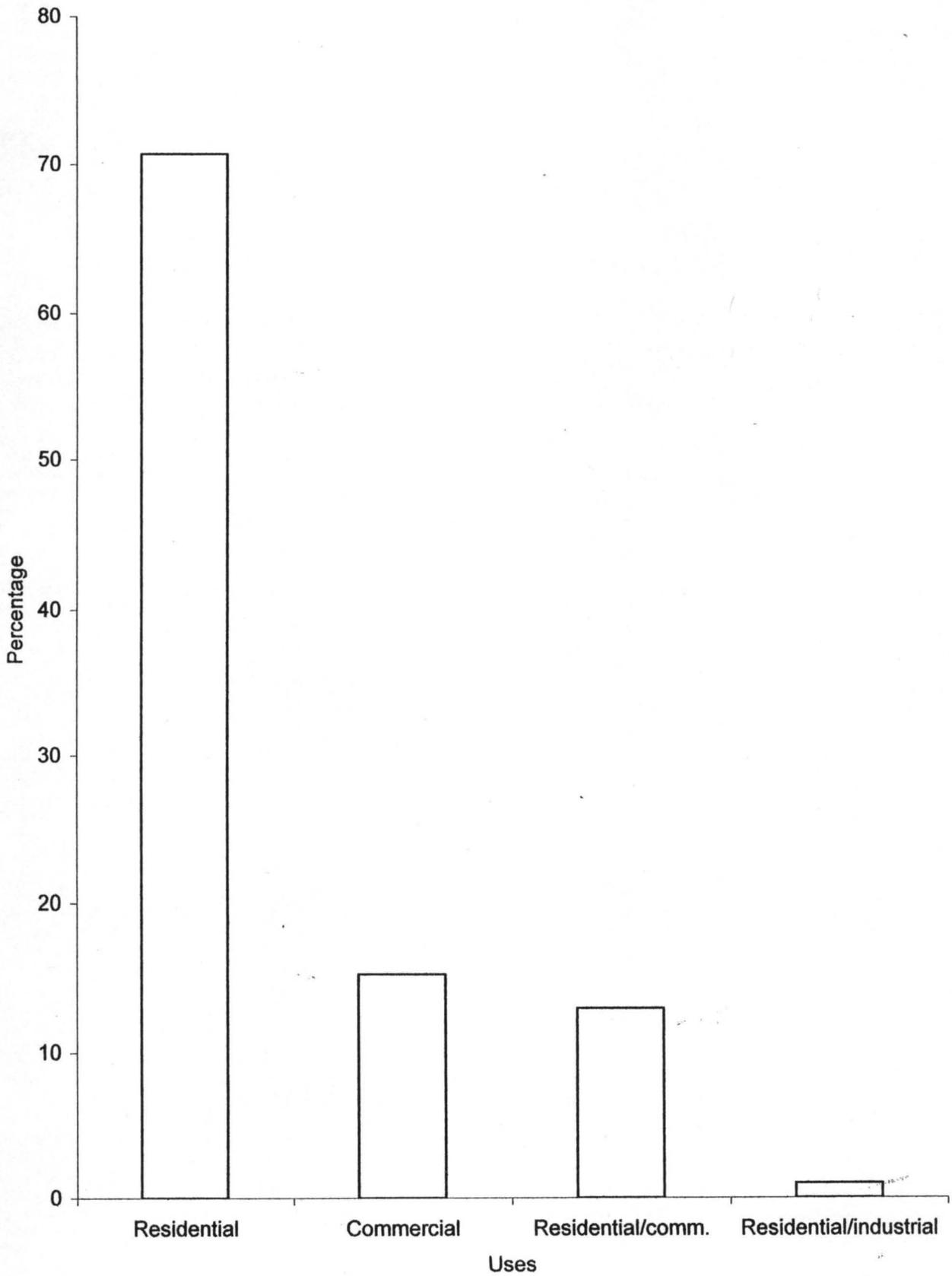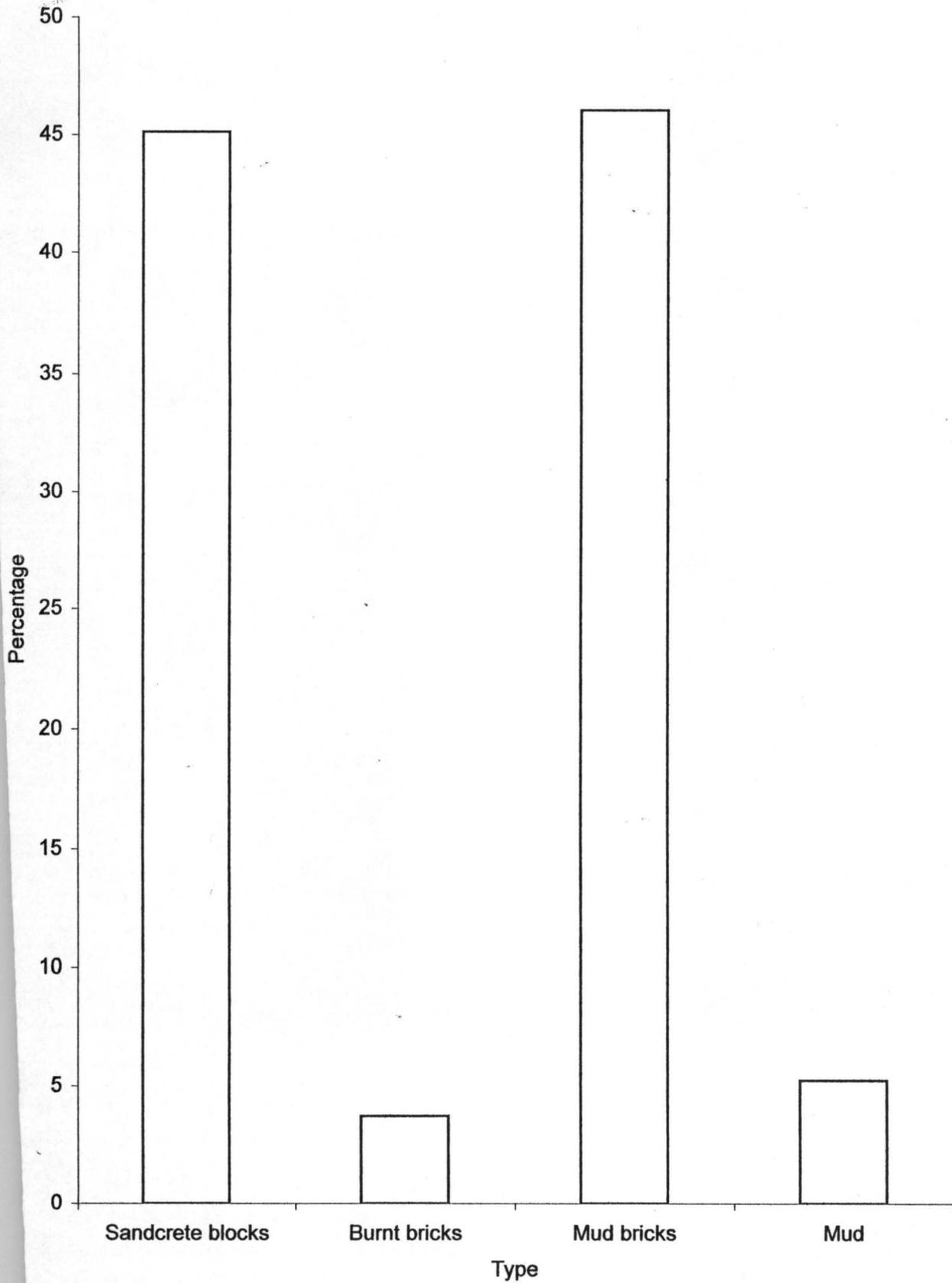
Fig. 5.3: BUILDING TYPES
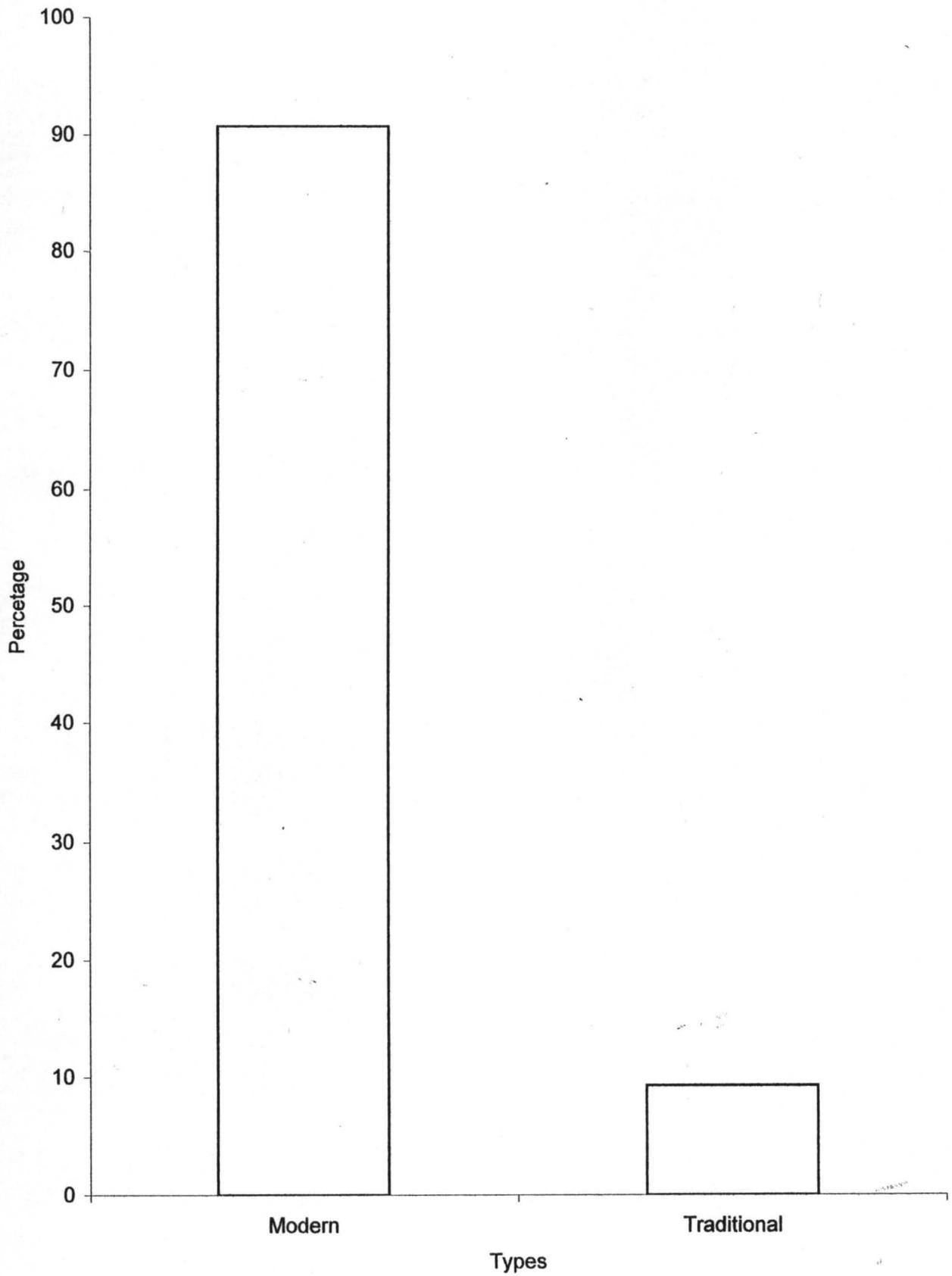
Fig. 5.4: ROOF
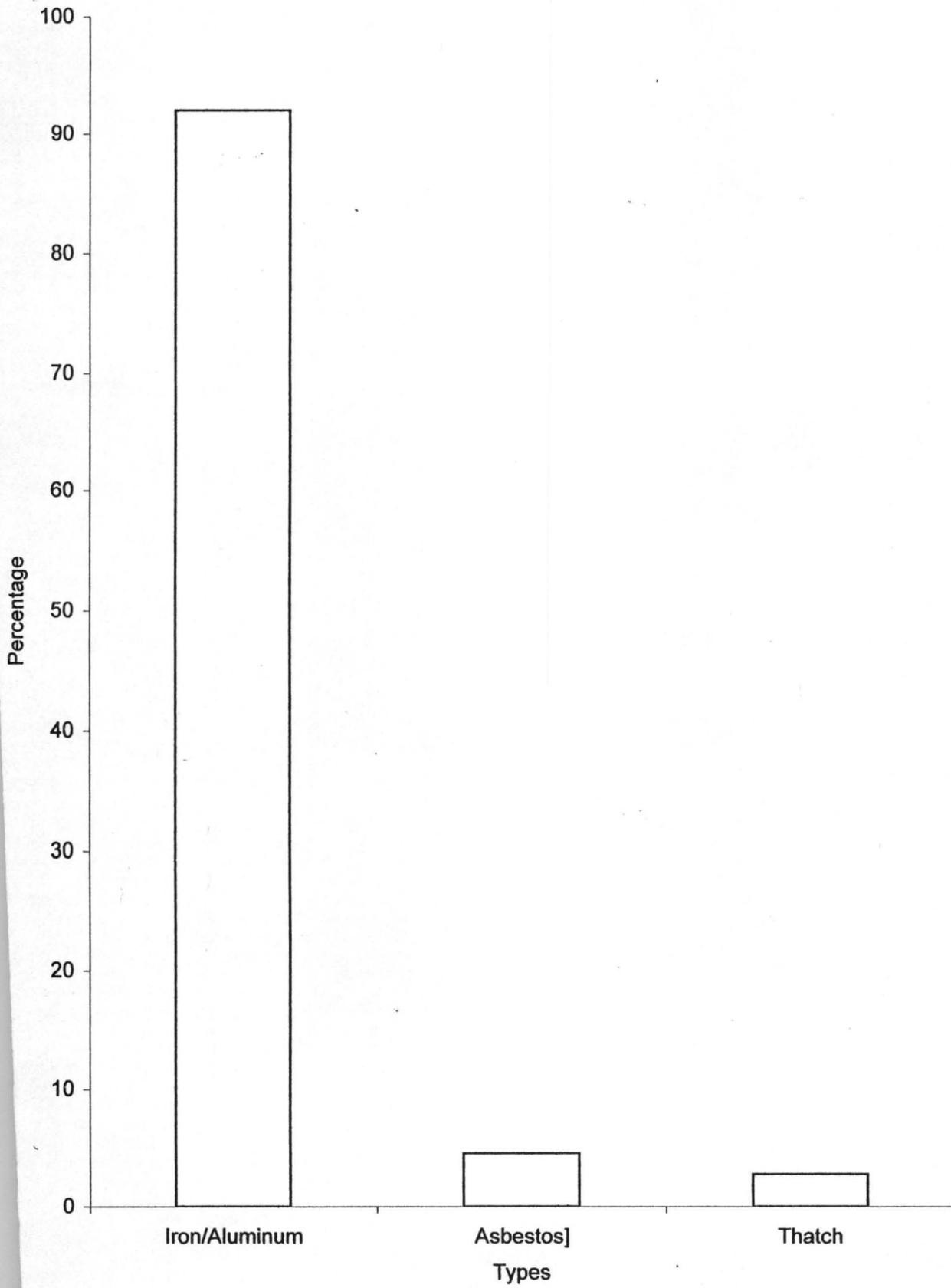
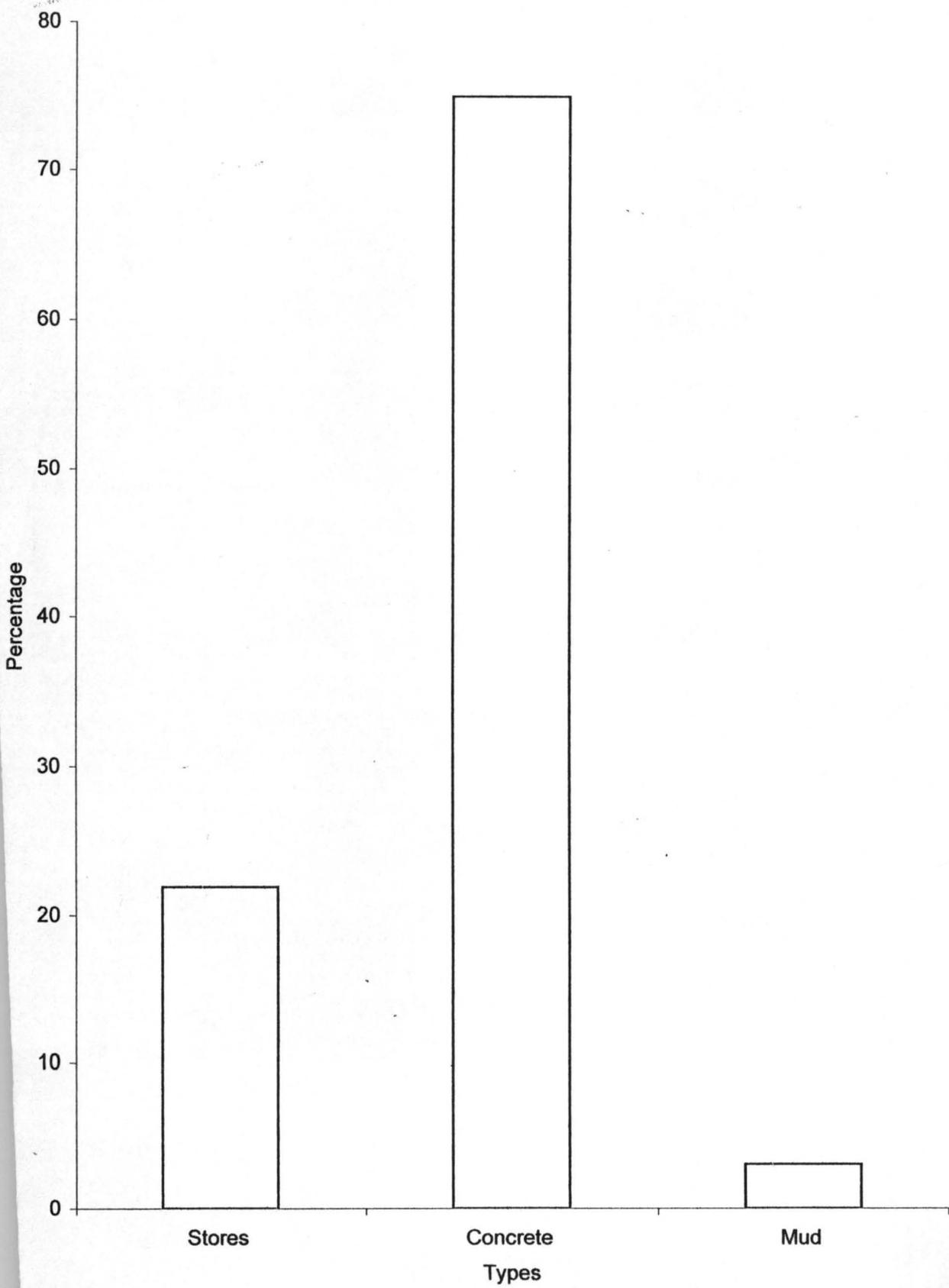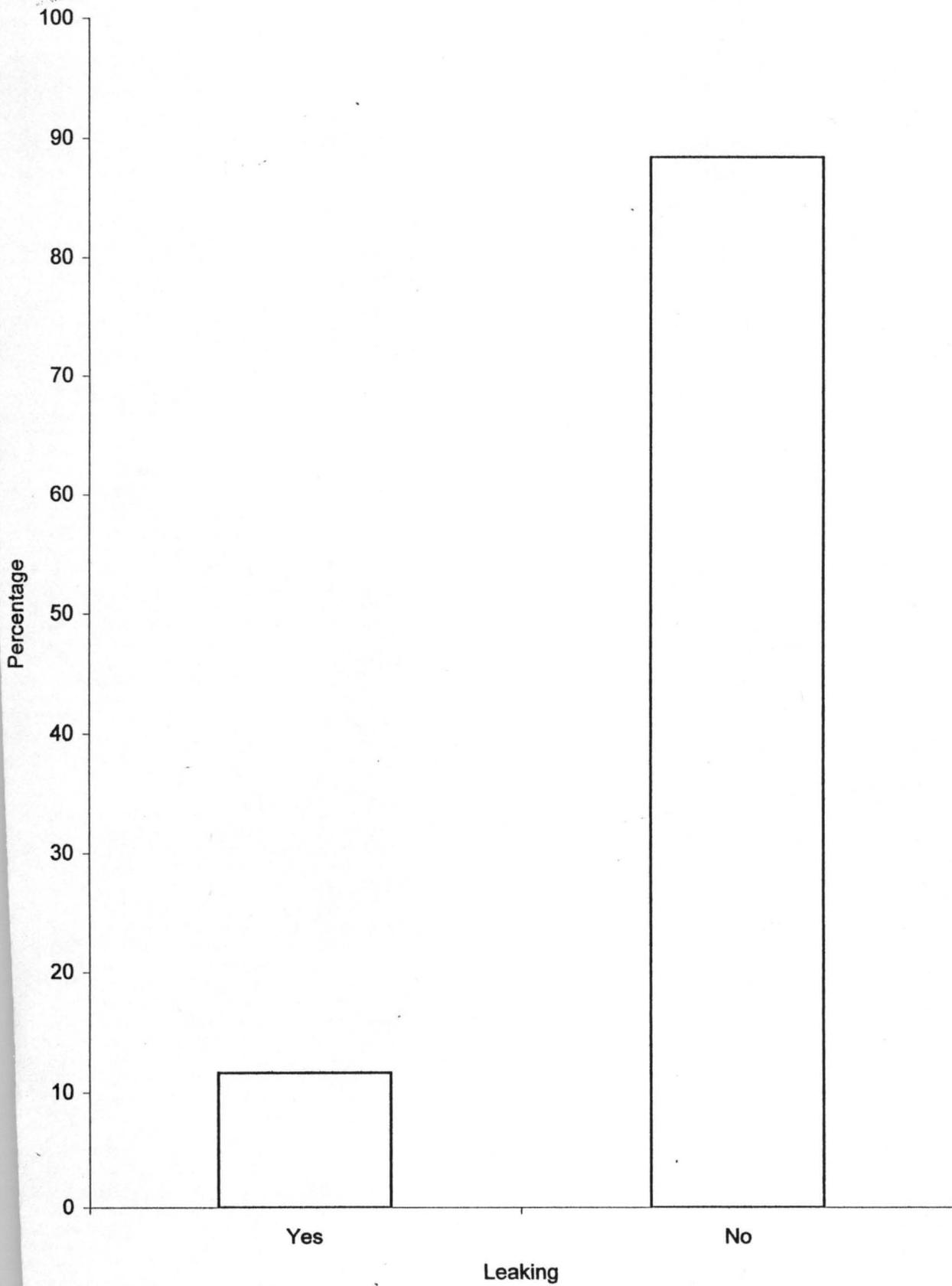Fig. 5.5: WELL TYPES
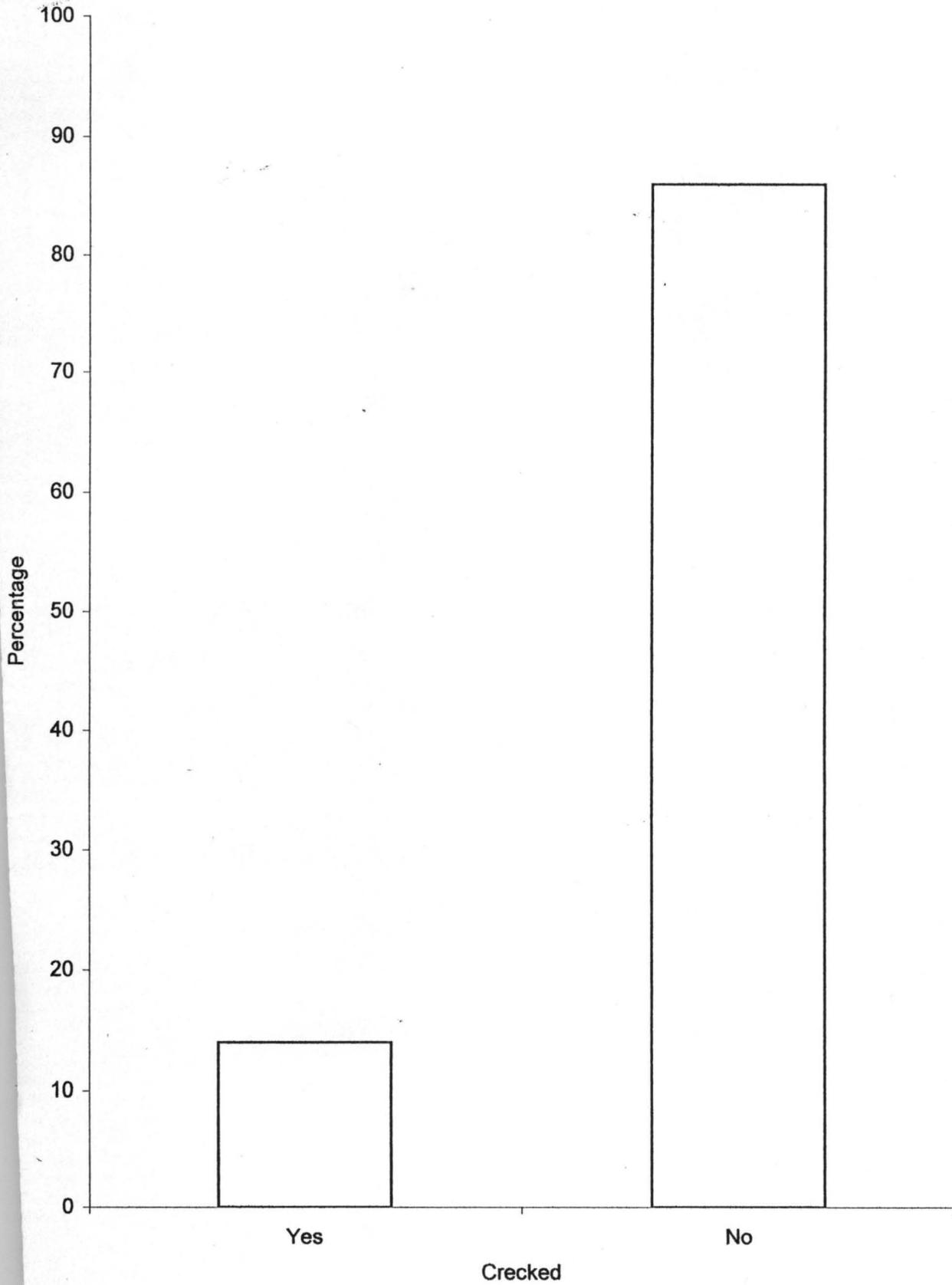
Type 5.6: FOUNDATION
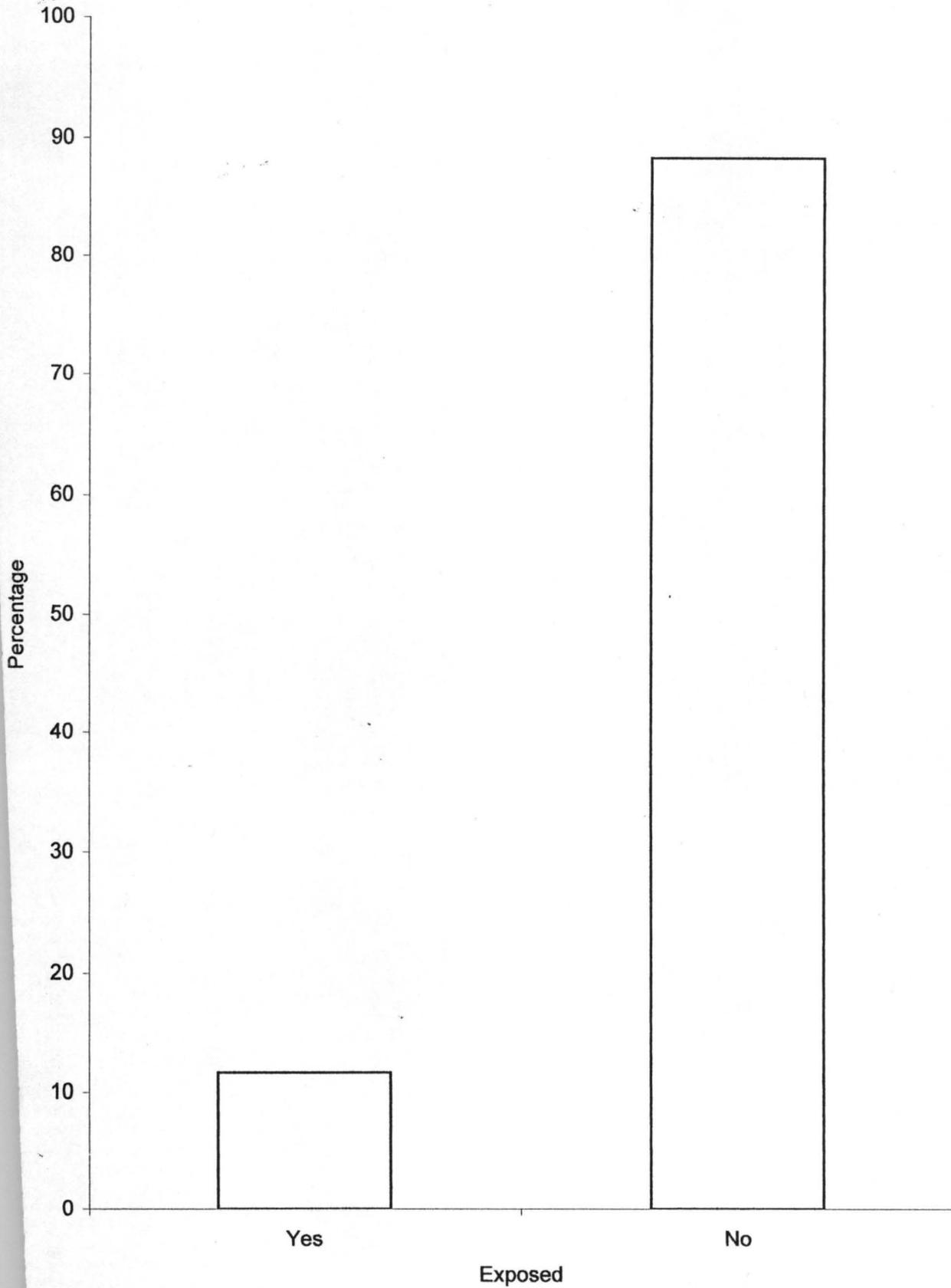
Fig. 5.7: ROOF

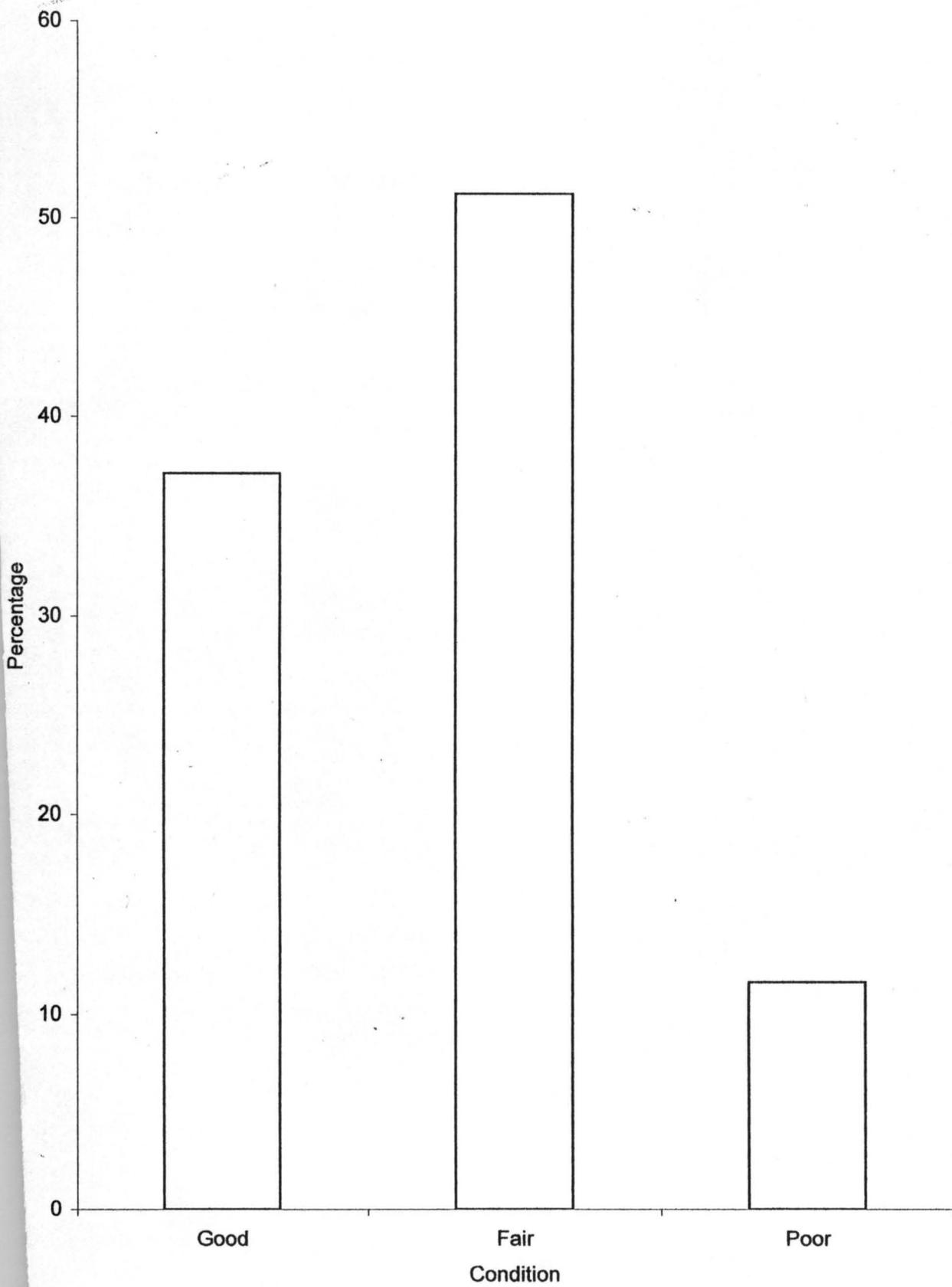Fig. 5.8: WALLS

Fig. 5.9: FOUNDATION

Fig 5.10: BUILDING CONDITION

Fig. 5.11: TOILET FACILITIES
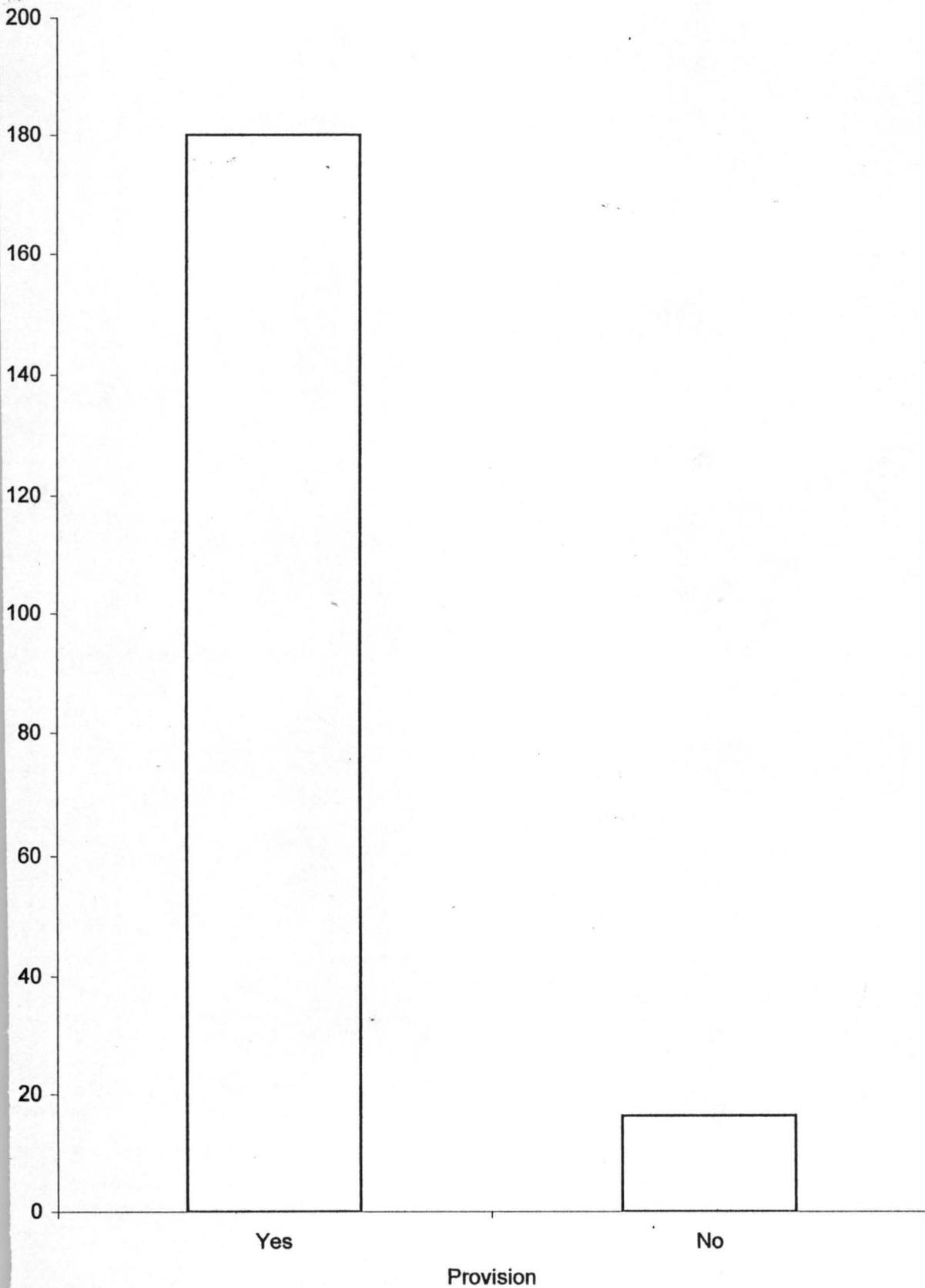
Fig. 5.12: TOILET TYPES
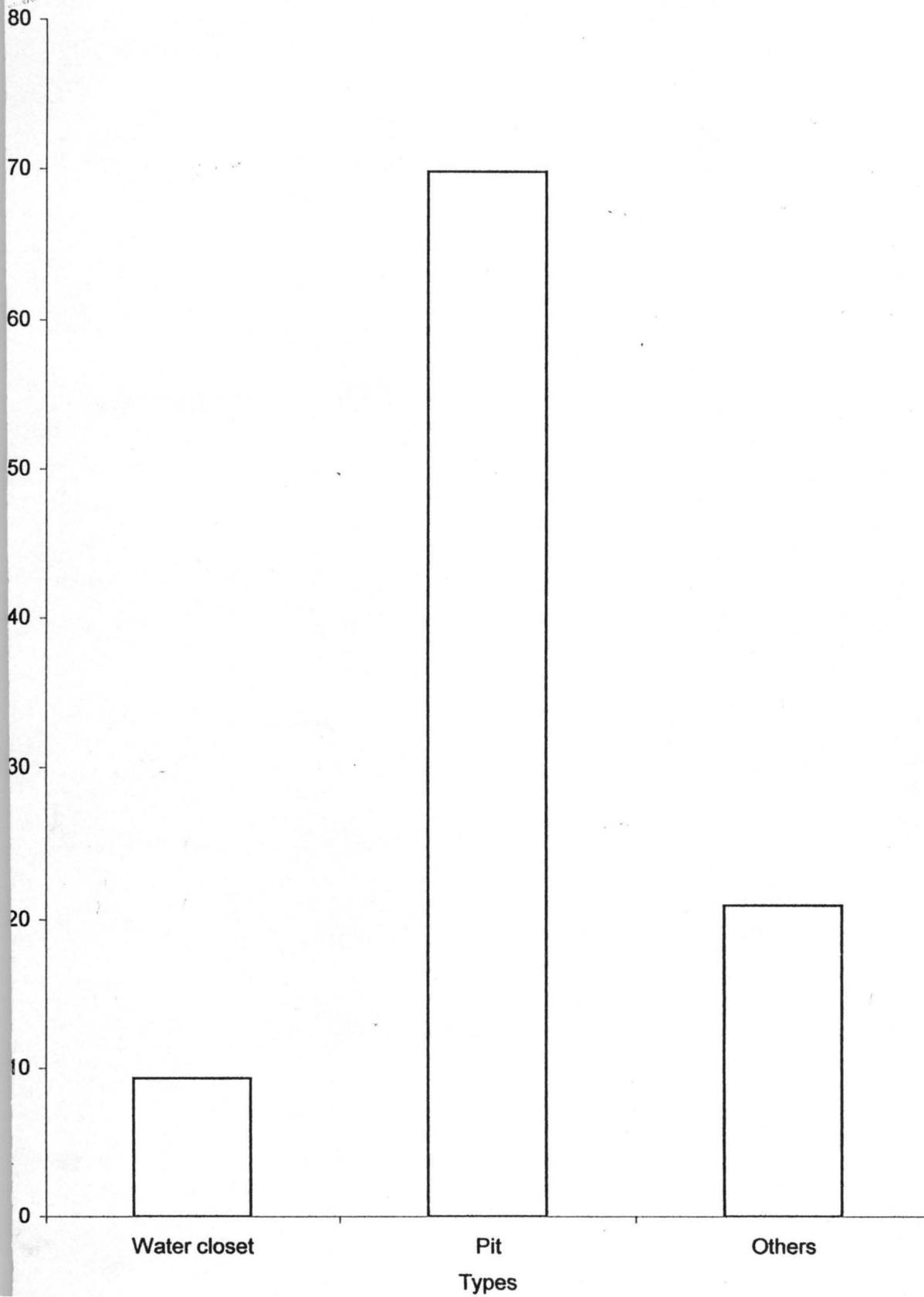
Fig. 5.13: BATH FACILITY
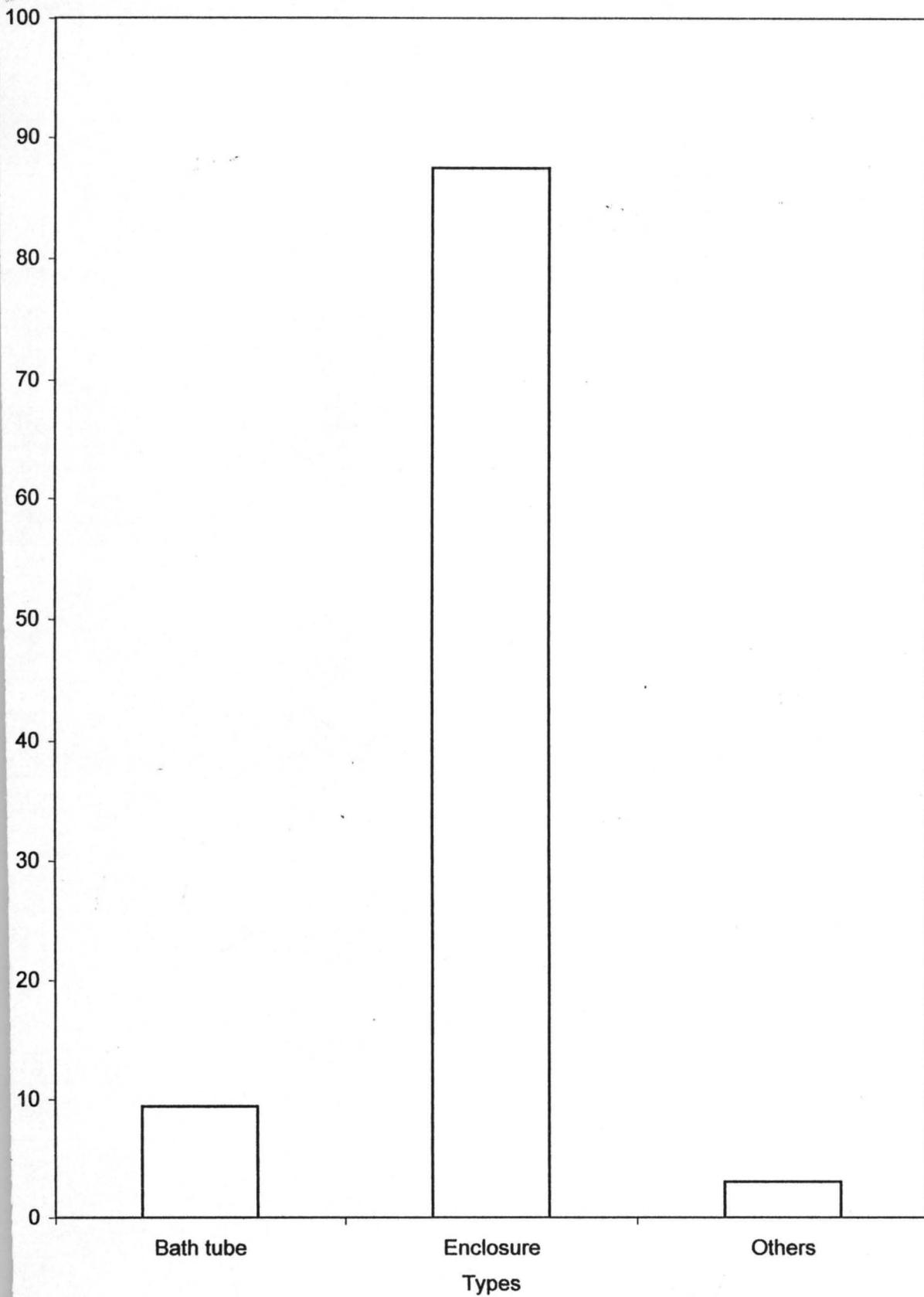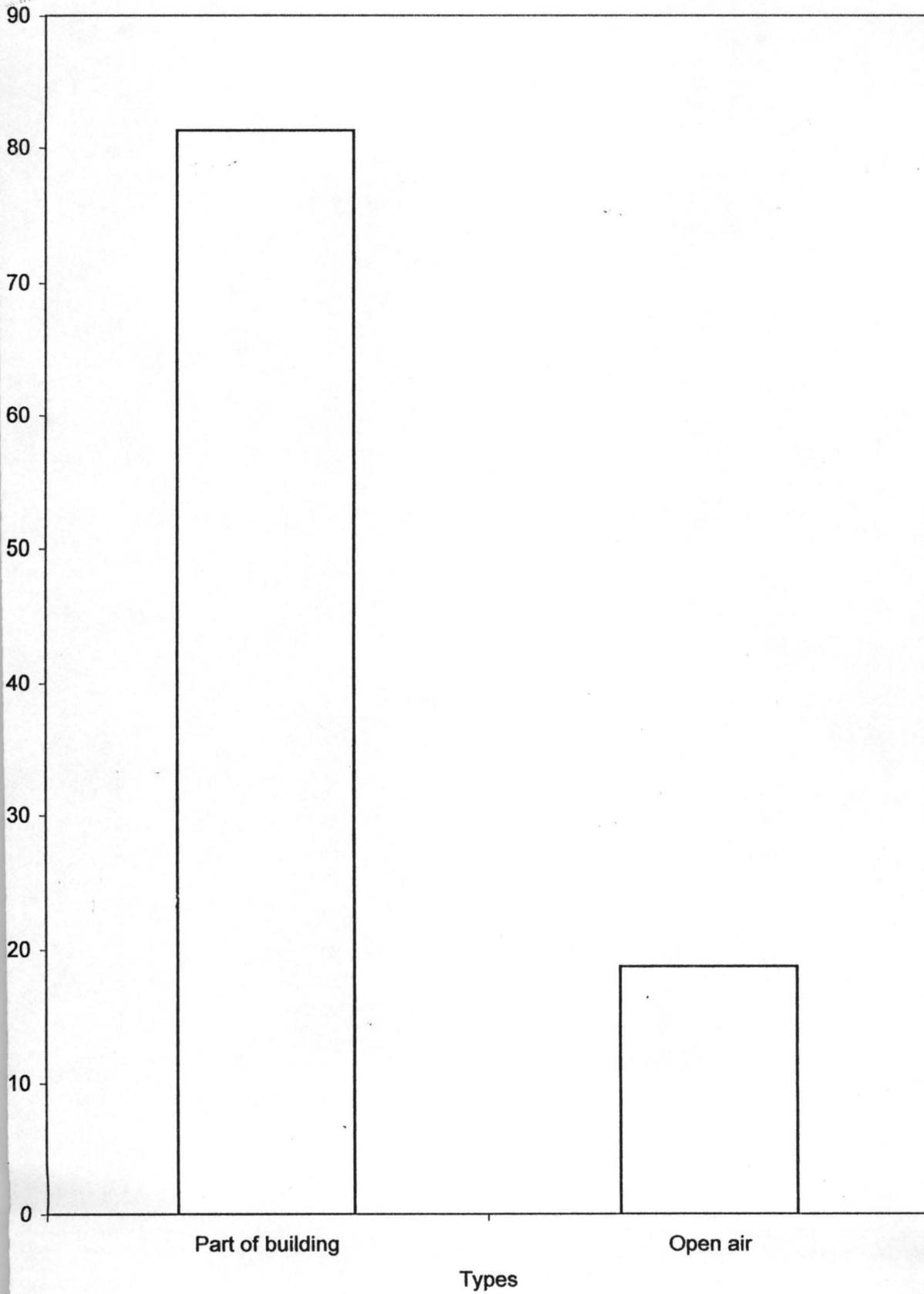
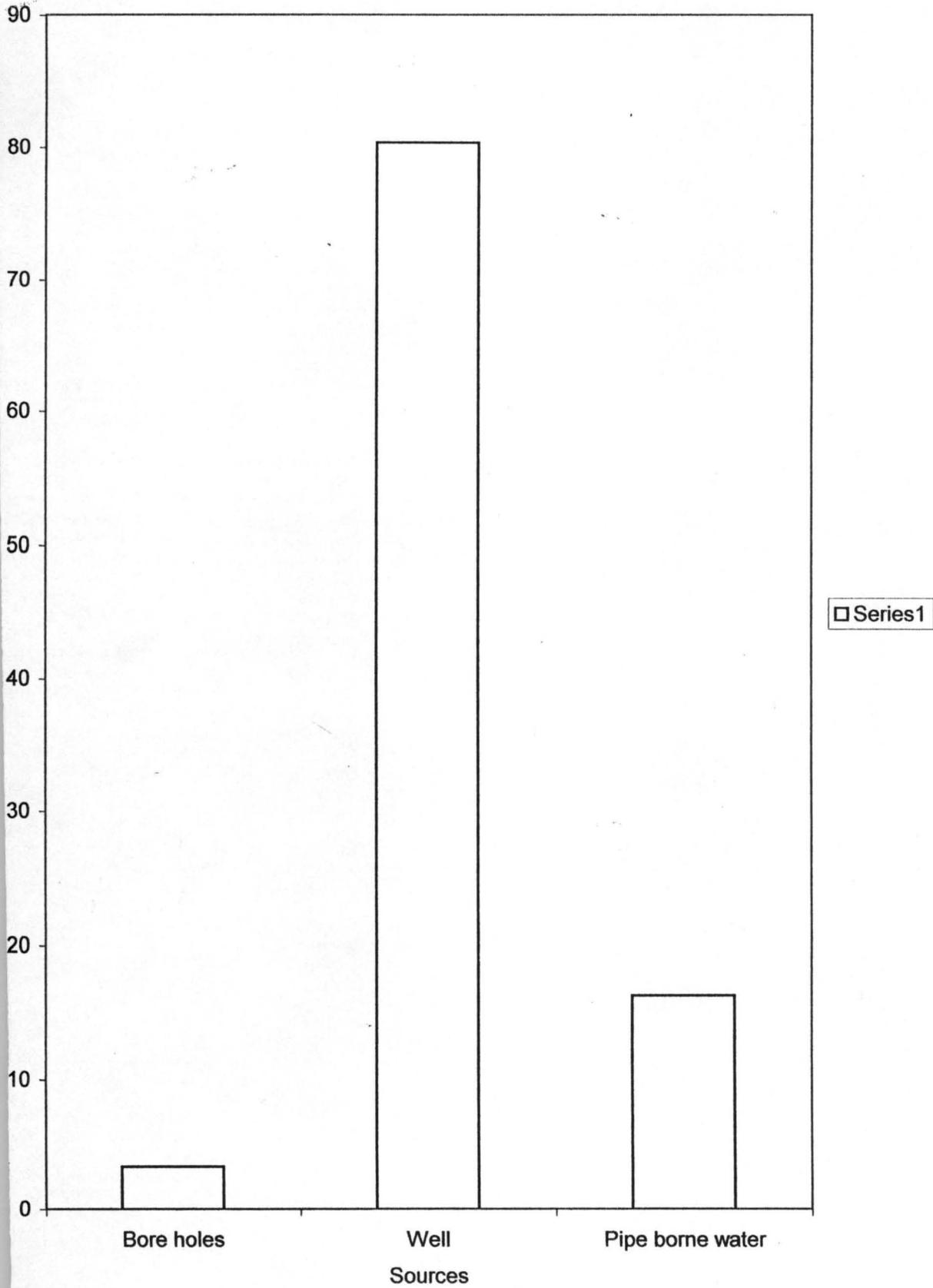fig 5.14: KITCHEN PROVISION

Fig. 5.15: SOURCE OF WATER SUPPLY
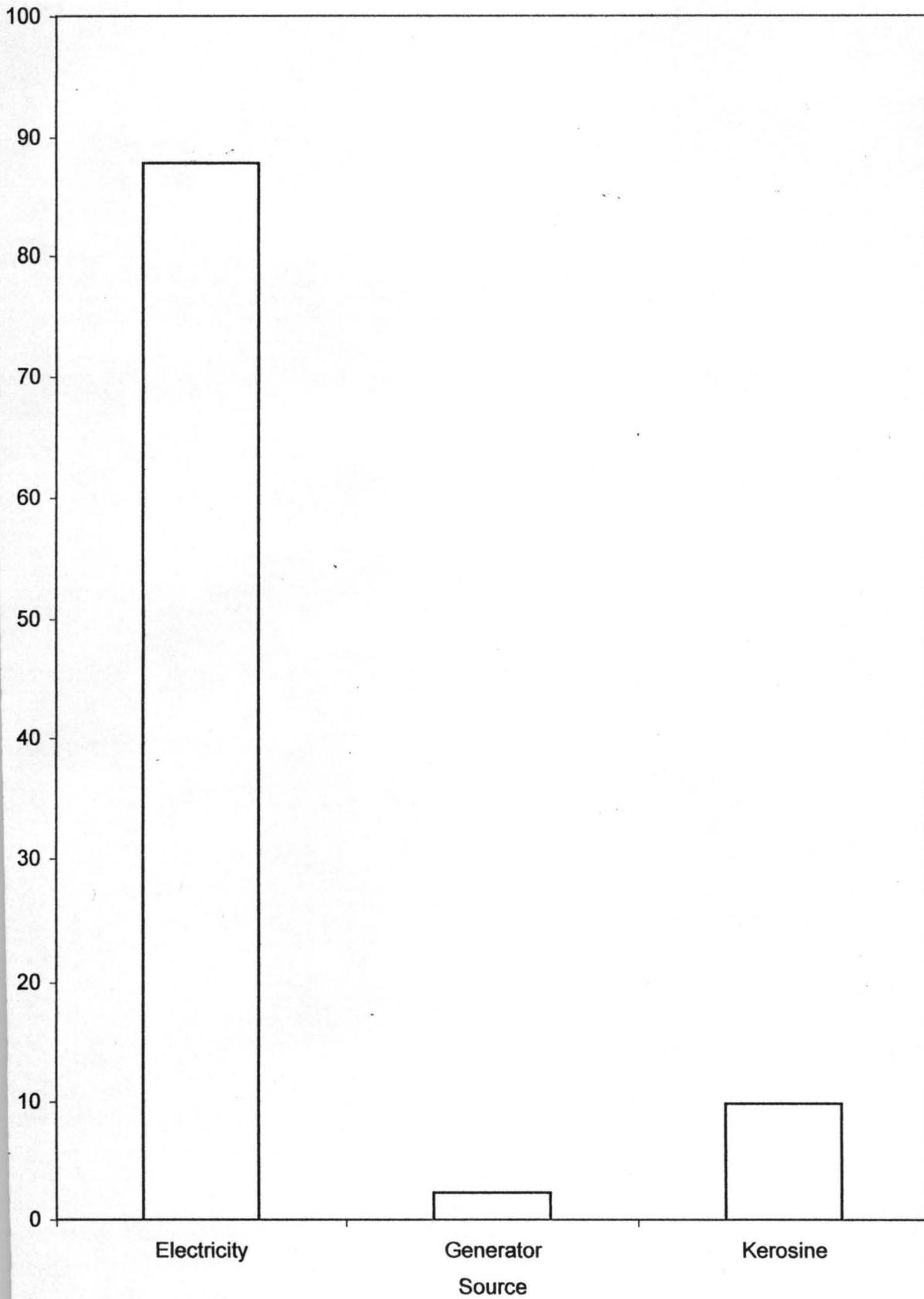

Series1

Fig. 5.18: SOURCE OF ENERGY SUPPLY
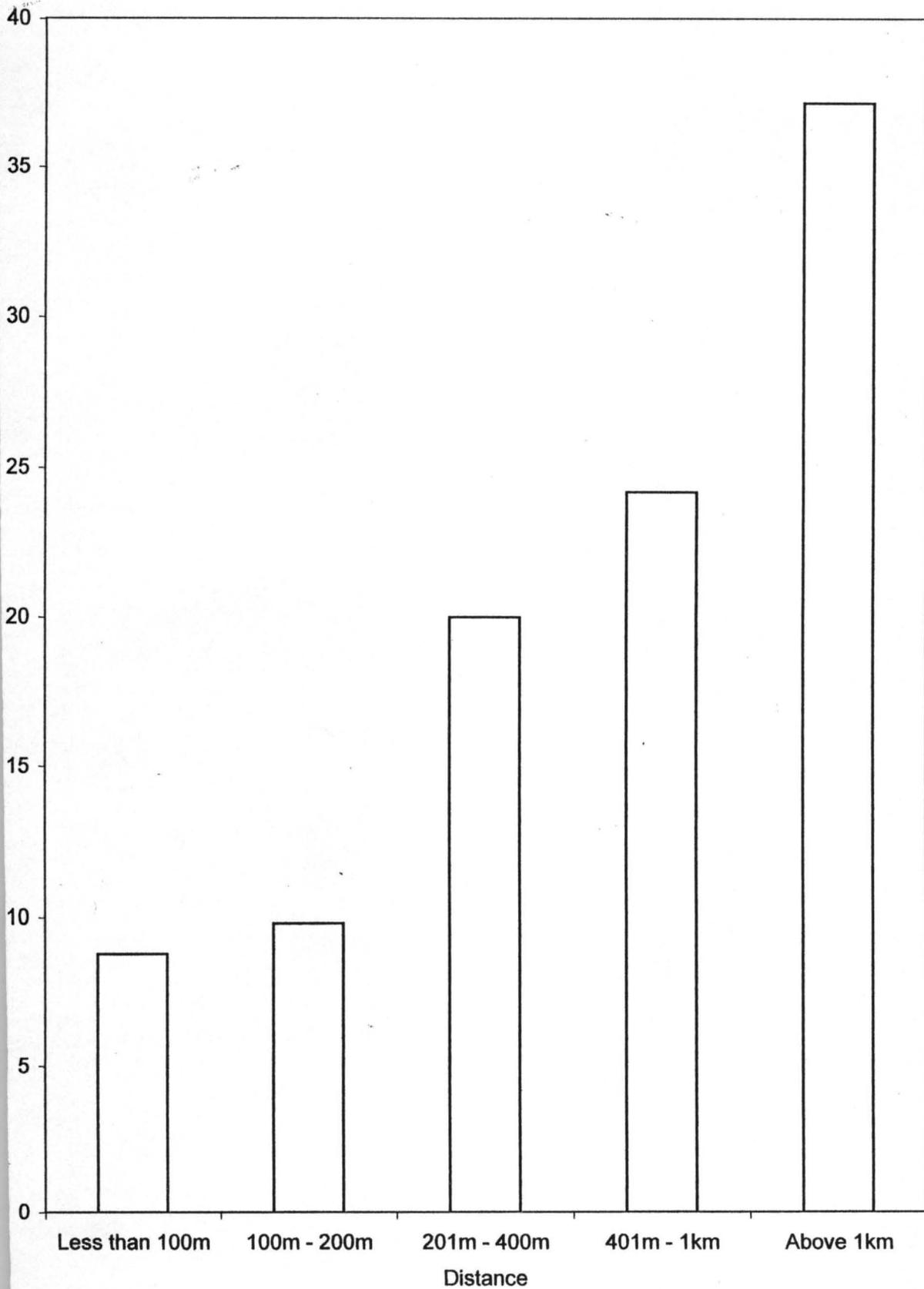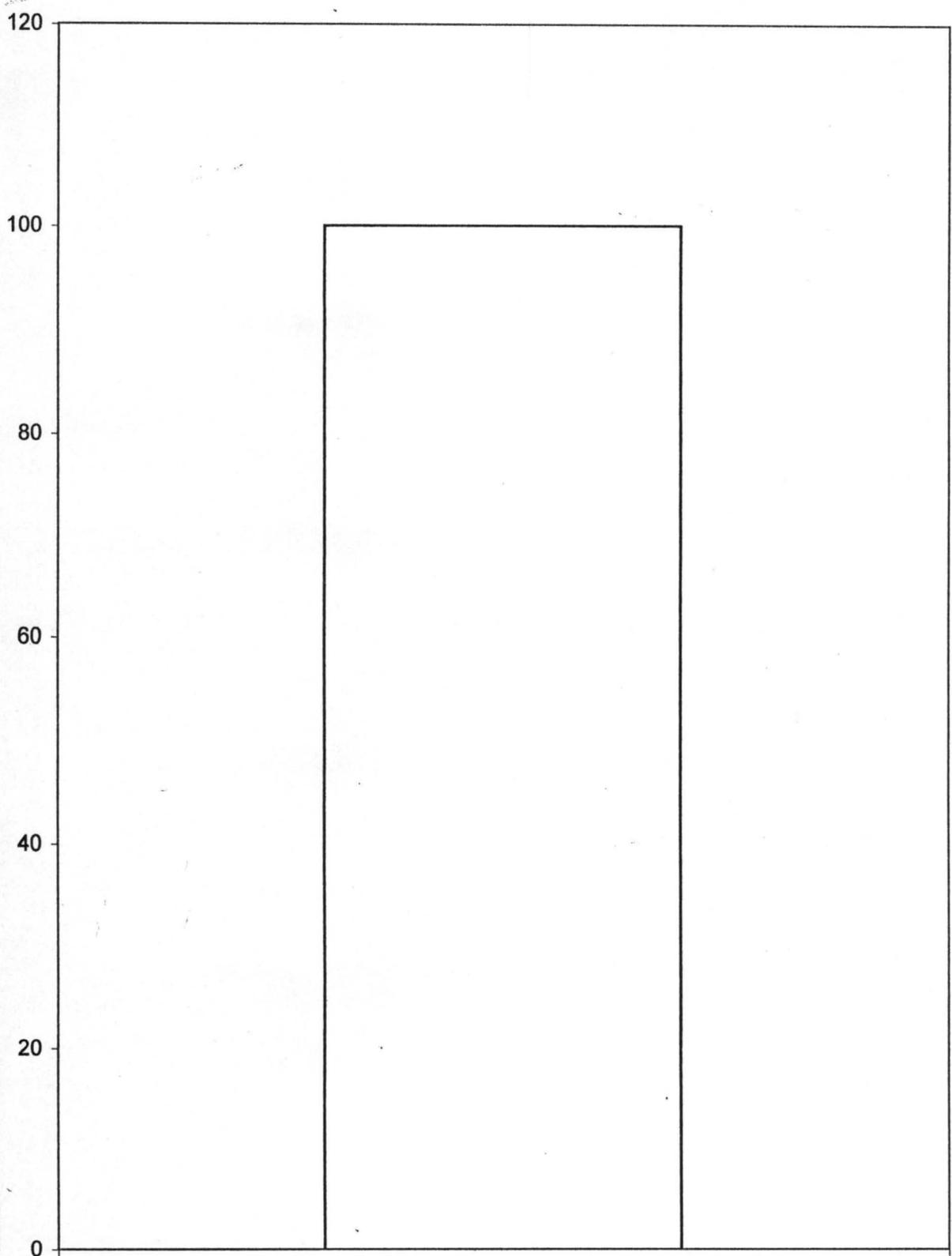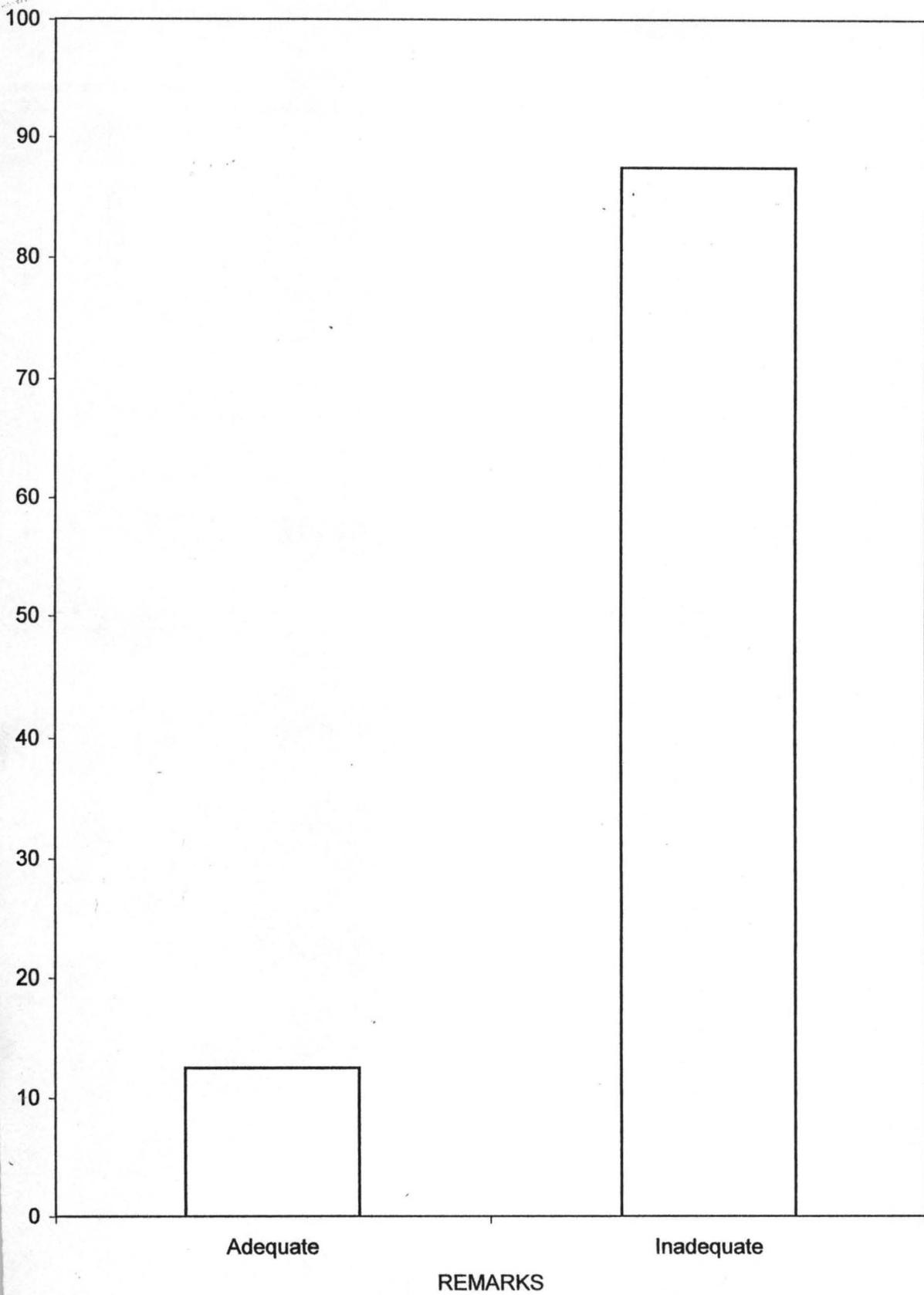
Fig. 5.17: DISTANCE TO SCHOOL

Fig.5.18: RECREATIONAL FACILITY

Inadequate

Remarks

Fig. 5.19: RECREATIONAL FACILITIES

REMARKS

CHAPTER SIX.

6.0 SUMMARY OF FINDINGS/CONCLUSION AND RECOMMENDATION.

6.1 SUMMARY OF FINDINGS.

In every human settlement, whether urban or rural, there must be problems due to unsatisfactory condition of human wants of any society. In this regard, therefore, this chapter attempts to summarise some of the existing planning problems identified in Maikunkele:-

i. The study revealed that there are problems of incompatibility of landuse such that residential and industrial activities are mixed up together as shown in table 5.2.

ii. The study observed that planning policy are not extended to Maikunkele village such that development springs up any where to the detriment of the environmental conditions of the settlement.

iii. It was observed that most of the wells sunk in the study area dries up between December and April period when water table goes down. The settlers during this period walk far to fetch water for domestic usage.

iv. The study reveals that recreational facilities are very inadequate. In fact the survey also reveal that no recreational facility is available in the study area.

v. The study also reveals that the study area lacks refuse disposal facilities and refuse dumping is unorganized.

6.2   RECOMMENDAION.

In order to solve the outlined existing planning problems of Maikunkele, the following recommendations are made to meet both the contemporary and future needs of the people.

i.   The residential and industrial activities should be demarcated. Commercial and industrial areas should be moved out of residential area.

ii.   The planning policies should be extended to Maikunkele village so as to improve the environmental conditions of the settlement.

iii.   Maikunkele has inadequate water supply, the study therefore recommends more boreholes to be sunk in the study area to alleviate the suffering of the people.

iv.   Recreational facilities should be provided, as this will increase the standard of living of the people.

v.   An organise refuse collection center should be provided in different locations of the study area.

6.2   CONCLUSION.

Housing being a very important aspect in the economic development of both rural and urban center should not be treated with contempt, people should be made aware of the role of housing in uplifting the living standard of people and the need to improve their own shelter and immediate environment. Effort should be geared toward extending planning policies to grass root.

Planning at any level is aimed at improving the living condition of the people. Therefore, it is important to let them know their role in the planning process so that they can

articipate fully. In other words, plans should not be impose on the people without their onsent if not it is bound to fail.

A close monitoring of the implementation of plan could help to avoid some of the itful of the past and leads to a new development with better fittings for the purpose of social nd economic performance.

It is therefore hoped that various authorities concern in Niger State and the public vill effectively translate the plan period such that housing and environmental condition in Maikunkele will change for better.

REFERENCES: -

1. TONY SEYMOUR (1979), Housing, Incomes and Occupational Activities in selected residential Areas of Kaduna.

2. HOPKINGSUILLE KENTOCKEY (1973) Housing Strategy

3. YUSUFU K. ALIYU (1982), Provision for Residential accommodation Kajuru as a local Government Headquarters HND Thesis (unpublished).

4. DR. KARSHI S.S. (1982), The origin, Growth and expansion a town.

5. JOHN GLASSON (1974), An introduction to Regional Planning

6. Association of Housing Corporations of Nigeria (1978), Nigeria Housing and Development]

7. Hugh Stretton (1978), Urban Planning in Rich and Poor Countries.

8. William Lean (1969), Economic of Land use Planning: Urban and Regional.

9. Jwan Abednego Joshua (1991) A Study of Housing and Environmental Condition of Heipang HND Thesis (unpublished).