PLANNING FOR THE URBAN INFORMAL SECTOR IN ABUJA CITY

M.Sc (U.R.P) THESIS

AHMED ZALIHA'U (MRS)
B.Sc (HONS) GEOGRAPHY
A.B.U., ZARIA

DEPARTMENT OF URBAN AND REGIONAL PLANNING
FACULTY OF ENVIRONMENTAL DESIGN
AHMADU BELLO UNIVERSITY, ZARIA

JULY, 1998.

DEDICATION

TO IBRAHIM FOR EVERYTHING

AND

UMMAYMAH, MUZAMMIL AND MUWAFFAQ
for missing the motherly love
during the course.

DECLARATION

I hereby declare that this thesis has been composed by myself and that it is the outcome of my research work. It has not been accepted in any previous application for a higher degree. All sources of information are acknowledged by means of reference.

AHMED, ZALIHA'U (MRS.)

NAME

JULY, 1993

DATE

CERTIFICATION

This thesis entitled PLANNING FOR THE URBAN INFORMAL SECTOR IN ABUJA CITY by Mrs. Ahmed Zaliha'u, meets the regulations governing the award of the degree of Master of Science of Urban and Regional Planning of Ahmadu Bello University; and is approved for its contribution to knowledge and literary presentation.

Chairman, Supervisory Committee	15/11/93 Date
Member, Supervisory Committee	Date
Head of Department	15/11/93 Date
Dead, Post-graduate School	7/4/99 Date

ACKNOWLEDGEMENT

I am profoundly grateful to Mallam Ahmed, Dr. S. K. Wiradu and Dr. J. B. Kaltho for their guidance, suggested alterations and additions, also for their encouragements. In addition I should like to convey my appreciation to other members of staff of the department for their useful contributions, critisims and attention.

I am indepted to my colliques for their help in carrying out the surveys and other material assistance.

My special thanks to Prime & Bell Partnership for the skillful typing and other stages of production.

Finally, I owe a special debt of gratitude to my husband for his understanding support and everything. ALHAMDULILLAH.

ABSTRACT

The menace of informal sector activities has reached an alarming stage that is causing concern to city authorities. This is because the sector proliferates at a very last rate. Also because of the small capital involved in the investment, they have the tendency to locate anywhere; along the roads, sidewalks, under trees and any empty lot where they do not only cause traffic congestion, delays etc. but also create nuisance by generating waste and poor methods of waste disposal.

Various attempts have been made by authorities responsible to carve the environmental and physical problems posed by this sector. The solutions mostly adopted by these authorities are relocation to areas outside the urban rim and demolition. However, these actions do not seem to solve the problem, because the actions taken are casual and adhoc without detailed survey and analysis of the problems involved.

Various categories of informal sector activities were identified. However, major categories that pose a threat to physical planning and management were selected for this study. These are the automechanics, electrical and electronics services, carpentry and woodworks, metal works, retail trade, food canteens and shoe repair services.

This study therefore, has been undertaken to offer effective planning solutions to these problems. The study covers the first developed districts of Abuja city (Garki, Wuse, Asokoro and Maitama) and neighboring phase II - IV where there are pockets of developments.

The findings of the field study include many important planning issues, such as locational preference to traffic points, major roads, public areas which results to traffic delays and accidents.

There is occurrence of high degree of land use mixing, incompactible uses sited together, which create nuisance, inconveniences and ugly sight.

As a result of little space required, little capital, they locate haphazardly, so They lack necessary utilities, facilities needed for their operation. They use cheap and old materials for constructing of workshops which present ugly sight. The operators of the informal activities have law educational training and in most cases law perception of environmental quality, thus waste disposal methods are far from adequate planning principles and Standards were derived from the findings, and it can serve as a basis for subsequent implenientation of development plans, thereby enhancing their efficiency and reducing urban management problems.

Integration of informal sector activities within the city plan, proper spatial organisation, and appropriate locations within the neighborhoods and districts will reduce their menace and ease management problems.

TABLE OF CONTENTS

CONTENTS		PAGE
DEDICATION		i
DECLARATION		ii
CERTIFICATION		iii
ACKNOWLEDGEMENT		iv
ABSTRACT		v
TABLE OF CONTENTS		vii
LIST OF FIGURES		x
LIST OF TABLES		xi
LIST OF PLATES		xii
CHAPTER ONE		
INTRODUCTION		1
1.1.0	Statement of Research problem and Justification	4
1.2.0	Aim and Objectives	6
1.3.0	Scope and limitation	7
1.4.0	Methods of Data collection	7
1.5.0	Conceptional frame work	9
1.6.0	The study Area	12
CHAPTER TWO		
INFORMAL SECTOR AND ITS ROLE IN URBAN DEVELOPMENT		16
2.1.0	The concept of the informal sector	16
2.1.2	The global characteristics of informal sector enterprises	18
2.1.3	Types of informal sector activities	20
2.2.0	The role of the informal sector in Urban Development	21

CHAPTER THREE

CHARACTERISTICS AND EFFECTS OF INFORMAL SECTOR ACTIVITIES IN ABUJA CITY 29

3.1.0	Appraisal of existing land use in Abuja (Phase I)	29
3.1.2	Physical characteristics and effects of the informal sector activities	30
3.1.3	Locational characteristic	31
3.3.0	Effects of informal sector activities on environment	56
3.3.1	Incompatible land use	57
3.3.4	Pollution	64
3.4.0	Resident impression on informal sector	65
3.4.1	Shopping trips to service centres	65
3.4.2	Satisfaction of Residents with existing shopping centres	68
3.4.3	Reasons for patronising informal sector enterprises	70
3.4.4	Analysis of existing location of informal sector	70
3.4.5	Suggested solutions by Residents	71
3.5.0	General interences drawn from the study.	73

CHAPTER FOUR

4.1.0	Review of existing planning strategies	74
4.1.1	Plan proposals	74
4.1.2	Deviation from planning proposals and reasons	76
4.2.0	Existing planning policies and actions	76
4.2.1	Existing locations of informal sector enterprises	77
4.2.2	Locations as provided by the master plan	78
4.2.3	Planning implication of existing policies and actions	80

CHAPTER FIVE

PHYSICAL PLANNING REQUIREMENTS, DESIGN PROPOSAL AND RECOMMENDATION		83
5.1.0	Planning and locational principals	83
5.2.0	General Locational concepts	84
5.2.1	Alternative Locational concepts	85
5.2.2	Site selection and analysis	88
5.3.0	Design concepts	89
5.4.0	Proposal for provision of utilities	91
5.5.0	Space standards and site requirements	92
5.5.1	Land use structure	92
5.5.2	Space requirements	93
	Set banks	94
	Building heights	95
	Access roads	95
	Parking	95
	Waste	95
	Building materials	95

CHAPTER SIX

IMPLEMENTATION STRATEGY AND MANAGEMENT PROPOSALS		96
6.0.0	Introduction	96
6.1.0	Policies for implementation plan proposals	96
6.2.0	Construction	97
6.3.0	Provision of utilities	98
6.4.0	Financing	98
6.5.0	Cost recovery	99
6.6.0	Effective management	100
6.7.0	Summary and conclusion.	100
	BIBLIOGRAPHY	102

LIST OF FIGURES

1. MAP OF NIGERIA SHOWING FCT
2. FCT IN THE REGIONAL CONTEXT
3. EXISTING LAND USE PLAN
4. COMPOSITION OF INFORMAL SECTOR ACTIVITIES
5. LAND USE ASSOCIATED WITH INFORMAL SECTOR
6. LOCATION OF INFORMAL SECTOR ACTIVITIES
7. PREMISES OF INFORMAL SECTOR ACTIVITIES
8. REASONS FOR LOCATION OF ACTIVITIES
9. AGE OF INFORMAL SECTOR ENTERPRISES
10. EXISTING LOCATIONS OF INFORMAL SECTOR
11. EMPLOYMENT SIZE OF INFORMAL SECTOR ENTERPRISES
12. SOURCE OF CAPITAL OF INFORMAL SECTOR ENTERPRISES
13. SALES/ EARNINGS OF INFORMAL SECTOR ENTERPRISES
14. EDUCATIONAL LEVEL OF INFORMAL SECTOR WORKERS
15. TYPES OF WASTES PRODUCED AND METHODS OF DISPOSAL
16. TRIPS OF SERVICE AND SHOPPING CENTRES
17. SATISFACTORY OF RESIDENTS TO EXISTING FACILITIES
18. REASONS AGAINST LOCATIONS AND SUGGESTED SOLUTIONS
19. LOCATIONAL CONCEPTS OF INFORMAL SECTOR ENTERPRISES
20. PROPOSED LAYOUT OF INFORMAL SECTOR

LIST OF TABLES

TABLE	TITLE
1	COMPOSITION OF INFORMAL SECTOR ENTERPRISES
2.	DISTRIBUTION OF ENTERPRISES BY ACTIVITY
3.	LOCATION OF ACTIVITIES
4.	PREMISES OF ACTIVITIES
5.	REASONS FOR LOCATION
6.	PREFERRED LOCATION BY ENTERPRISES
7.	AREA OF WORKSHOPS
8.	AGE OF ENTERPRISES
9.	EMPLOYMENT STRUCTURE OF ENTERPRISES
10.	EMPLOYMENT SIZE OF ENTERPRISES
11.	SOURCE OF CAPITAL FOR ENTERPRISES
12.	SALES / EARNINGS OF ENTERPRISES
13.	SERVICES FROM AUTHORITIES AS ASSISTANCE
14.	RENTS PAID TO AUTHORITIES
15.	EDUCATIONAL LEVEL OF INFORMAL SECTOR WORKERS
16.	REASONS FOR COMING TO ABUJA BY WORKERS
17.	WASTE DISPOSAL METHODS
18.	SHOPPING TRIPS SERVICE CENTRES
19.	SATISFACTION OF RESIDENTS TO EXISTING CENTRES
20.	LAND AREAS PROPOSED IN VARIOUS CENTRES BY SECTOR
21	MASTER PLAN

LIST OF PLATES

Page	
1	RETIL TRADE ON SIDE WALK
2	SHOW REPAIRS, RETAIL TRADE IN TEMPORARY STRUCTURES
3	INFORMAL SECTOR ACTIVITIS UNDER TREES
4	TEMPORARY STRUCTURE USED BY INFORMAL SECTOR
5	TRAFFIC CONGESTION AND DELAYS CAUSED BY INFORMAL SECTOR ACTIVITIES
6	INFORMAL SECTOR ACTIVITIES WITHIN RESIDENTIAL AREAS - A CASE OF UNCOMPARTIBLE LAND USE
7	INFORMAL SECTOR ACTIVITIES IN INSTITUTIONAL AREAS
8	INFORMAL SECTOR ACTIVITIES IN COMMERCIAL CENTRES NEIGHBOURHOOD CENTRE
9	WASTE MATERIALS DUMP BY INFORMAL SECTOR

CHAPTER ONE

1.00 INTRODUCTION

In recent years, Urban Economist have adopted a two sector notion towards analysing employment and economic activities in Third World cities. They divide urban employment and economic activities into 'traditional' activities as those which existed before and continue in the face of western capitalist penetration. The 'modern' activities are conceived as those associated with foreign influence and investment, the application of advanced technologies, use of professionals and government.

This dual thinking received a boost in the early 1970's when Hart, K presented a paper on urban employment in Ghana. He used the terms 'formal' and 'informal' for the modern and traditional sectors, respectively Hart associated the informal sector with significant self employment and smallness of enterprises, a degree of statistical under recording.

In the face of poverty, under and unemployment as well as lack of facilities in rural areas, the cities have become attraction centers for large numbers of rural - urban migrants. These migrants, constituting large concentration of labour in urban centers which the modern sector has been unable to absorb, resort to informal activities.

The situation described above is replicated in Nigeria. Here urban informal sector activities are growing fast as a result of development of import substitution industries. This process of 'evolution' of the urban economy have been described by Mc Gee (1976) in his study of South East Asian cities. He used the term *the 'bazaar' economy to described the informal sector.*

Opinions differ on some aspects of this sector but some of the aspects on which there is general agreement is its great potential for the development of Third World countries and it growth with

increasing urbanisation. According to Friedmann and Wulff (1976) 60 - 80% of labour force in all Third World cities is employed in the informal sector.

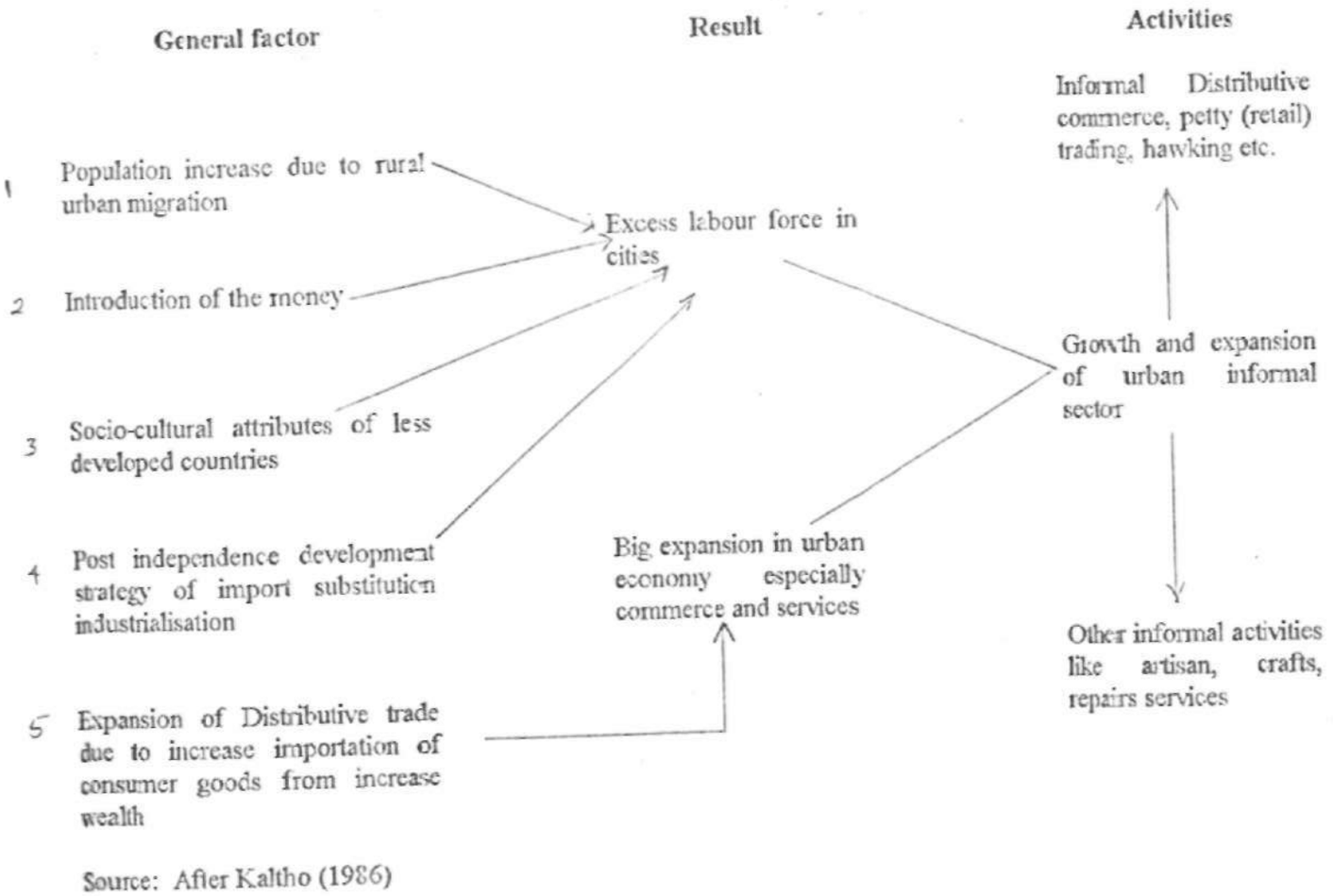
Urban informal sector economic activities generate problems that need effective solution. Notable among these problems is that the locational pattern of the activities have little regards for official land use policies. The activities are located all over, with any empty space being utilised as an operational base.

A major side effect of this has been unpleasant physical environment, difficulty of managing waste generated by the sector and pollution. Also they contribute to traffic hold-ups and general chaos especially in city centers.

The major challenge as these problems for physical planners has been to find ways of ordering the sector's activities within the context of other urban activity systems.

The development of informal sector can be traced to the capitalist economic structure of dependency which penetrated third world economies, concentration of resources for development in urban areas. The resultant effect is mass rural - urban migration in search of jobs in the cities.

In addition to this, they industrialisation policy of most Third World countries is base on import substitution strategy has led to the establishment of consumer goods industries that are capital intensive which requires, highly skilled labour. The strategy which was aimed at widening the employment base in urban areas has not achieved its objective but rather increased urban unemployment. The 'reserve army' as the unemployment finds outlets for subsistence in the informal sector activities. The factors responsible for the emergences of informal sector activities has been summarised by Kaltho, J. B (1986) as thus:-



Source: After Kaltho (1986)

1.1.0 STATEMENT OF RESEARCH PROBLEM AND JUSTIFICATION

The growth of informal sector economic activities is a characteristic of most Nigerian cities and cities of the developing countries in general. Efforts by various governments of these countries including Nigeria, to manage the growth and expansion of this sector through relocation nd restriction to certain areas of the city have not been successful.

The difficulty experienced by the various governments in managing the activities of this sector may be attributed to limited understanding of the nature of the informal sector activities. Research in this field has laid more emphasis on the economic aspects such as the role of the sector in income and skill generation, services rendered as well as problems faced by the enterprises.

Accordingly, policy makers are general ill-informed or ignorant of the importance of the spatial aspects of informal sector activities. They tend to see every case of informal sector growth in urban areas as an index of progress and good development. But planners are aware that this also leads to disuse and destruction of a great proportion of the land use, aesthetics, and environment of many cities in the Third World.

Planners have recognised that an increasing proportion of urban informal activities are occurring today. Turner (1970) described it as spontaneous growth in totally implanned ways, beyond the control of the authorities.

Wilnston and Werner (1976) stated that "the greatest challenge faced by modern city planning is the identification and articulation of planning objectives, hand in hand with improved means of attaining them".

Locational characteristics, space requirement and the consequencies of informal sector activities for the environment, urban management and planning controls are neglected. These need to be investigated for a better understanding and for formulation of effective planning policies.

Abuja the new federal capital of Nigeria has been witnessing mass influx of people from all parts of the country since it creation in 1976 due to the massive construction activities. The mater plan for Abuja was prepared and completed in 1980. Proposals were made for allocation of lands and construction for various economic activities including the informal sector activities within the employment areas and commercial centers of the city.

However, within the commercial centers and employment areas so far developed, there is no allocation made for the informal sector enterprises.

The effects of the neglect of this sector is proliferation of the activities along some streets, in open spaces and within the commercial centers; haphazard locatio and mixing with other land uses; environmental pollution and lack of organisation even where every cluster.

Present planning action toward the sector especially the auto-mechanics, carpentry and wood works, metal works, canteens, is moving them away from the city center to outskirts where development has not reached and where no facilities and services necessary for their operation are available. Any time developments reach the place so allocated they are again moved further away. This is not an appropriate planning action as it is neither economically justified now is it in the interest of orderly physical development of the city.

The recent Federal government policies of provision of employment for one million people in all the states and Abuja, the National Directorate of employment programme, the loan schemes from people bank and other commercial and community banks are aimed at providing employment in the informal sector economic activities. Planners must be willing to accommodate and adequately in-cooperate the informal sector accuanic activities into urban areas plans. There is need, therefore, for effective physical planning for accommodation of the informal sector activities in the subsequent development of the city. This involves controlling their locations, provide conducive atmosphere for their existence and curb their negative effects on the environment for a heathy working and living environment.

1.3.0 AIM AND OBJECTIVE

1.3.1 The aim:

The aim of the research is to examine the operational characteristics of the informal sector enterprises and their effects on the environment as it relates to planning and development of Abuja. This will form the basis for formulating effective planning proposals.

1.3.2 Objectives

The aim will be achieved through the following objectives:-

a) To discuss the concept and global characteristics of the informal sector as well as the pattern of land use associated with it.

b) To examine the general operational characteristics of the informal sector and the effects on the environment in Nigerian cities with particular reference to Abuja.

c) To examine the Abuja master plan proposals for the informal sector as well as the existing planning policies and actions.

d) To identify the locational principles and space requirements of the informal sector enterprises.

e) To make physical planning proposals for informal sector enterprises in Abuja and recommend strategies for implementation.

1.4.0 SCOPE AND LIMITATION

The issue of informal sector activities are very broad, multi-dimensional and cuts across various professional interest. For instance, the sociologist, geographer, economist, planner etc. view the sector from different perspectives that range from people welfare, to production of goods and services, income and skill generation and spatial location and distribution.

This study is rather limited to the spatial characteristics and effects of the sector n the environment, i.e how the informal sector makes use of various land uses as well as its consequences for the physical environment. Urban planning and management are also investigated.

In addition only the major categories of enterprises in the sector that have serious physical planning implications interms of locational characteristics, urban management and planning control are taken into consideration.

The research addresses these and related issues using phase I of the Federal Capital city as case study.

1.5.0 METHOD OF DATA COLLECTION

The following methods were used in the collection of data. Most of the data was collected from primary sources while other from secondary sources.

i) Reconnaissance survey of informal sector enterprises was conducted to identify the various categories, locations, characteristics and problems.

ii) Field measurements to determine spaces occupied by the informal sector enterprises.

iii) Use of maps and planning reports for relevant and useful information.

iv) Administration of questionnaires:- Two sets of questionnaires were administered. One set was addressed to operators of the informal sector enterprises, the other to residents of Abuja city.

Three hundred and fifteen questionnaires were administered, one in every fifty category of enterprise in the various location; representing a 20% survey. Another set of 150 questionnaires was administered to resident representing 10% of an estimated 100,000 population.

All the questionnaires administered were collected back since they were immediately followed up. However, response to some questions by operators of the enterprises were evasive and unrealistic particularly an earnings / sales.

The data analysis was done manually percentages were then worked out as the basis of which tables, charts and graphs have been drawn.

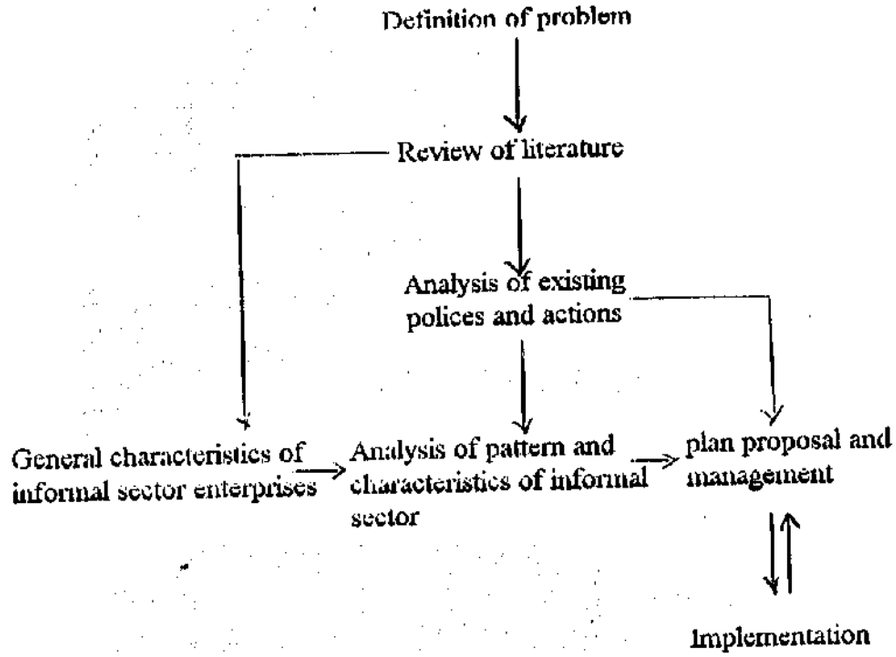
v) Informal interview with some officials of planning department F.C.D.A. Abuja environmental Protection Agency and Abuja municipal government was carried out.

vi) Field photographs of informal sector enterprises in Abuja city were taken for visual illustration.

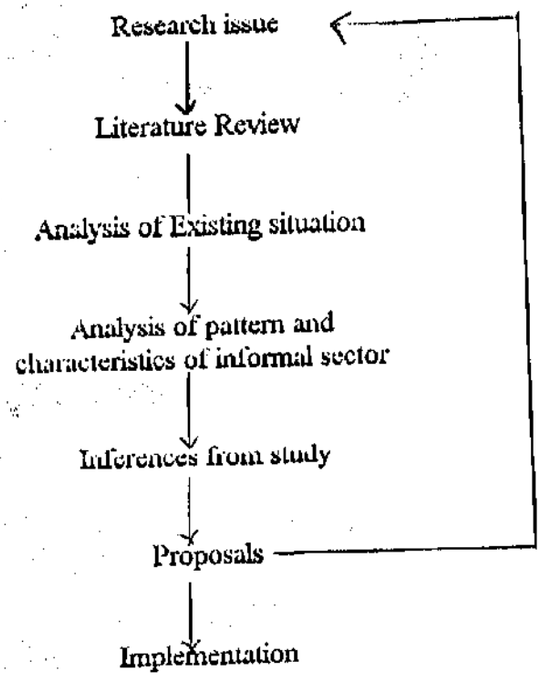
1.6.0 CONCEPTUAL FRAME WORK

The study beings with definition of the problem, then it looks into available literature on the subject. Further, the general characteristics of the sector, pattern and existing and proposed planning policies and standards will be examined with a view to draw inferences and make proposals.

Evaluation and periodic review of adapted strategy will be necessary to fine the appropriateness or otherwise and to make necessary amendments.



Thesis Structure



1.7.0 THE STUDY AREA

1.7.1 Historical background

The thought of a new federal capital was conceived, when Lagos had become a seamless web because of its multiple role as a state and federal capital. The conception of Abuja is best appreciated when its is realised that the continued retention of Lagos as the federal capital had become inpraticable, especially with its intractable traffic, housing and sanitation problem.

On August 9, 1975 a panel was set up and empowered to examine the dual role of Lagos and to recommend a suitable alternative locatio should it determine the federal capital be moved from Lagos. The panel's recommendations for the setting up of the new federal capital city at Abuja, was accepted. Therefore, the Federal Capital Development Authority (F.C.D.A), charged with the responsibility of the planning and development of Abuja was established by Decree No. 6 of 1976.

1.7.2 Location

The federal capital territory is located in the geographical center of the nation. It lies between latitudes 8o 25' N - 9o 20' W and Longitude 6o 45' and 7o 39. It occupies an area of 8,000 sq km. it is bounded to the north by Kaduna state, to the east and south east by Plateau state, to the south -west by Kogi state and to the west by Niger state.

Being centrally located, the new federal capital city, Abuja currently under construction is easily accessible for all parts of the country and indeed the principal cities of Africa. It is located to the eastern fringes of the Territory (see fig.1). The federal capital Territory is linked to the rest of Nigeria by road and air.

ABUJA IN THE NATIONAL CONTEXT

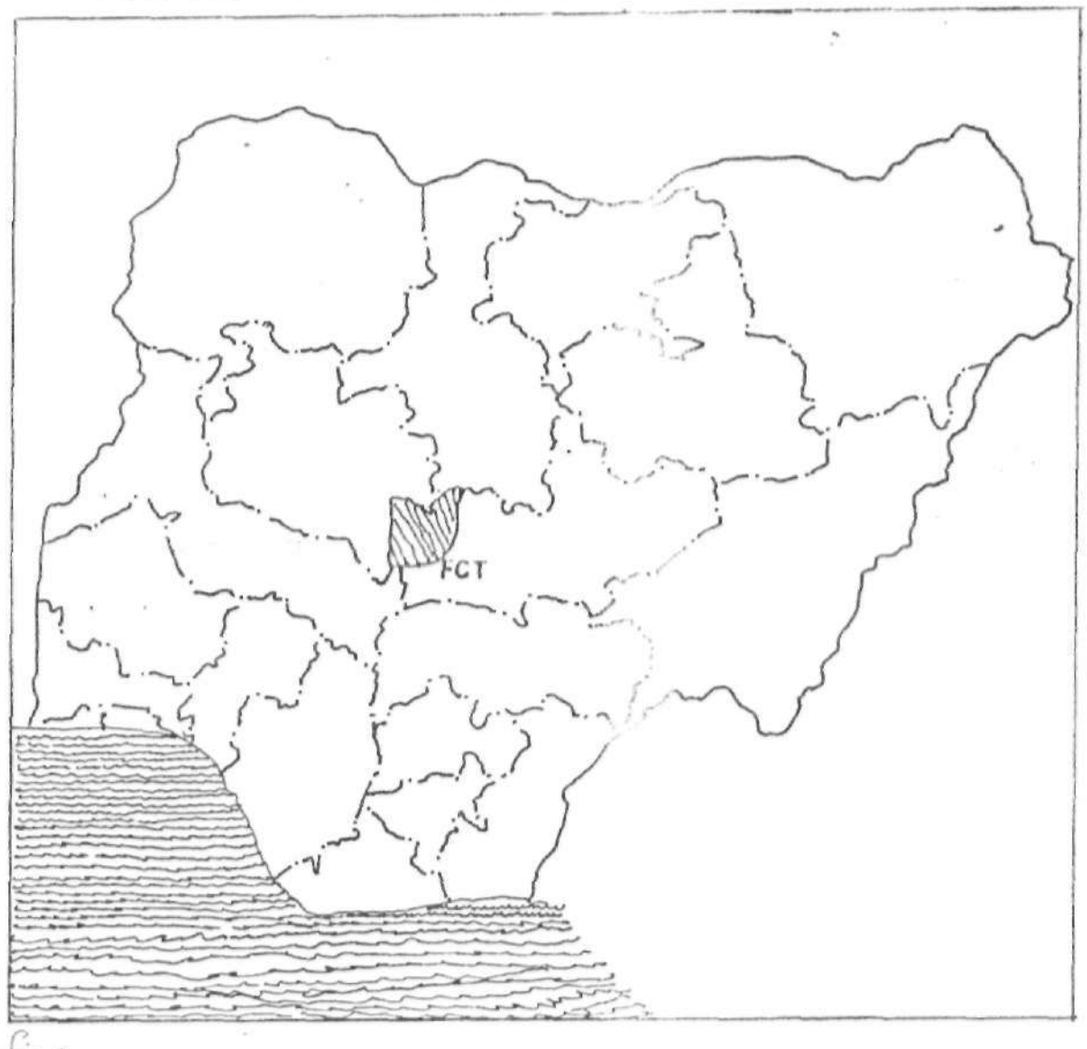


fig 1

AHMED, Z.
M.Sc. Thesis
1992/93
URP

ABUJA WITHIN THE REGIONAL CONTEXT

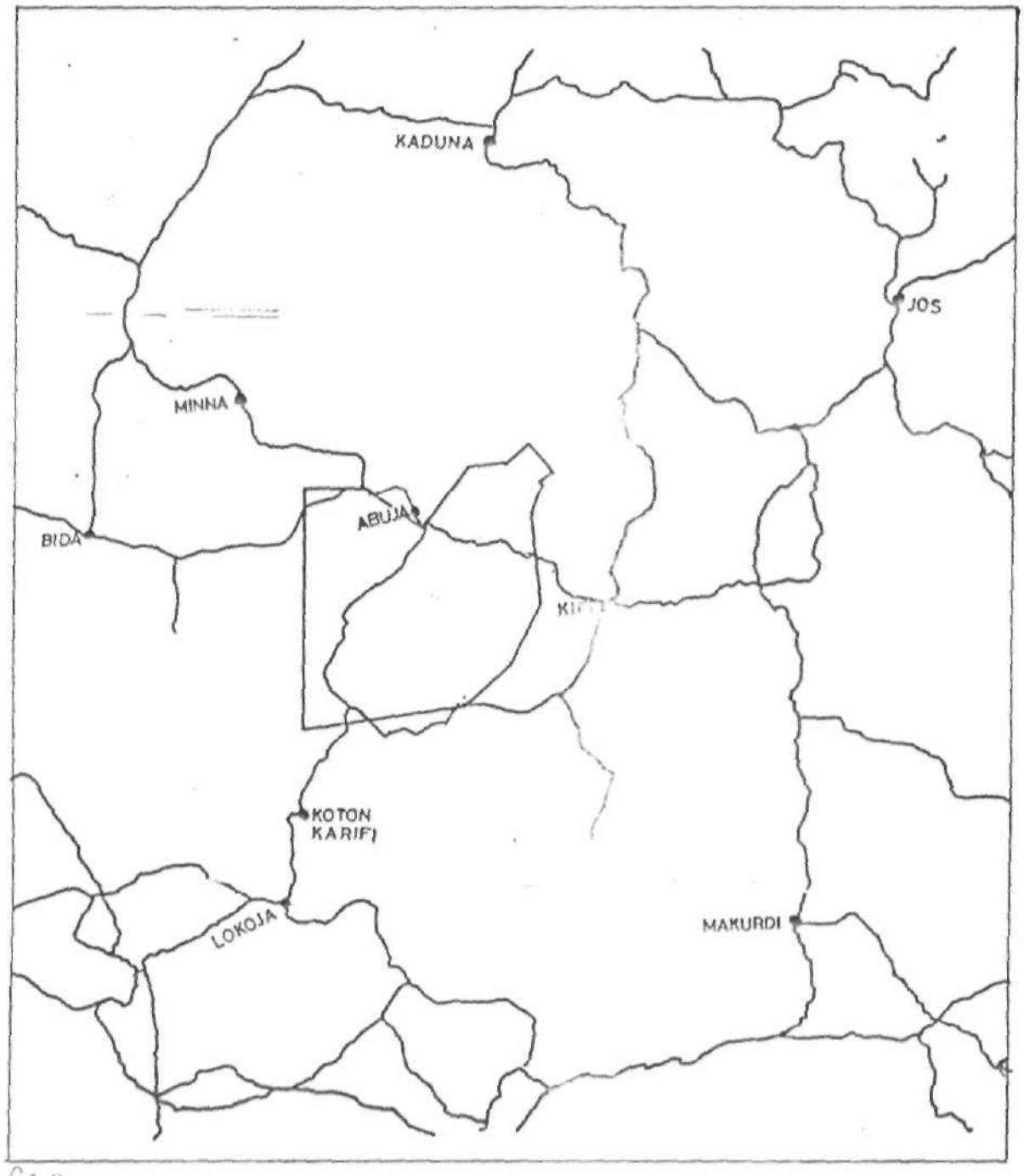


fig 2

AHMED, Z.
M Sc Thesis
1992/93
URP

1.7.3 *Planning and Design of Abuja*

The new federal capital city - Abuja has been planned and designed to achieve a target population of 1.6 million people by the year 2000. The city will grow to an ultimate size of 3.2 million people when fully developed. The master plan for the development of Abuja was completed in 1979. The principal aims of the plan are to create a most attractive environment for the national seat of government and to provide decent and health living conditions for all the city residents.

The master plan defines the broad strategy for the different phases of the city development of the new capital. The first phase to be developed covers the central areas together with four residential districts namely, Garki, Wuse, Asokoro and Maitama to the north and south which together when fully developed will accommodate a population of 230,000 inhabitants.

The comprehensive land use plan for the phase 1 of Abuja city was completed in 1980. This include the detail urban design of city phase I. In addition the general land use plan of phase II of the city has also been completed and the detailed site Development Plans and Engineering drawings are almost completed for implementation. Land use categories:- The new capital design as a viable urban environment for seat of National government and full range of supporting and complementary activities.

The macro-organisation pattern include pattern of land use and development guidelines for 500 hectres of government activities, 891 hectres of services, 486 hectres of residential land, 920 hectres, of high industry, 1,840 hectres of transport infrastructures, 561 hectres of commercial uses and 8,300 hectres of open and recreation land.

ABUJA PHASE 1 LAND USE MAP

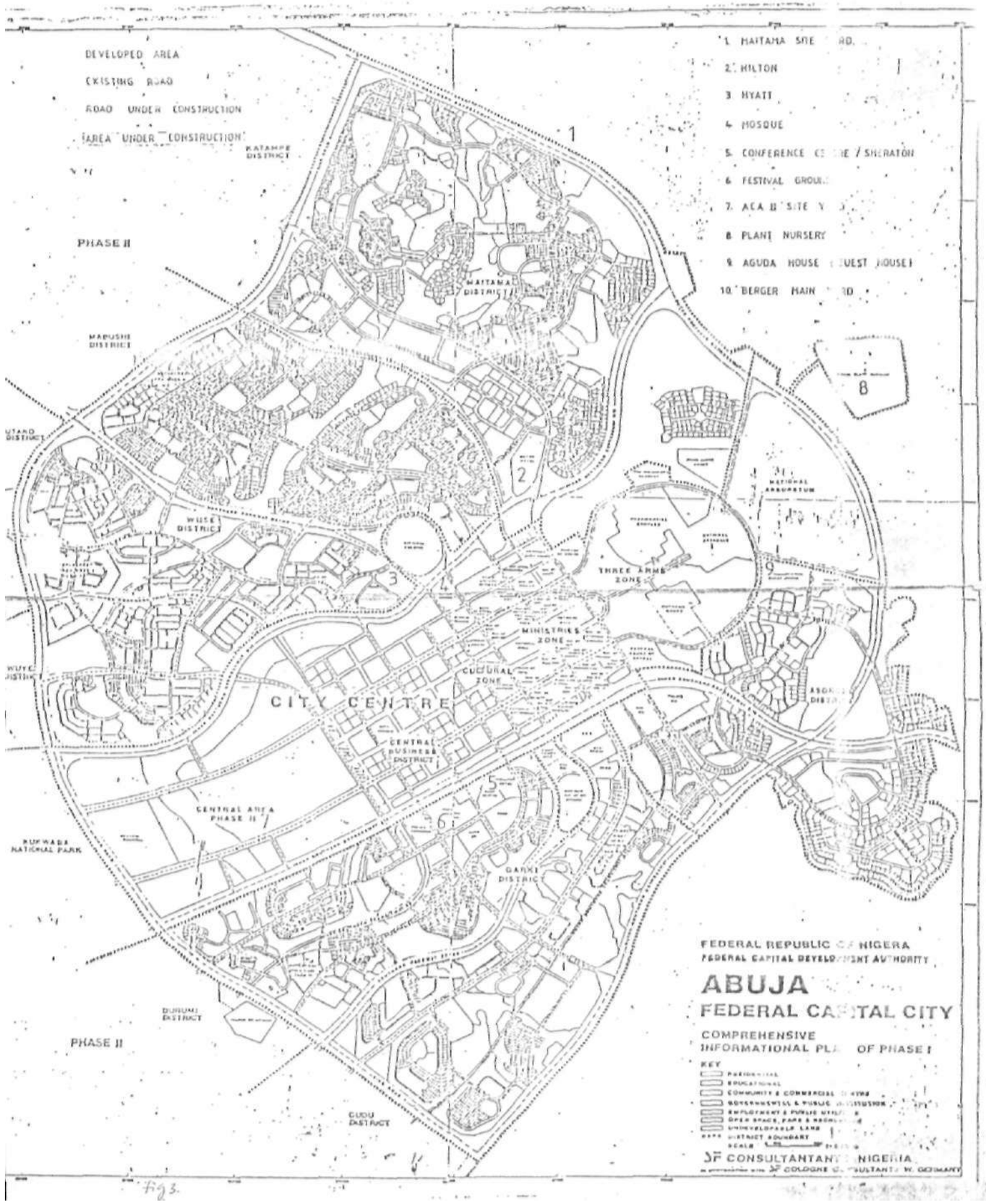


Fig 3.

20

The sector organisation consist of growth modules in the form of development sector of 200,000 - 250,000 focused on internal secondary employment center and subdivided into residentional districts. Residential district of 40,000 - 60,000 focused on a hierarchy of commercial, community and utility services and organised into a hierarchy of small-scale residential neighborhoods.

The informal employment small-scale activities assumed to occur on a dispersed basis within residential neighborhoods are also located within sector centers or dispersed in residential districts as "cottage industry and employments". The section especially the services subsector of the informal sector are related closely to household activities.

CHAPTER TWO

2.0 *THE INFORMAL SECTOR AND ITS ROLE IN URBAN DEVELOPMENT*

2.1.0 The concept of the informal sector

The term informal sector was first used by K. Hart in 1973 to refer to small scale service industries, retail trade, craft, artisans, builders. etc., who are self-employed. These are labour intensive, unskilled or semi-skilled low technology activities that serve the public in repairs and general services.

The informal sector has been defined as a heterogenous group of small producers of goods and service who exist outside the formal sector (World, Bank 1989). This sector has also been identified as being operated by the self-employed, low income entrepreneurs operating on a small scale with simple tools, small capital, few workers and with no fixed salaries and prices for their goods and services, Malkhtar, Z. (1985).

Mabogunge, (1976) Narwooo (1975), identified the sector as comprising numerous owner-operated activities such as crafts, petty trading, hawking, small scale repairs services, construction works, domestic services of various kinds, setup on an adhoc basis.

Alison MacEven Scott (1978) described the sector as consisting of independent producers who are artisans in the traditional industries such as foot wear and clothing, leather goods, carpentry and jeweller. Done, (1976), also described the sector as consisting of "the road side and empty lot mechanics, welders, leather workers making hand bags for tourists, the furniture makers, the men who collect empty cans and have them processed into serviceable oil lamps".

The informal sector activities are also a process of offering goods and or other services for sale from usurped public spaces, streets or pavements. For the purpose of this work, the Mobogunfe and

Norwooo definition will be adopted because, it express closely what the informal sector is, within the context of this study.

Accordingly, Ukpand (1987) submits that the informal sector in Nigeria, as in other developing countries encompasses all those in the urban work-force who are not employed in public sector administration or in modern industrial and commercial undertakings.

Many other terms have been used by other scholars to describe this sector. They include, the urban proletariate, the "bazaar" economy, lower "circuit" economy, subsistence, low productive urban section, unprotected sector, reserve economy of the poor. Other names are micro-enterprises, petty commodity producers, unorganised sector, marginal sector, 'traditional' sector etc.

The precise meaning given to these terms varies between authors according to their disciplined orientation, such dichotomies usually rely heavily as a distinction between wage-labour and self-employment (Singer 1970, Hart 1973). The different terms as well as the characteristics described the type of activities and the operational mode of the sector.

The informal sector covers a wide range of activities. The sector in Developed countries, however, does not have identical characteristics as those of less developed countries. The informal sector can be classified using a variety of parameters such as kinds of activities like manufacturing, services or trade and commerce. It can also be classified into primary, secondary and tertiary activities depending on types of raw materials and services used. (Refer to section 2.1.3)

In developed countries those activities without permits /licenses, unregistered enterprises etc. are considered informal. In the less developed countries, an the other hand, as was noted in chapter one, informal sector activities include retail trade, carpentry and

woodworks, metal works, mechanical and electrical repairs service, shoe repairs, catering services etc.

These activities constitute a higher percentage of the economic activities of cities and provide employment for most city dwellers and school leavers who cannot be absorbed by the formal sector.

2.1.2 *The Global characteristics of informal sector enterprises*

The described characteristics are supported by many scholars and authors including Keirth Hart, Sinclair, Scott, Maboguije, Fapohunda, Filani, Gana and also some international organisations like the United Nation Development Programme (UNDP), World Bank and the International Labour Orgarisation (ILO).

The characteristics relates to the following; scale of operations, size of capital, location / place of operation, mode of operation, entry conditions, level of organisation, intensity of labour employment etc.

The informal sector is characterised by small scale operation usually self or family-owned. They depend on indigenous resource, because the capital base is usually small, thereby limiting the scale of operation. The capital usually family owned or from personal savings therefore wages and low as a result of size of operation. There is generally an involved process of distribution and aggregation of goods.

In a study in some parts of Benue state it was found that adequate credit facilities were not available to auto-service industry as they were considered high risk by banks and other financial institutions, (Ojibo, 1990). Similarly studies by Kude 1988 and Gano 1983 on hawking also confirmed this.

Another important characteristic of enterprises in the sector is easy entry into the new enterprise because no formal education is

required. It requires only a period of apprenticeship, the apprentice gradually learns all the aspects of the trade until he is in a position to become established on his own with financial assistance from his master or family. The period of apprenticeship varies with the type of trade.

Furthermore, the sector is characterise by the ability to employ a large number of labour. In his study of urban informal sector in Africa, Setheuraman (1976), commented that substantial increase in labour force is resorting to employment in activities of the informal sector rather than staying unemployed. Studies in Togo (Demol and Jordan, 1974) showed that one-fifth of the economically active population were engaged in informal sector activities.

Another significant characteristic of this sector is locating in unregulated places. Any available empty space becomes an operational base. Transport terminals, interchange and markets, commercial and civic centers are most favoured for better access to consumers. This is confirmed by studies of various subsectors of the informal sector in Nigeria by Kude (1988), Atungwu (1985) Zubairu (1983) and Ojibo (1990).

Another locational characteristic of this sector is its tendency for spatial specialisation, that is similar activities locate in small concentrations which gives them better access to consumers and better market opportunities for their goods and services.

The informal sector is characterised by simple work places, makeshift, temporary structures or any convertible spaces parts of the house, in the shades of large trees, with no storage facilities. Such work places are not officially designated for such uses, although the operators have some times been charged some amount of money by some local government.

Occupational instability and lack of any social welfare system is a characteristic of the sector. Also, there are no fixed prices for its products; prices are negotiable. They have rough and ready method of enterprise management. Standards of technical management and book keeping are poor.

Another important characteristic of this sector is its ability to "innovate" goods are manufactured in the informal sector, using innovative techniques at a fraction of the cost of importing them. They specialised in improvising used materials and products of the formal sector to re-process into other new products at a very low production cost.

The informal sector differs from the formal sector by the level of organisation, wages, capital base, place of operation, welfare system and entry qualification. The formal sector is relatively capital intensive with high level of organisation and bureaucratic, fixed wages, permanent places of operation and formal education required for entry.

2.1.3 Types of informal sector activities

The informal sector can be broadly classified into three groups, namely

i) manufacturing

ii) Trade and commerce

iii) Services

The manufacturing sub-sector includes the following activities, furniture making and carpentry works, metal works, Bakeries, tailoring, weaving, etc. The trade and commerce include retail trade of all kinds - hawking, petty trading etc. where buying and selling is the dominant activity. The services category consists of electrical and mechanical repairs services, repair of foot wear, leather works, catering services, laundries, photography, etc. However, some of these categories may fall in more than one class. An example is carpentry works, they can manufacture furniture as

well as sale or service of used furniture. Therefore, they can fall under manufacturing, trade and commerce as well as services categories, depending on the circumstances. Bakeries also may fall in more than one group.

The informal sector activities selected for this study are:-

i) automechanics
ii) furniture and carpentry works
iii) metal works
iv) shoe repairs
v) electrical repairs
vi) food canteens.

These categories are selected because of the fact that their operational and locational characteristics pose more physical planning problems in the study areas than the other categories.

2.2 *The role of the informal sector in Urban Development*

In any city, there exist an array of economic activities and functions in which people are regularly engaged and which together constitute its engine of growth and development. There is the need to understand the characteristics of the various activities and their effect on one another, and the city as a whole. This will lead to a knowledge of the actual and potential contribution of the particular activity to the city's economy and development.

urban growth has come out as a result of complex economic, social and cultural factors. The activities of the informal sector have contributed to urban development both directly and indirectly. The contribution is both positive and negative.

The informal sector is the fastest growing sector in the Nigerian economy, thus its importance within the national economy in general and the urban economy in particular cannot be over-emphasized. Despite its socio-economic benefits to the urban areas in the

generation of income, skills, employment, goods and services, training opportunities, the activities of this sector pose some problems to the urban environment.

The negative impacts range from noise, air, soil and water pollution to poor waste disposal methods, unpleasant odor, traffic congestion, encroachment on other land uses, substandard buildings which affect the aesthetics of the environment and cause problem of urban management and control of standards.

Nihal et al (1979), noted that the sector, without obstructing the modern (formal) sector, performs important training and income generating functions for vast majority of those engaged in it. These roles are discussed in detail below.

First, employment generation. In the third world cities informal sector enterprises provide employment to a large number of people living in urban areas. Sethuraman (1976), observed that in many African countries, the informal sector provides employment to 60 - 70% of residents. Studies in Lome (Togo), in 1976 Demol and Jordan showed that one fifth of the economically active population were engaged in the informal sector activities.

Studies by the International Labour Office (ILO) in various under developed countries, including Ghana, Togo, Nigeria showed that labour force in the sector grew at the rate of 4.1% between 1962 - 1972. The World Bank report of a study in Venezuela in 1976 showed that employment in the informal sector in Caracas expanded at an annual rate of 4% between 1961 - 1974. Another report shows that in Columbia, four million people earn their living from the sector while in India the sector produced more than double the number of new jobs than the formal sector over a period of 20 years (1960 - 1980).

Furthermore, the result of study in Lagos and Kano by Maboguije and Filani (1976) and Fapohunda (1981) confirmed the high rate of employment opportunities in this sector and its capacity for absorbtion of labour.

The Third National Development plan (1975 - 80) estimated that the informal sector accounted for about 30% of the non-agricultural wage employment. In the Lagos study it was confirmed that 80% of the respondents were not interested in changing jobs and very few wanted wage employment in the formal sector, whereas in Kano 41% of all respondents did not wish to change their jobs under any conditions.

By generating employment, the sector has had a stabilising effect on the economy and social life of urban areas by quietening the people and keeps them away from the stresses of unemployment. The availability of labour tends to have a tremendous effect of urban growth by stimulating growth through providing necessary work force for the various sectors of the economy. Even where the cost of production will be low, the economy of the town will receive a boost from the contribution of the informal sector enterprises.

Furthermore, as more people are employed many more will move into the urban area to seek for jobs. This further attracts more economic activities and more housing development because the new arrivals need shelter and more working places. This helps in the spatial expansion of the urban area.

As people are employed, they earn incomes, invest their savings and spend part of it on basic requirements. This also enhances the economic base of the area for further development.

Secondly, the informal sector helps in training unskilled labour through apprenticeship schemes, workers acquire skills by working in family workshops while others gain the experience in the formal

Substantial proportion of ready-made clothing, furniture and maintenance services are provided by this sector. For example, locally-made furniture is cheaper than imported factory-made articles, but these have prestige value in developing countries (Norwood, It .C 1976).

Furthermore, the ban on importation of new machinery, spare parts, electronics, textiles etc. as well as the economic slump has led to the imposion of a maintenance culture on the people, their equipments has to be kept in good working conditions through the service provided by the informal sector.

Another area in which the informal sector -contributes to urban development is income and revenue generation. Some means of subsistence for a considerable part of the population is ensured. The income generated helps to raise the standard of living which will enhance urban growth, improvement of earnings, savings, public spending and taxation which will lead to urban development.

According to Singh, N. N. (1970) small scale industries which are part of the informal sector contribute to the development of urban areas by way of taxation. the taxable capacity of the people will increase as a result of the increase in the purchasing power of the large number of people engaged in service industries activities. These taxes will help to further broaden the tax base of the urban economy.

In addition, by responding to the genuine economic needs of the less affluent of the urban society, service industries ensure equitable distribution of the national income. At the same time, by generating primary income they provide the urban poor with the basic goods and services necessary for their performance and existence within the urban set up.

The ground or property rents, annual business premises renewal or registration fees that are charged by the city authorities is a source of revenue. This will enable the government to put up more infrastructures like roads, water and power networks. Also, if they are employed, they will contribute more effectively to the physical development of the town. Furthermore, they will be able to build better houses and more out of the city centers and thus ensuring spatial growth and order for the urban area. This was confirmed by Zubairu D. G, (1983) Atungwu (1985), and Ojibo (1990), in their various studies of some selected sub-sectors of the informal sector in some parts of Nigeria.

Studies by the ILO in 1970's and early 1980's indicated that immigrants entering the informal sector are better off interms of their income relative to their situation before migration. Herkenbery and Ramos (1979), in a study of David in the philippines found out that the bulk of the employment in the informal sector are economically efficient and profit making though small in scale and liitle in techonology.

On the other hand the effects of informal sector activities are not all positive. They also contributes negatively to the development of urban areas through construction of houses, they also introduce undersired changes in the land uses. They encroach an other land uses, such as road reservations, open spaces, etc. to build their work places or houses. The types of houses built are not up the rrequired standards as they use makeshift materials, wood, old zinc. This changes the environmental quality and aesthetics of th area. Also the low income houses they build may not be in a planned manner. They do not construct proper drainage system and the waste disposal system are generally inadequate. Consequently, the area turns into a slum.

Informal sector activities are usually associated with development of squatter settlements, because most of those involved are

migrants and cannot afford good accommodation within the city. They move to unplanned and undeveloped areas to build. Though this brings spatial expansion of the town, it serves as a shelter for criminals.

Noise, air, water and soil pollution as well as poor waste disposal, generation of unpleasant odour, streeet traffic congestion etc. are all negative impact of informal sector activities.

Vegale, (1976), stated that automobiles emits various types of deadly organic gases. Zubairu D. G. (1983) in his study of hawking in Kano revealed that delays and accidents cause by activities of hawkers are obvious and they affect almost every aspect of the city circulation network. Health and sanitation problems are readily observable though are recorded low (2.5%) and effects are not recorded for documentation. Also the negative effects on urban aesthetics are not recorded which may be attributed to lack of concern and awareness about the beauty of the environment.

Another source of pollution in urban areas by informal sector activities is the abandoning of broken down vehicles on the streeets, vacant plots, highways, the pilling up of waste materials, discarded cans, polythene bags etc. in open spaces which have detrimental effect on the environment. Vehicles abandoned on city roads and along highways is a familiar sight in Nigeria.

Due to lack of adequate statistics on the informal sector activites proper establishment of shopping requirements are vbery difficult and adequate shopping and / or service facilities cannot be provided. Therefore, they move into these centres without proper layout of shops which changes the landuse and distorts the plans of the area.

The development and expansion of the informal sector is very difficult to control. Planning for it is also difficult because it prolifirates at a very fast rate and its is set-up on and adhoc basis. Social problems cause through the activities are not easily recorded. They do not lend themselves readily to official recording.

Finally the problems of adverse effects on the city environment is rather felt and experienced than documented.

CHAPTER THREE

3.0.0 THE CHARACTERISITICS AND EFFECT OF INFORMAL SECTOR ACTIVITIES IN ABUJA CITY

This chapter discuses the characteristics of selected informal sector enterprises based on study of Abuja. Emphasis on discussion of characteristics covers location, operational status, premises of activity, reasons for location, size of workshop, materials used in construction age of enterprises, employment size and apprenticeship, source of capital , sales and earnings, category of beneficiaries, nature of assistance from Government. Other characteristics discused also include types of services provided to the operators by government, rents charged by authorities etc.

3.1.0 Appraisal of existing land use in Abuja (Phase I)

The existing landuse structure follows largely the proposals of the master plan prepared by IPA in 1978. Experience in Development control in Abuja shows that the town is witnessing imprecedented growth in population and economics activities; indeed much faster than what has been envisaged by the master plan. Conclusively, the implementation of the plan is much slower that what has been proposed. Infact developmnet is much faster than plan implementation.

The first phase of the city development has been zoned into four residential districts organised around the cenral area (CBD). In each of the districts there is porposal for a district centre to accommodate health cenre, police station, fire station, post office, shopping centre, secondary school, informal employment centre.

Further, at lower level of a district neighbourhood centres are proposed with similar facilities at lower level to serve neighbourhood. The key to sector, district and neighbourhood organisation is the hierachy of service and facility systems.

The sector is planned to be sustantially self-contained with respect to service system containing concentrations of formal commerical and governmnetal employment, along with the higher level public services. Community services are administered in each sector. Each service unit it to be supported by local facilities at district and in some cases at neighbourhood level.

The residential land use is a mxiture of low, medium and high density and there is strict pertition of land use into commercial, residential and institution. As a result of the slow pace of implementation of the plan and pressure of land and existing facilities the informal sector has been pushed out ofthe areas they are supposed to be accommodated. Hence the prolifivation of informal sector activities in a disorderly and uncontrolled manner within the city.

3.1.3 PHYSICAL CHARACTERISTICS AND EFFECTS OF THE INFORMAL SECTOR ACTIVITIES

The characteristics of informal sector establishments in Abuja are not very different from those of other parts of the country. A number of the characteristics have some impact on the environment which will be the focus of this analysis.

Informal sector activities consist of various categories, including retail trade, mechanical and associated works, electrial and electronic repair services, carpentry and woodworks, metal works, food canteens, shoe repairs, tailoring services, barbing and hair dressing etc. The Categories of informal sector that pose major threat to the environmental will be considered.

Of the selected informal sector activities, retail trade constitues the greateest number (47.0%). This is followed by mechanical (23.8%) food canteens, (14%), show repairs and electrical repairs (4.8%), carpentry and wood works (3.5%) and metal works (1.6%). These are detailed out in table 1.

Table I: Composition of informal sector enterprises (surveyed)

	Retial trade	Mech.	Elect	Carpentry /wood work	Food Canteen	Shoe Repair	Metal Work	Total
No	750	375	75	52	218	75	15	1560
Sample Size	150	75	15	11	44	15	5	315
%	47.6	23.8	4.8	3.5	14	4.8	1.6	100%

The survey also showed that reatil trade are concentrated more in institutional centres transport terminals and commerical cenres. Mechanical repairs and associated works concentrate in Garki village, Phase II. Shoe reapirs service are scattered within commercial centres and transport terminals. This pattern of concentrations may be due to availability of land and nature of the activities. (see Table 2 and fig. 1)

Table 2: Distribution of Enterprise by Activity.

	Manufacturing	*Trade & comm.*	*Services*
Total No.	67	750	743
Sample size	16	150	315
%	5.1	47.6	47.3

NB

The number of retail trade exclude hawkers who move about with their goods and those that operate inthe evenings only.

Source: filed survey (1990)

The informal sector activities have the tendency of concentrating in particular areas based on the category.

3.2.1 Locational characteristics

The locational characteristics of the sector will be examined in terms of pattern of location, premises, of operation, size of workshops, reasons for location, preffered location, storage facilites available, site organisation etc.

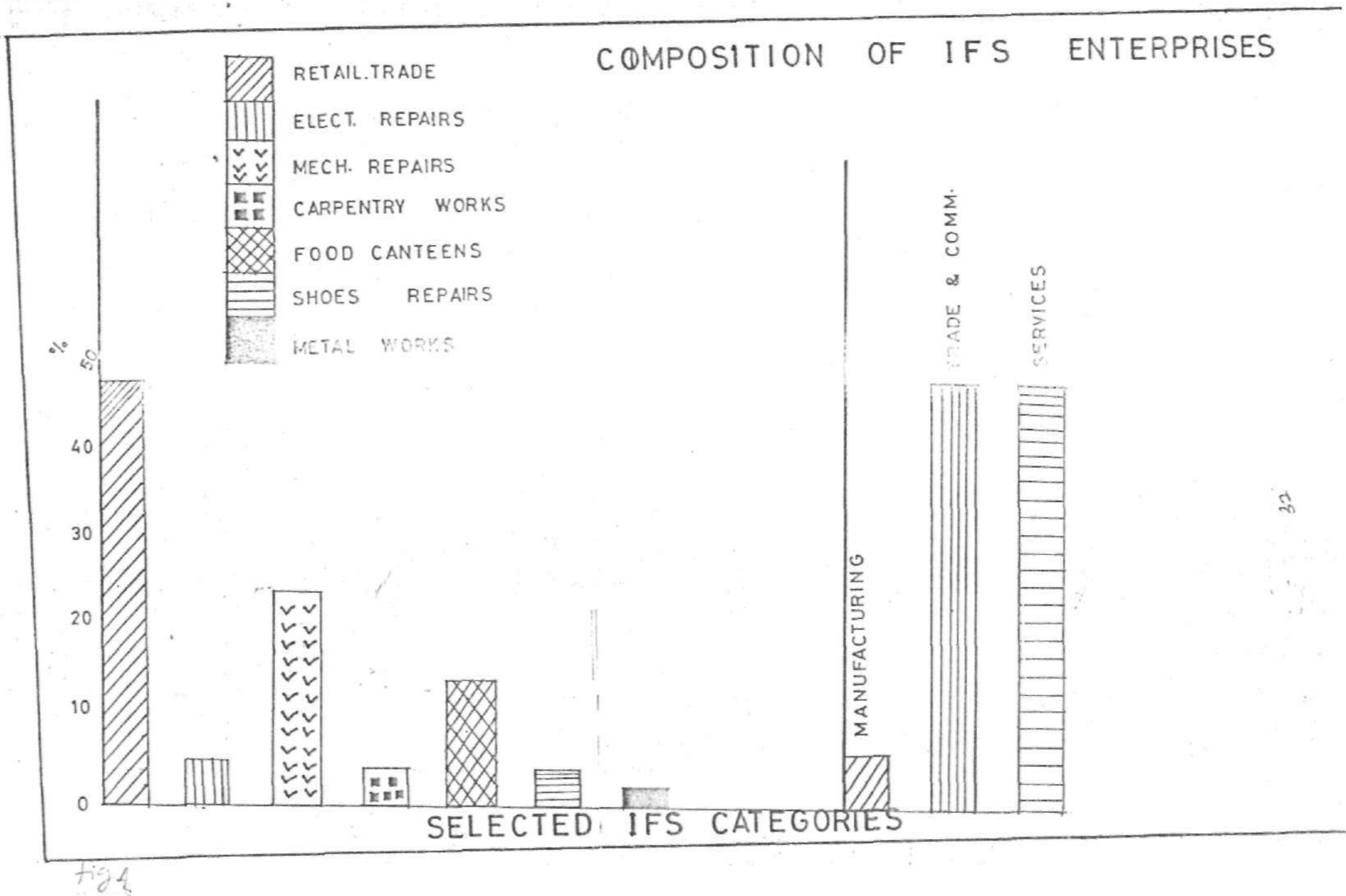
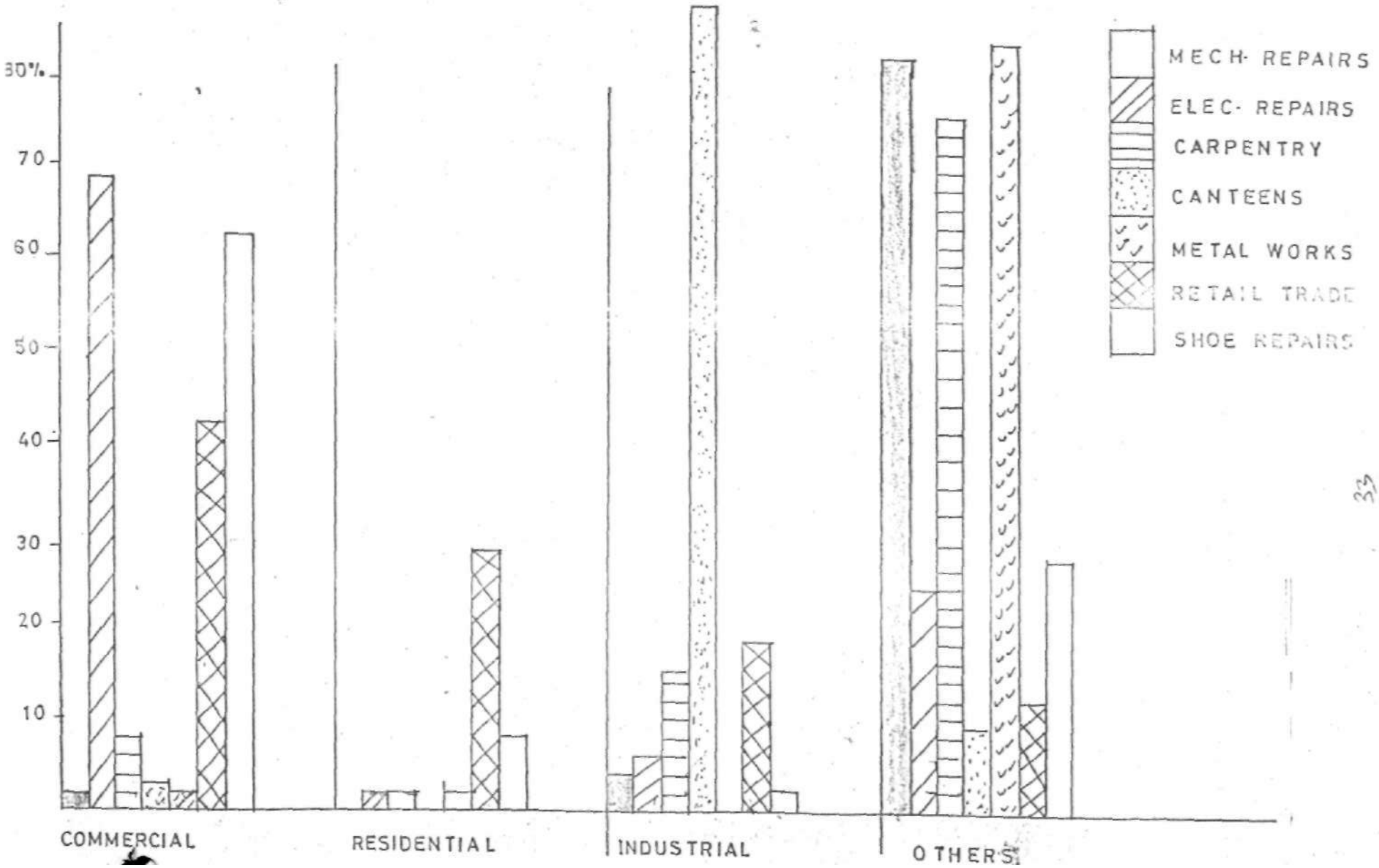

COMPOSITION OF IFS ENTERPRISES
RETAIL TRADE
ELECT. REPAIRS
MECH. REPAIRS
CARPENTRY WORKS
FOOD CANTEENS
SHOES REPAIRS
METAL WORKS
%
50
40
30
20
10
0
MANUFACTURING
TRADE & COMM.
SERVICES
SELECTED IFS CATEGORIES

fig 1

LAND USE ASSOCIATED WITH INFORMAL SECTOR



33

fig 5

The informal sector enterprises have the tendency of concetrating in particular areas based on the category. Transport terminals, commercial areas, etc. are favoured for various reasons.

Retail trade, shoe repairs, electrical repairs operate within 10mts of the edge of the road pavements. Only few operate beyond that of the edge of the walkways or pavements.

Table 3: Location of activities

Category	D.C	NC	Garki	Phase II-IV	Others	Total
Retial trade	14	28	32	30	46	150
Mechanics	-	-	41	27	7	75
Electrical	2	8	2	-	3	15
Carpentry	-	-	7	4	-	11
Canteens	-	6	-	26	12	44
Metal works	-	-	3	2	-	5
Shoe repairs	6	9	5	2	-	15
Total	22	51	90	91	68	315
%						

Source (Field Survey 1992)

Table 4: Premises of Activity

Category	Part of the house	shop / workplace	within the house	others	Total
Retail trade	46	82	4	18	
Mech. repairs	-	66	-	9	
Elect. repairs	4	9	-	2	
Canteens	-	7	2	2	
Carpentry	2	39	-	3	
Metal works	-	5	-	-	
Shoe repairs	-	3	-	12	
Total	52	211	6	46	315
%	16.5	66.9	1.9	14.6	99.9

Source: Field Survey (1992)

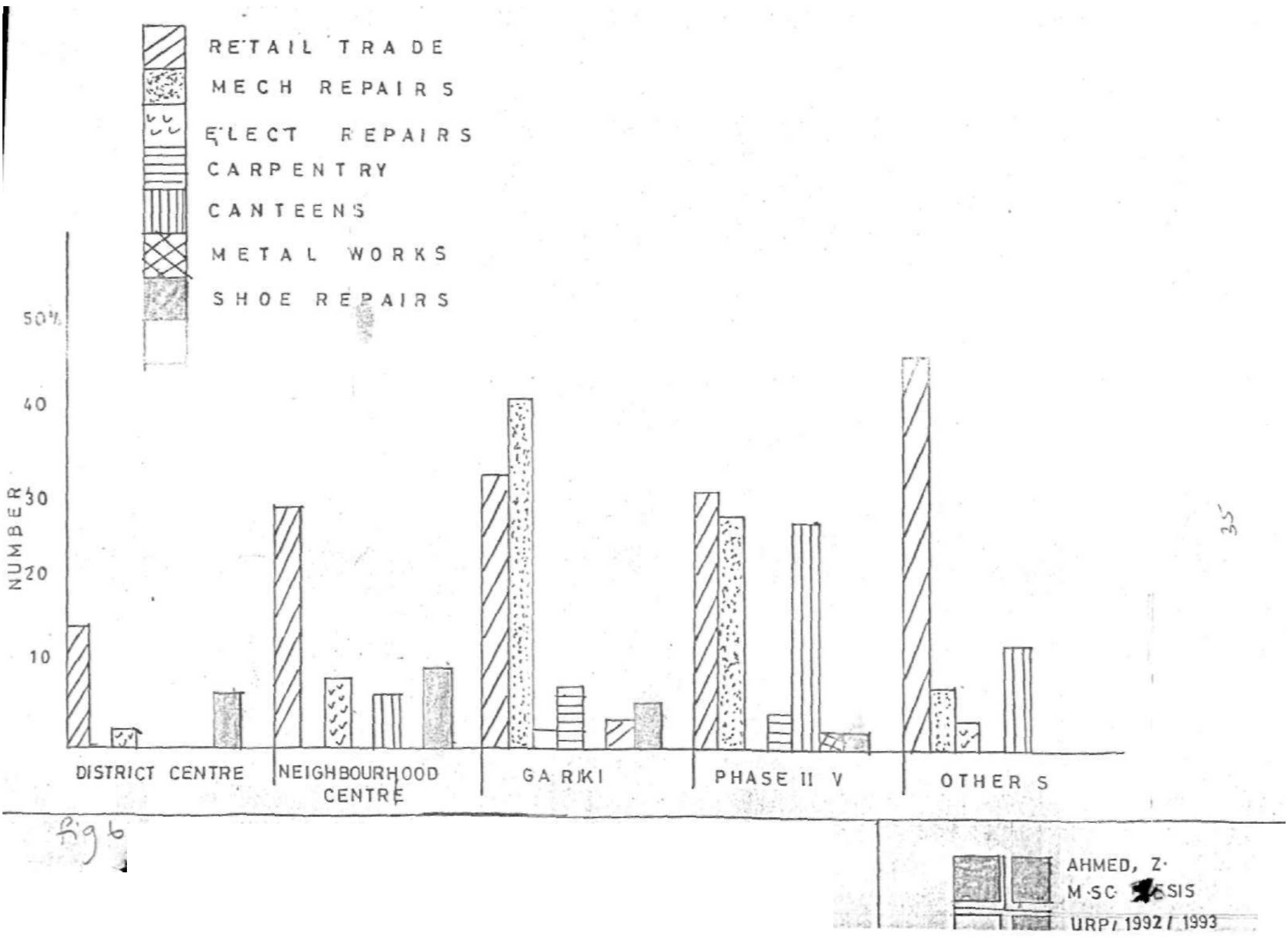

RETAIL TRADE
MECH REPAIRS
ELECT REPAIRS
CARPENTRY
CANTEENS
METAL WORKS
SHOE REPAIRS
50%
40
30
20
10
NUMBER
DISTRICT CENTRE
NEIGHBOURHOOD CENTRE
GARIKI
PHASE II V
OTHER S
AHMED, Z.
M.SC THESIS
URP/ 1992 / 1993

fig 6

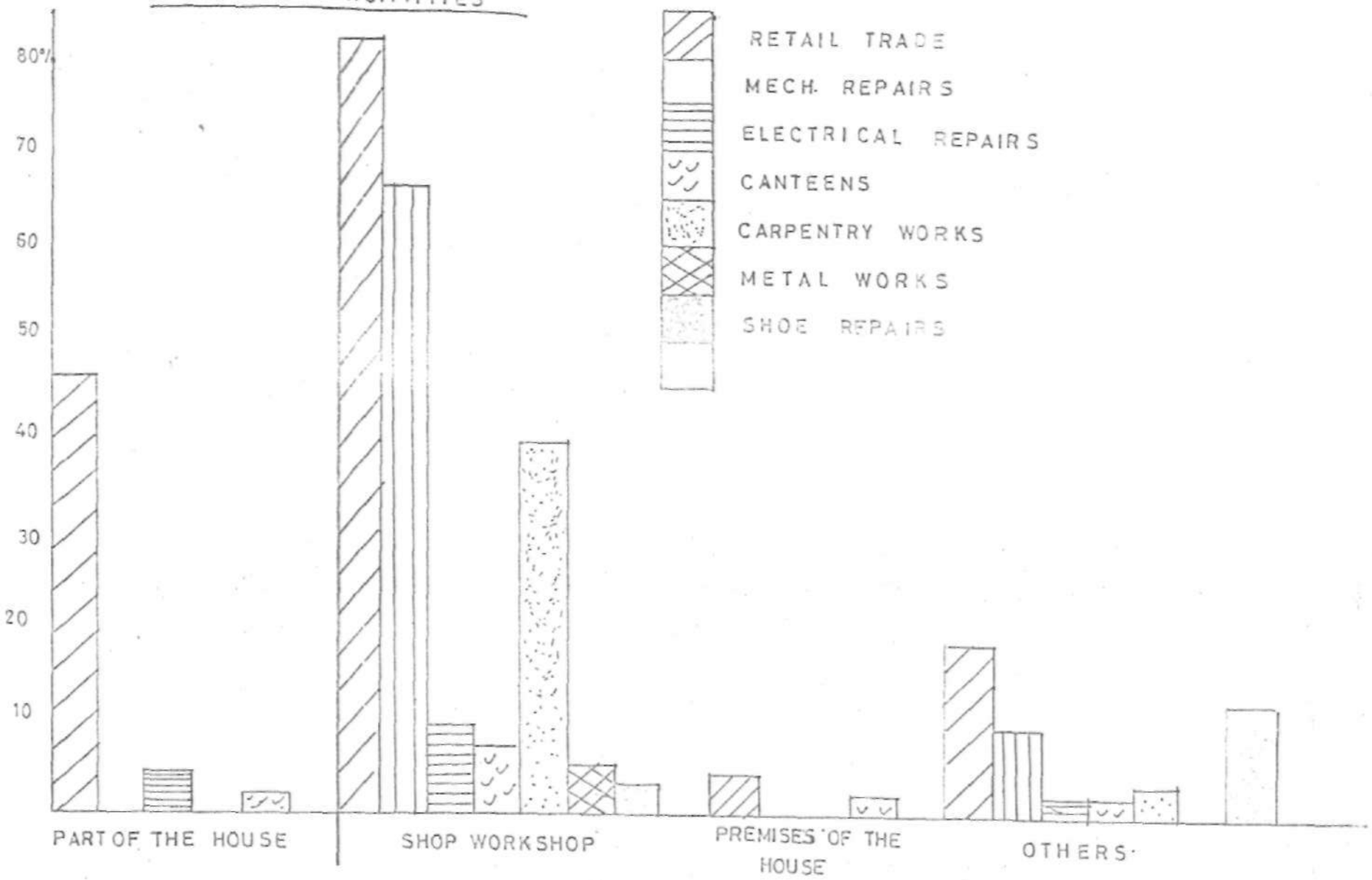

PREMISES OF ACTIVITIES
80%
70
60
50
40
30
20
10
RETAIL TRADE
MECH. REPAIRS
ELECTRICAL REPAIRS
CANTEENS
CARPENTRY WORKS
METAL WORKS
SHOE REPAIRS
PART OF THE HOUSE
SHOP WORKSHOP
PREMISES OF THE HOUSE
OTHERS

fig 7

Tables 3 and 4 show the concentration of informal sector occurs in Garki village and within phase II - IV. This might be because they are not allocatd spaces within the framework city plan. Furthermore 11.9% of the enterprises use workshops away from their residence. 16.5% use part of their house while 14.6% use either open spaces, tree shades or movabel kicsts.

For the enterprises located within the developed areas of the city, high concentration is in other areas like pavements / side walks or roads, motor parks, petrol filling stations. Their locations is haphazard and incordinated, this why they cause problems to traffic, urban management and aesthetics.

Availability and accessibility to land and consumers of their products are the major reasons for location. The enterprises are not within planned commerical centres or employment areas. as proposed in the master plan.

Some 50% of the enterprises locate where they have access to land (see Table 6 below). About 26.0% locate for market oppotunities, so they locate in commercial and institutional areas and transport terminals. Some locate because they have no alternative but wish to move if land will be made available else where.

Table 5: Reasons for location

Reasons	No	%	Degree
Availability of land	160	51	182.9
Access to facilities	13	4.0	14.9
Market oppotunities	82	26.0	94.0
Nearness to premises	6	2.0	6.9
Other	54	17.0	61.71
Total	315	100	360

Source: Filed Survey (1992)

REASONS FOR LOCATION OF INFORMAL SECTOR ACTIVITIES

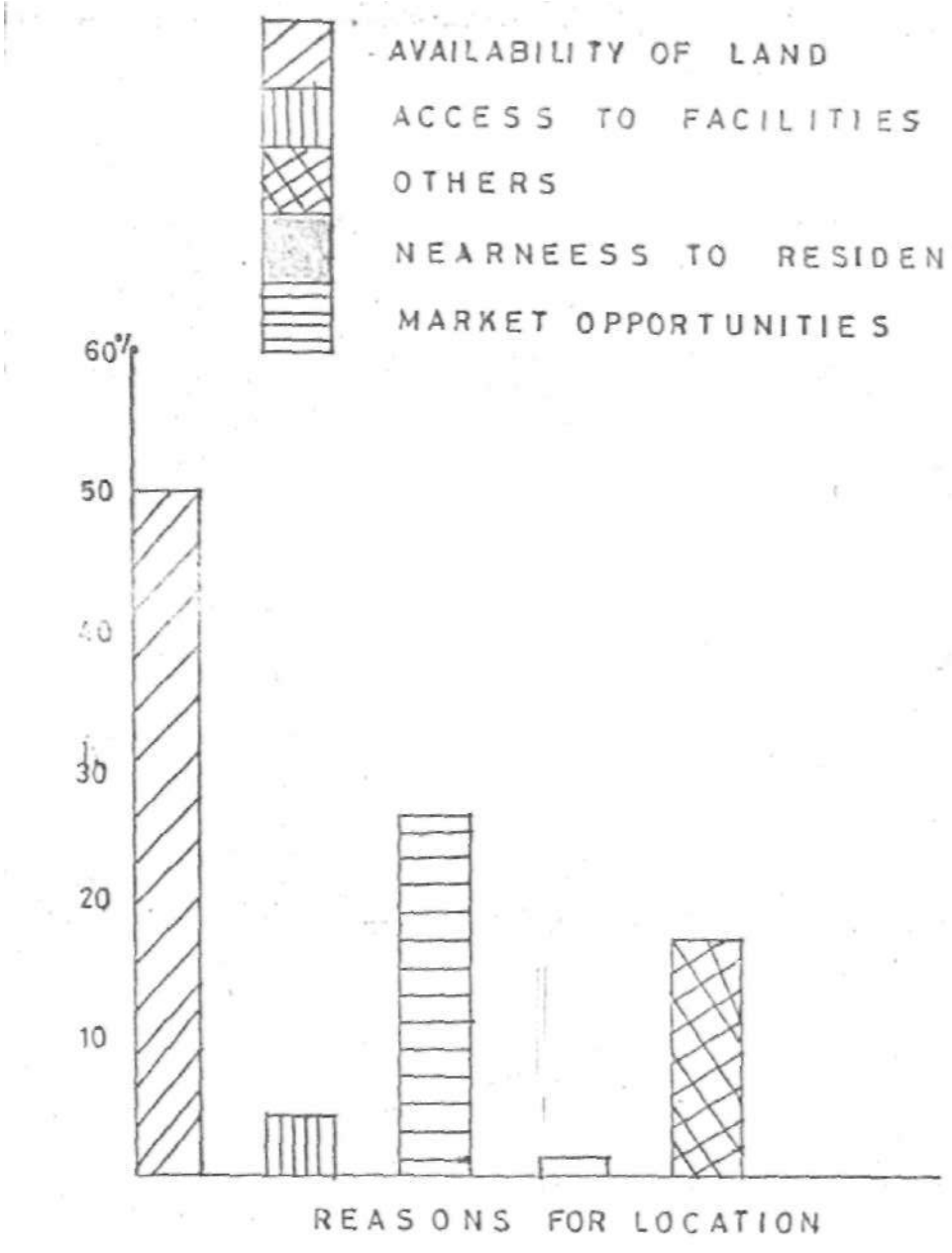


fig 8

AHMED. Z.
M.SC THESIS
URP/ 1992/ 93
ABU ZARIA

3.1.3 Size of workshops and storage facilities

The informal sector enterprises occupy small ares, they do not have facilities for storage of their goods / materials. This could be reaons why they easily establish in any space available within the city. This also explains the reasons for their encroaching on roads and adjoining land uses, causing congestion, traffic delays and accidents.

The survey revealed that these activities attract on-street parking because consumers will not move away to park for their services which results into traffic congestion. Related to this also is the lack of adequate space for displaying of their items, so the roadsides are used for that purpose.

The everage space occupied by mechanics presently is $12m^2$, this space is shared by a mechanic, spare parts sellers and a welder. On average, electrical repairs occupy $6m^2$, metal works $15m^2$, carpentry workshop $15m^2$, retail trade 2 - $3m^2$ and shoe reapirs less than $2m^2$ (see table 7 below).

Table 7: **Area of workshops**

Category	Average area occupied in m2	Adequacy (%)
Mech. repairs	12m2	42
Elect. repairs	6m2	55
Metal works	15m2	35
Carpentry works	15m2	28
Retail trade	2 - 3	48
Shoe repairs	less than 2	3
Total		

INFORMAL SECTOR ACTIVITIES UNDER TREES



TEMPORARY STRUCTURES USE BY INFORMAL SECTOR ENTERPRISE PRESENT UGLY SIGHT



INFORMAL SECTOR ACTIVITIES ON SIDE WALK AND PARKING AREAS





INFORMAL SECTOR INFRONT OF NEIGHBOURHOOD CENTRES





3.1.4 Type of Accommodation and Construction materials used:

There are basically two types of workshop accommodation for the informal sector in Abuja. These are open air where they do not have any shed covering their areas of operation. Vulcanizers, welders, most mechanics fall under this group. They work under trees, bill boards etc.

Another category is those that operate a temporary structures. Majority of the enterprises, especially metal works, carpentry workshops, electrical repairs fall under this category. However, some canteens, and retail trade have semi-permanent structures. They are those that have temporary allocations of land from the authority. They are not to put up permanent structures because they are expected to move any time the authority wishes to use the land.

Materials used for construction of workshop are commonly wood, planks, used zinc, shaft. The structure are very temporary in nature which distorts the aesthetics of the environment especially where they are located in residential or institutional areas.

3.2.0 Other characteristics of informal sector enterprises

The characteristics relate to the year of establishments of enterprises, capital investment and sources, employment size, sales and earnings of the enterprises, category of people served by the sector, nature of assistance from government, hours of operation etc.

3.2.1 Age of enterprises

Majority of the establishments were set up between 1976 - 1992, and 44.1% was set up between 1990 - 1992 (see table 8). This might not be unconnected with the movement of government to Abuja.

AGE OF IFS ENTERPRISES

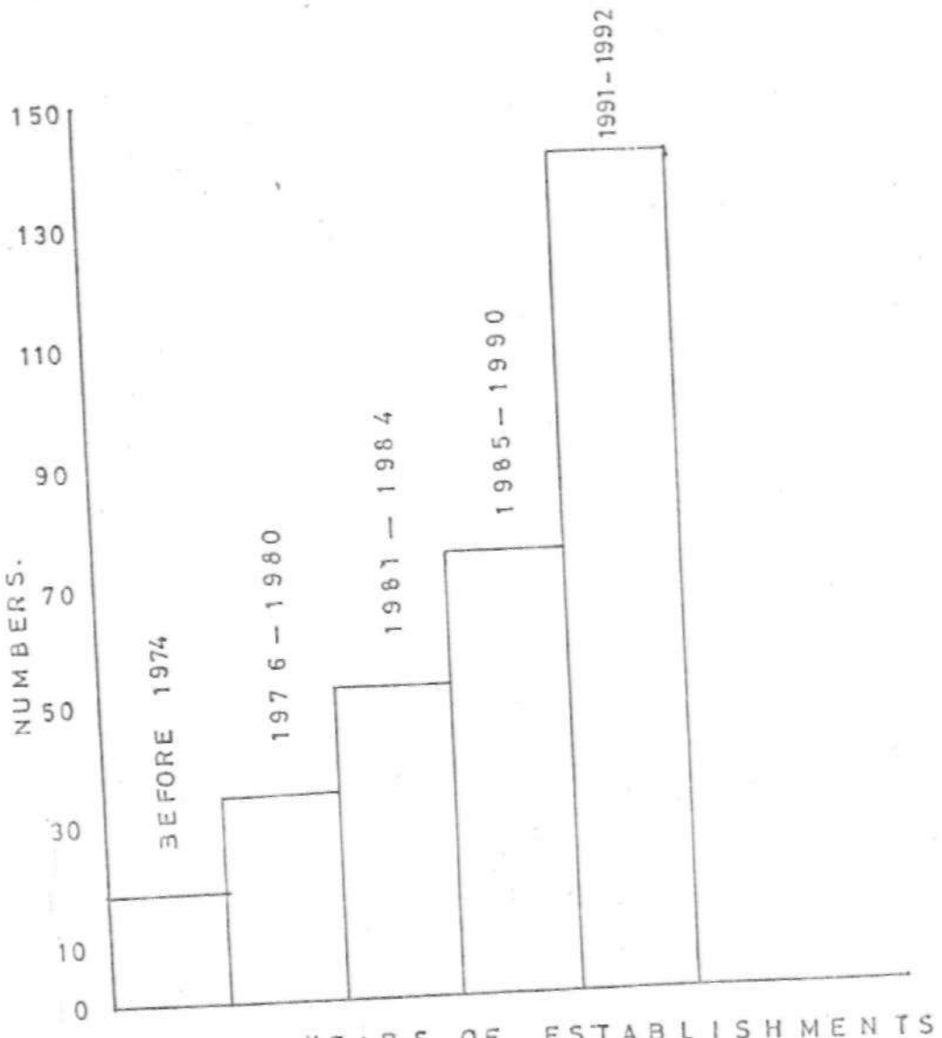


fig 9

AHMED Z
M SC THESIS
URP/1992/1993

Table 8: Age of enterprises

Year of establishment	No	%	Degrees
Before 1976	18	5.7	21
1976 - 1980	33	10.5	38
1981 - 1984	51	16.1	58.3
1985 - 1990	74	23.5	85.0
1991 - 1992	134	44.1	153.1
Total	315	999.9%	

Source: Field Survey (1992)

3.2.2 *Operational characteristics of informal sector enterprises*

Most informal sector enterprises operate on a permanent basis 71.7%, while only 2.0% operate only during the dry season. Others operate certain hours of the day i.e. in the afternoons or in the evenings only. This shows the flexibility of operation time of the sector especially the retail trade category.

The rapid increase in the enterprises will have serious effect interms of management. Ways of controlling them and reducing their effects on the environment will have to be formulated by planners and other city authorities.

With the increase of the informal sector activities overtime, they compete for space with other commercial activities, if they are not resettled within the proposed areas. The resultant effect will be more serious urban management problem, growth of unauthorised development and emergence of squatter settlement.

3.2.3 *Employment size of enterprises*

The informal sector enterprises provide employment to very few people per establishment (see table 9 & 10). They are also involved in training of apprentices who also depend mainly on the earnings from this work.

MAJOR LOCATIONS OF INFORMAL SECTOR ACTIVITIES



fig 10

The survey revealed that about 35% of the workers are employees and 65% are apprentices. The number of people employed has direct effect on the environment, the waste generated, management of the area and use of their structures. Some of them use their workshops as residents too, this leads to deterioration of the environment and pose management problem to authorities.

In areas like the federal secretariat site, Garki village, Julius Berger junction where there is the concentration of mechanical services, canteens and retail trade and correspondingly large employees and consumers, the amount of waste generated is more than anywhere else. There are no public conveniences and dust bins, therefore open spaces and back of the sheds are used as toilets, thereby polluting the environment.

Table 9: Employment structure of informal sector enterprises

Status	Number	%
Apprentice	1296	67.5
Workers	624	32.5
Total	1,921	100.0

Source: Field Survey (1992)

Table 10: Employment size of enterprises

Category	only one person	up to 3 people	4 -7	8 - 10	10 +	Total
Retail Trade	129	21	-	-	-	150
Mech repairs	-	12	53	8	2	75
Elect repairs	5	8	1	-	-	15
Carpentry work	2	3	6	-	-	11
Canteens	-	5	32	7	-	44
Metal works	-	2	3	-	-	5
Shoe repairs	15	-	-	-	2	15
Total	151	51	95	15	4	315

Source: Field Survey (1992)

EMPLOYMENT SIZE

- ONLY ONE PERSON
- UP TO 3 PERSONS
- 4 - 7 PERSONS
- 8 - 10 PERSONS
- 10 ABOVE

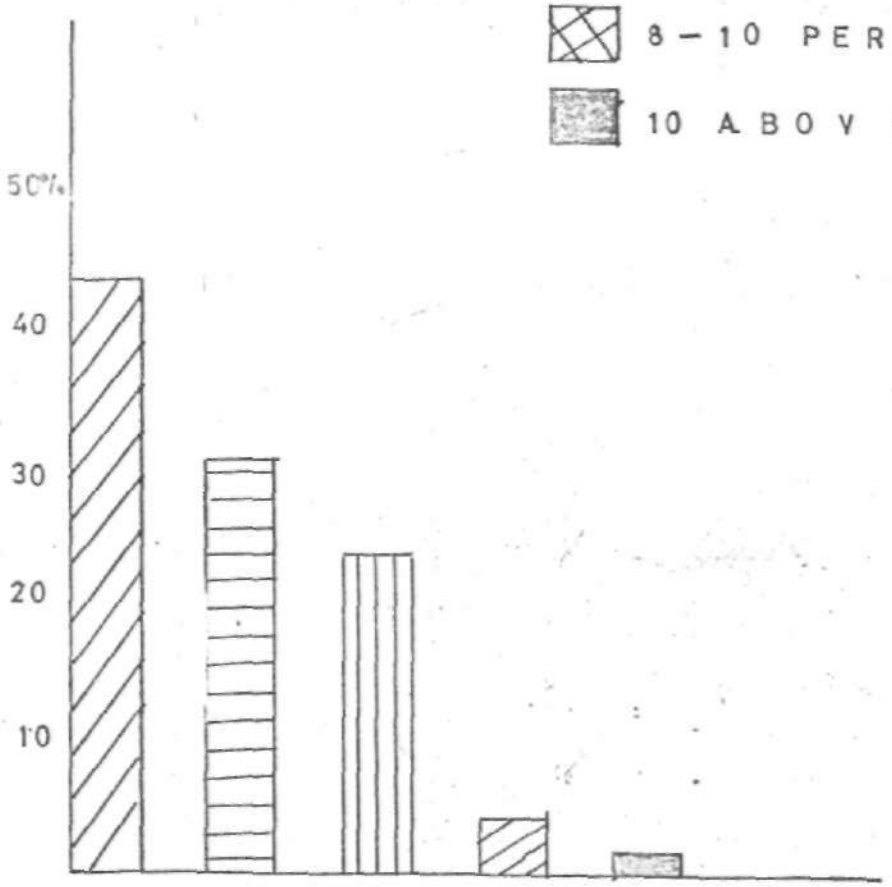


fig 11

AHMED Z.
M. SC. THESIS
URP/ 1992/ 1993

3.2.4 Source of Capital

The source of capital to informal sector enterprises is mainly from private savings and family loans or both. Very few (see Table 10) get government loan. This partly explains why their investments and operation are small and use of structures poor.

Table 11: Source of capital for informal sector enterprises

Source	No	%	Degrees
Private savings	251	79.7	287
Loans (State)	-	-	-
Loans (Family)	32	10.1	37
Govt. Subsidy	21	6.7	29
Land and soil	11	3.5	13
Total	315	100	360

Source: Field survey (1992)

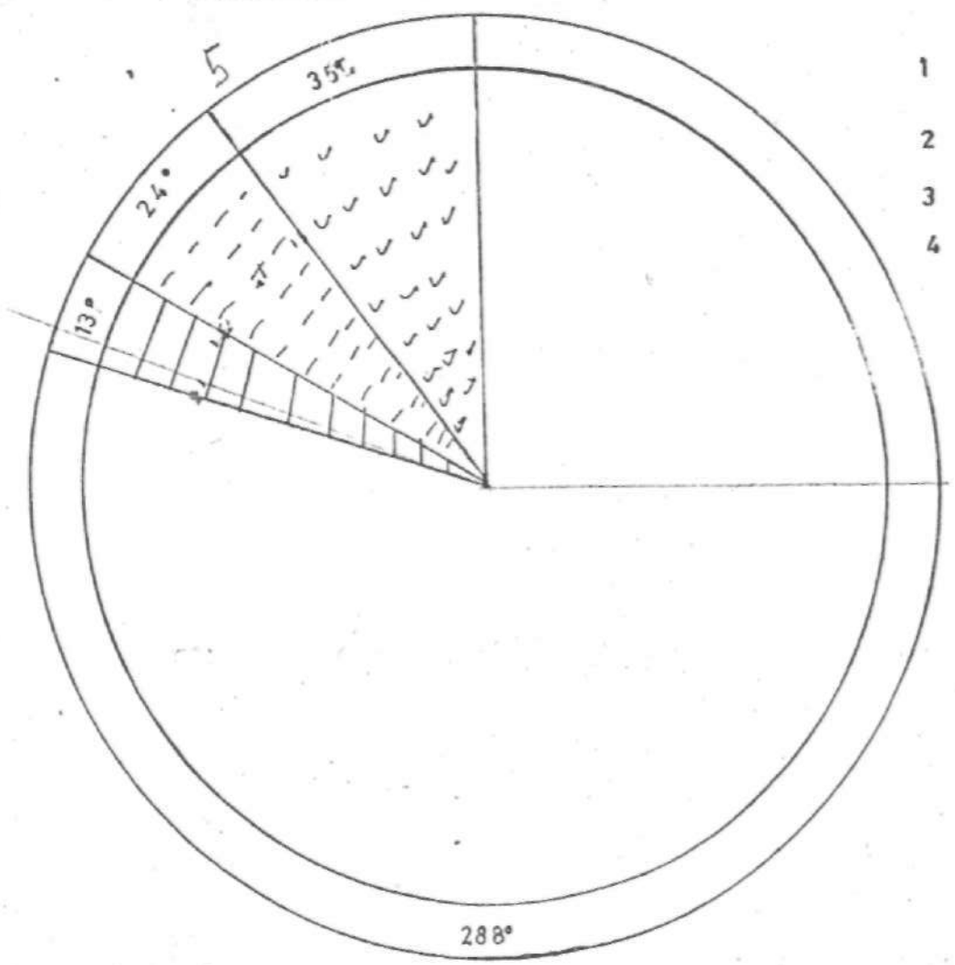
The survey also showed that the initial capital investment is small. About 62% of the enterprises started with capital base of less than N200.00. these are shoe repairs, electrical services, retail trade and mechanics. Canteens, metal works and carpentry works had their initial capital between N200 - N1,000, which constitute 18% of the enterprises.

The informal sector has limited access to government loans and subsidies, this suggest why they operate as small scale and this makes entry into the sector easy. It also explains why they prolifivate at a very fast rate and the result is more problems to urban management nd planning controls.

3.2.5 Sales / Earnings of enterprises

There is reluctance to give figures on sales and earnings for fear of tax increase consequently figures given are unrealistically low.

SOURCE OF CAPITAL



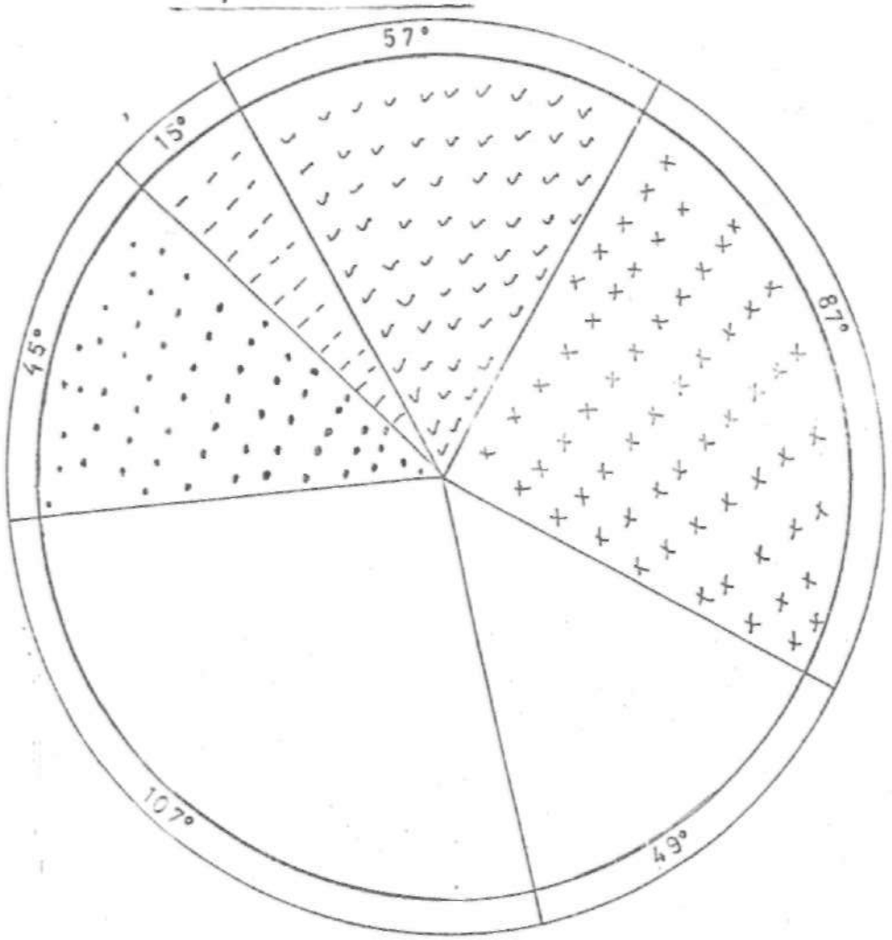
1 PRIVATE SAVINGS
2 FAMILY LOAN
3 GOVT SUBSIDY
4 ONE AND THREE

50

fig 2

AHMED, Z.
M.SC. THESIS
URP / 1992 / 1993

SALE EARNINGS OE IFS ENTER PRISES



NO ANSWER
450 — 550
351 — 450
251 — 350
LESS THAN 150
151 — 250

fig 13

AHMED, Z.
M.SC THESIS
URP/ 1992/1993
A.B.U. ZARIA

The survey of enterprises sales / earnings per month (see table 12) indicated that 13.7% earns less than N150.00, 30% earn between N151-250, only 4.1% earns up to N600.

The survey also showed that the income generated from the sector is low. The implication of this low earnings is inability of the operators to build better structures, and maintain healthy environment.

Table 12: **Sales earning of enterprises**

Amount in N	No	%	Degree
Less than N150	43	13.7	49.1
N151 - 250	94	30.0	107.4
N251 - 350	75	24.0	86.0
N351 - 450	51	16.0	58.3
N451 - 550	13	4.1	15.0
Above 550	-	-	-
No answers	39	12.4	95.0
Total	315	100	360

Source: Fiedl survey (1992)

The higher the earnings the better because they will be able to build better structure to improve the aesthetics of the environment. They will also be able to pay rent to the authorities which will enable the authority to provide infrastructure in their sites as well as maitain environmental sanitation.

3.2.6 Category of people served by informal sector enterprises

The informal sector enterprises provide products and services to most residents of the city, from government organisation to household. Since the sector is being patronised by almost every residence, it encourages their increase in number and prolifiration

which will result to creating more problems to urban management both in terms of their locations, waste generation and pollution.

On the other hand it attracts more employment, skills and revenue generation and consequently faster development of the city.

3.2.7 Assistance from Government

Very little contribution is given to the informal sector by government despite its contribution to urban development. For instance, no utilities are provided in their areas of operations (see table 13) while sites lack layout and proper drainage system. this partly explains why areas covered by the sector have poor sanitation, environmental deterioration and unpleasant sight.

Even in cases where the locations are approved by the authorities like the Julius Berger junction, federal secretariat, Area 3 on a temporary basis the required facilities are absent.

Table 13: Services from authorities

Nature of Service	Yes	No	Yes	No
Electricity	54	261	17.1	
Water	67	248	21.2	
Public transport	-	315	-	
Garbage collection	78	237	24.7	
Non	84	231	26.6	
Others (roadside)	32	283	10.1	
Total	315	1,575	997%	

Source: Field Survey (1992)

3.2.7 Rents paid to authorities by informal sector enterprises

Despite the fact that there is little attention and help received from authorities by the informal sector enterprises, the authorities collect rents and levies from them. Amount receive depends on the type of establishment.

Those establishment within Garki Village in addition to this pay some amount to the indegens of the area for the use of their land as shown in Table 14 below

Table 14: Rent paid to authorities monthly

Category	Government amount in N	Amount paid to Indegenes.
Mech repairs	N500	N150 - 200
Elect repairs	N150 - 250	N50 - 100
Metal works	N150 - 250	N150
Canteens	N250	N120
Retail trade	N50 - 150	N20
Carpentry works	N500	N150
Shoe repairs	less than 50	20

3.2.8 Educational charcteristics of informal sector operators.

The level of education of operator of informal sector enterprises shows why they cause problems to the environment and urban management. Their ability to cooperate with government in environmental management is generally low. They do not realise the importance of environmental quality and aesthetics. This suffest why their surroundings are disorganised, waste indiscriminately disposed, leading to poor environmental quality.

Most informal sector enterprise workers acquire their skills outside the formal educational system, through apprenticeship. Even those who attended primary or other schools still undergo some informal training.

EDUCATIONAL LEVEL OF INFORMAL SECTOR WORKERS

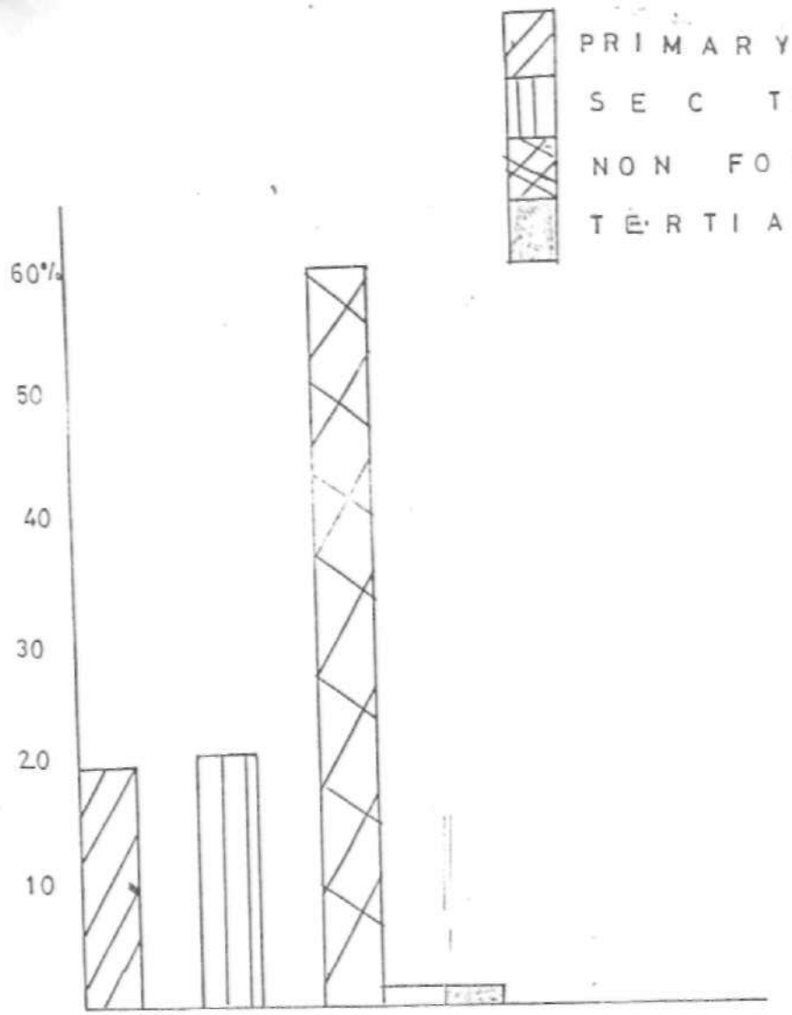


fig 14

AHMED, Z.
M.SC. THESIS
URP/1992/1233
A.B.U. ZARIA

Table 15: Educational level of informal sector workers

Category	Primary Sch.	Secondary Sch.	Non formal	Univ.	Total
Retail trade	36	6	108	-	150
Mech. repairs	18	27	30	-	75
Elect repairs	-	7	8	-	15
Canteens	3	20	21	-	5
Metal works	-	3	2	-	44
Shoe repairs	2	-	13	-	15
Carpentry	1	4	6	2	11
Total	60	65	188	2	315
%	19	20.6	59.6	0.6	99.8

Source: Field Survey (1992)

3.2.9 Reasons for coming to Abuj by informal sector operators

About 50% of the respondents indicated that they came to Abuja for economic reasons, others came for social reasons to join the families, visit friends or relatives while some came for administrative reasons (see table 16).

Table 16: Reasons for coming by workers

Reasons	No	%	Degrees
Economic	157	53	190
Social	54	18.1	65
Administrative	87	29.1	105
Total	298	100	360

Source: Field work (1992)

3.3.0 EFFECTS OF INFORMAL SECTOR ACTIVITIES ON ENVIRONMENT

The above discussion shows that the informal sector activities have direct adverse effects on the environment and the people. The

effects of informal sector activities on environment include incompatible mixed land use, traffic congestion, delays and accidents, air, water, soil and noise pollution, urban management and planning controls and general deterioration of the urban environment.

The above problems have been shown to be manifested through encroachment on right of way, adjacent land uses, waste generation, noise, air, water and soil pollution. This is more conspicuous in areas of mechanical repairs, carpentry workshop, metal works, carteens and retail trade. Used tyres, unserviceable vehicles, scraps are displayed along roads as advertisement strategy which present ugly sight. The use of side walks and road pavement reduce road width which cause traffic congestion, delays and accidents.

3.3.1 Incompatible land use

The siting of informal sector activities within residential neighborhoods, institutional areas or in commercial areas, along the roads charge the pattern of land use. Mixing of non-compatible uses creates nuisance, hazards and inconveniences e.g. the siting of canteen, carpentry workshop between residential blocks.

Many of the enterprises were found to locate indiscriminately, in front of offices, hospitals etc. The relationships with themselves, existing land uses, complimentary services are uncoordinated and unplanned. This problem is further compounded by the type of structures used by these enterprises, they are temporary in nature with old zinc, wood, shaft side by side with permanent buildings thus making such buildings aesthetically displeasing to the eye.

The above can be found in the wuse office complex, in front of the Foreign Affairs Ministry, F.C.D.A Secretariat, Federal Offices, health centers etc.

INFORMAL SECTOR ACTIVITIES WITHIN RESIDENTIAL AREAS





INFORMAL SECTOR ACTIVITIES IN INSTITUTIONAL AREAS
A CASE OF INCOMPARTIBLE LANDUSES





3.3.2 Traffic congestion, delays and accidents

The location of informal sector activities on road sides, streets, busstops, poses traffic problems. Due to lack of enough operational space, the bus stops provided infront of commercial areas have been over taken by informal sector activities, this impede free flow of vehicular and pedestrian traffic, resulting to congestions, delays and sometimes accidents.

3.3.3 Waste generation and disposal

The survey showed that waste generated by the activities of this sector included gaseous (fumes and gases), liquids (oil, fuel) and solids (paper, scraps, cans, saw dust, iron, wires) etc. The wastes generated differ with the different categories of the sector.

These waste materials are improperly disposed of some pile the waste in open space, spill them on the grand and burn. Very few have waste collection centers and waste collection vehicles are not regular, thus the waste is left scattered, which polluted the environment and present unpleasant sight.

Table 17: Waste Disposal methods

Method of Disposal	No	%
Burning	38	12.3
Dumpling in gutters	5	1.6
Storing in containers	82	26.5
Pile up in open space	106	34.0
Spilled on the grand	37	12.1
Waste collection vehicles or centers	43	13.5
Total		100%

Source: Field Survey (1992)



WASTE GENERATED BY INFORMAL SECTOR ACTIVITIES

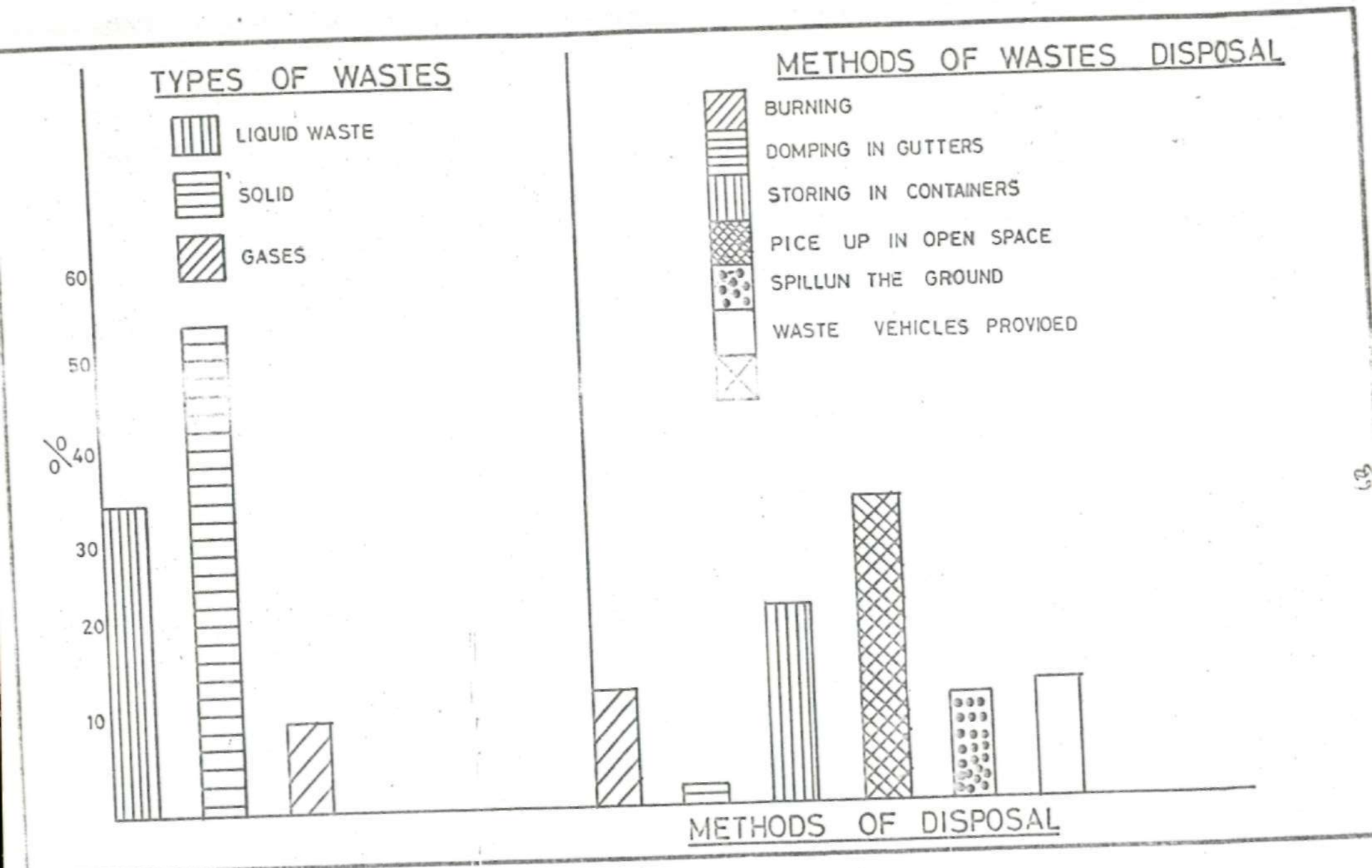

TYPES OF WASTES
LIQUID WASTE
SOLID
GASES
60
50
%40
30
20
10
METHODS OF WASTES DISPOSAL
BURNING
DOMPING IN GUTTERS
STORING IN CONTAINERS
PICE UP IN OPEN SPACE
SPILLUN THE GROUND
WASTE VEHICLES PROVIDED
METHODS OF DISPOSAL

fig 15

Six main method or ways of disposing waste were observed from the survey. The most common practice is piling up in the open space (34%, followed by storing in containers (26.5%) burning (13.3%) spilling on the grand 12.3%, collection by waste vehicles 13.5 and 1.6% by dumping on the gutters.

Piling up in open space and spilling on the grand is more associated with retail trade, automachanical repairs and shoe repairs while storing in containers is found in canteens, burning in mostly associates with carpentry works.

Liquid waste which are inform of waste water, fuels and oils used mostly found in mechanical works. These liquids are disposed of their either by smearing on the grand around the workshop premises, near by areas or by draining into nearby gutters or drainage lines.

The resultant effects of this waste disposal methods is unhealthy and environmental deterioration which cause management problems to city authorities.

3.3.4 Pollution

There is no measure used to determine the level of noise and air pollution caused by the informal sector activities, the fact still remains that noise from saw mills, crashing of metals, panel beating, fumes, produce from various activities, dust, burning of waste etc. cause environmental pollution.

The gases / fumes produced by burning of waste, used tyres, reduces visibility on roads, irritate the eyes cause accidents. Noxious gases produced from the burning of these waste make the surrounding environment unhealthy and unsafe for human inhalation, because they can cause respiratory diseases for residents.

The disposal of fuels, oils on the grand, gutters, ditches also cause water pollution because this waste ultionately finds its way into the ground to pollute the ground water or into streams that are source of drinking water for some communities.

Furthermore, it was found out from the survey that, as a result of pouring waste fuels water on the grand areas of operations of most of these activities especially canteens, mechanics, the surface is turned black which reduced the aesthetic quality of the area. Also related to this is the dumping of waste in gutters and drainage lines which stops the waste water from flowing freely, this leads to fowl smell, untidy environment and pollution.

The display of condemned tyres, tanks, unserviceable fans, refrigerators, radio on roads, sidewalks, under tress by vulcanizers, metal workers, electrical repairs reduced the aesthetics of the environment, present ugly sight and cause management problems.

3.4.0 RESIDENTS' IMPRESSION OF INFORMAL SECTOR

This section reports the findings from the interview of resident on how often they patronize the informal sector enterprises and reason(s) for doing that. It also reports their suggestions on how the sector can be improved or integrated into the city plans and if their integration into the city plan is acceptable.

3.4.1 Shopping trips to service centers

From the tables below (18a & 18b) it is observed that residents patronize open markets, retail traders, road side mechanical and electrical services more frequently than the organised sector. This explains why the informal sector flurish well.

TRIPS TO SERVICE CENTRE





fig 16a

AHMED, Z.
M.SC. THESIS
URP/1992/1993
A.B.U. ZARIA.

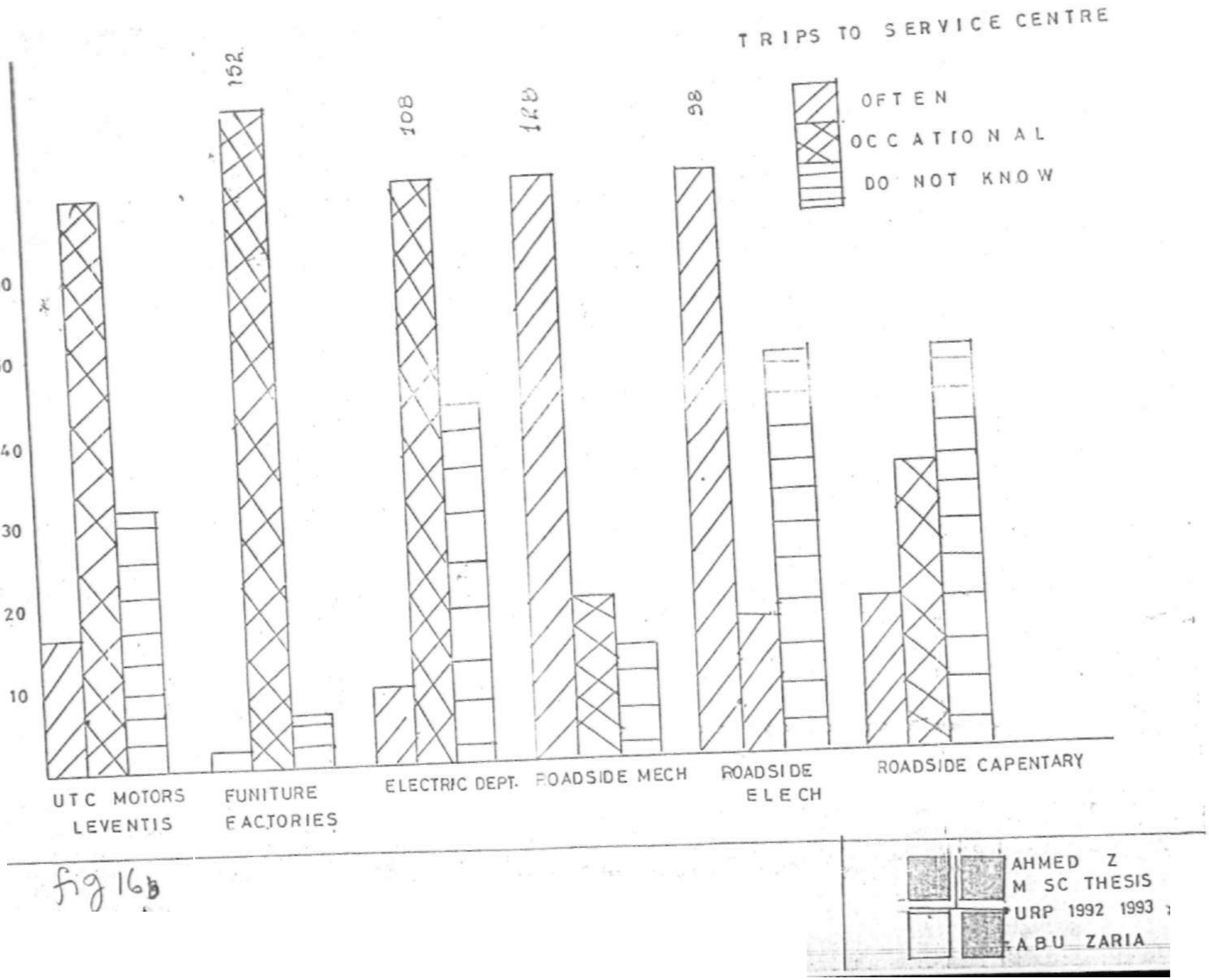

TRIPS TO SERVICE CENTRE
OFTEN
OCCATIONAL
DO NOT KNOW
152
108
128
98
80
60
50
40
30
20
10
UTC MOTORS LEVENTIS
FUNITURE FACTORIES
ELECTRIC DEPT.
ROADSIDE MECH
ROADSIDE ELECH
ROADSIDE CAPENTARY
AHMED Z
M SC THESIS
URP 1992 1993
ABU ZARIA

fig 16b

Table 18 Shopping trips

	Super mkt. No.	%	Shopping No center	%	Open mkt. No.	%	Road side No.	%
Occasionally	33	7.0	28	64	7	12	13	22
Daily	2	4.3	5	11.4	14	24	26	45
Weekly	2	4.3	32	5	32	55	16	28
Forthnightly	9	19	6	13.6	5	8.6	3	5.1
Monthly	2	4.3	3	7.0	-	-	-	-
Total	47	100	44	100	58	100	58	100

Table 18b: Trips to Service centers

	UTC / Leventis motors	Furniture factory	Electrical Dept. store	Roadside mech.	Roadside elect.	Roadside carpentry work
Often	16	2	9	128	98	18
Occasional	78	152	108	19	16	34
Do not know	33	6	43	13	46	48
Total	127	160	160	160	160	100

3.4.2 Satisfaction of Residents with existing shopping centers

From the survey, it was established that the existing shopping centers is not adequate, and does not satisfy the residents with all their requirement.

Out of the respondents, 48% indicated that the available, centres are only partly adequate 37.9% stated that they are not adequate at all while only 14% feel they are adequate. The result indicated that 86% are not satisfied with the existing centers, is an indication of reasons for patronizing the informal sector which will encourage their operation irrespective of their location and impact on the environment and urban management problems.

SATISFACTION OF RESIDENTS TO EXISTING FACILITIES.

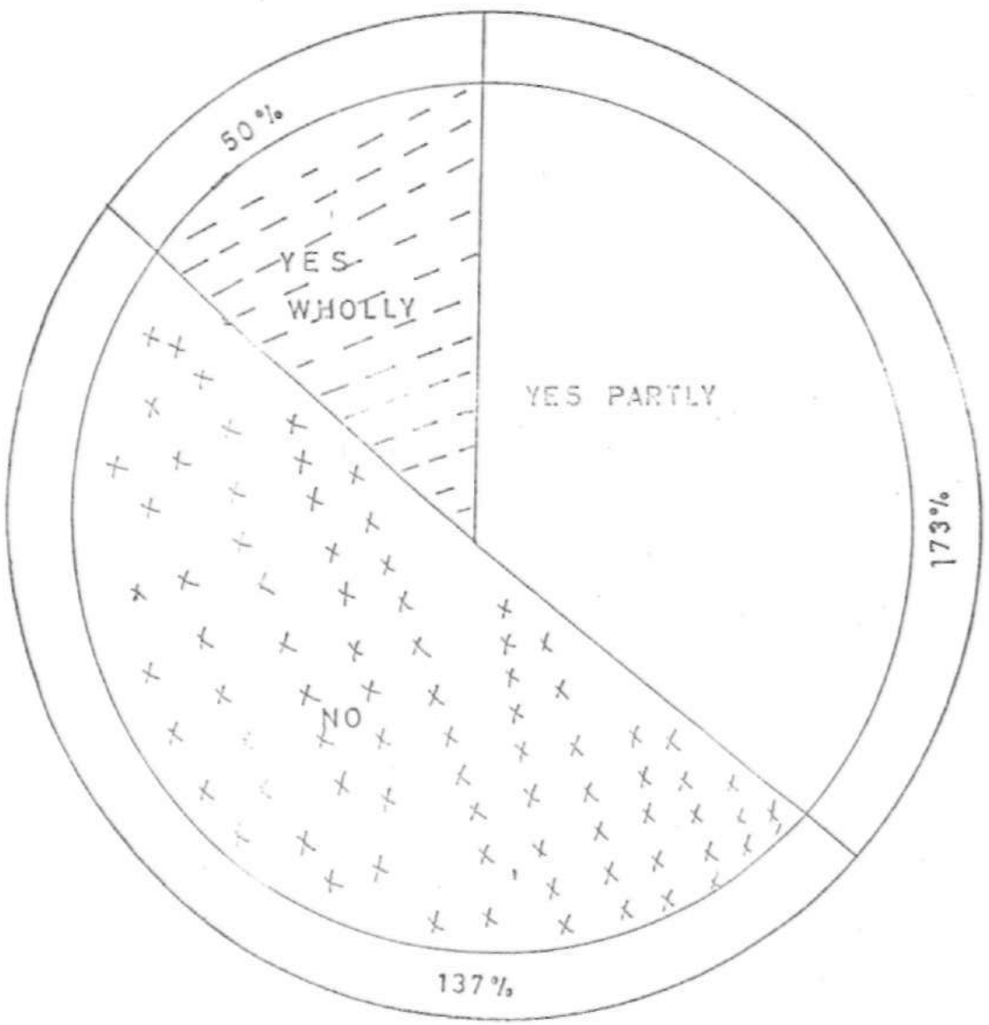


Fig 17

AHMED, Z
M·SC: THESIS
URP/ 1992/93

69

Table 19: Satisfaction of residents to existing centers

Answers	Number	%	Degree
Yes wholly	22	14.0	50
Yes partly	76	48.0	173
No	60	37.9	137
Total	158	99.9	360.00

3.4.3 Reasons for patronising informal sector enterprises

The major reasons given for patronising the informal sector by residents include easy accessibility, relative cheapness, the organised formal sector, nearness to residents and having no option as they are easily reached.

Giving reasons in order of priority, 44.4% gave cheapness as their first priority, 28% gave easy accessibility, 15% gave nearness to residents as their first priorities respectively.

3.4.4 Analysis of existing locations of informal sector

Majority of respondents (33%) indicated that the present locations of the informal sector are very inappropriate because they cause traffic congestion, create ugly and dirty environment. Their structures are an eye some and their locations are unorganised (see table 20).

Many residents suggest some ways and means of solving the problems and menace to the urban environment.

Table 20: Reasons against existing locations

Reasons	No	%
Cause traffic jam	56	15.2
Create ugly & dirty env.	78	21.2
Present ugly temp. struct.	28	7.6
Too far from Residents	18	5.0
Encroach on roads	65	18.0
All of the above	122	33.0
Total	367	100.0

Source: Field Survey (1992)

The proportion of respondents are 15.2% because of traffic congestion the activities cause, 21.2% because they create ugly and dirty environment, 7.6%, 5.0% and 18.0% gave temporary structures used, distance from residence and encroachment respectively which 33% stated all the reasons.

3.4.5 Suggested solutions by Residents

Residents suggested three methods of coping with the activities of this sector in the city. The suggestion include building shops for them where they exist by government (32.2%0 regrouping them in few locations within the city (34.1%) while (34.0%) suggest that they should be organised into neighborhood / district centers and employment areas as proposed by the master plan subsequent development.

The reasons give by residents for offering the above suggestion include the following. Some 68% indicated that the sector provides goods and services necessary for the residents. 26% stated that they provide employment while 6.9% stated that they generate employment to the unemployed and revenue to the city authorities.

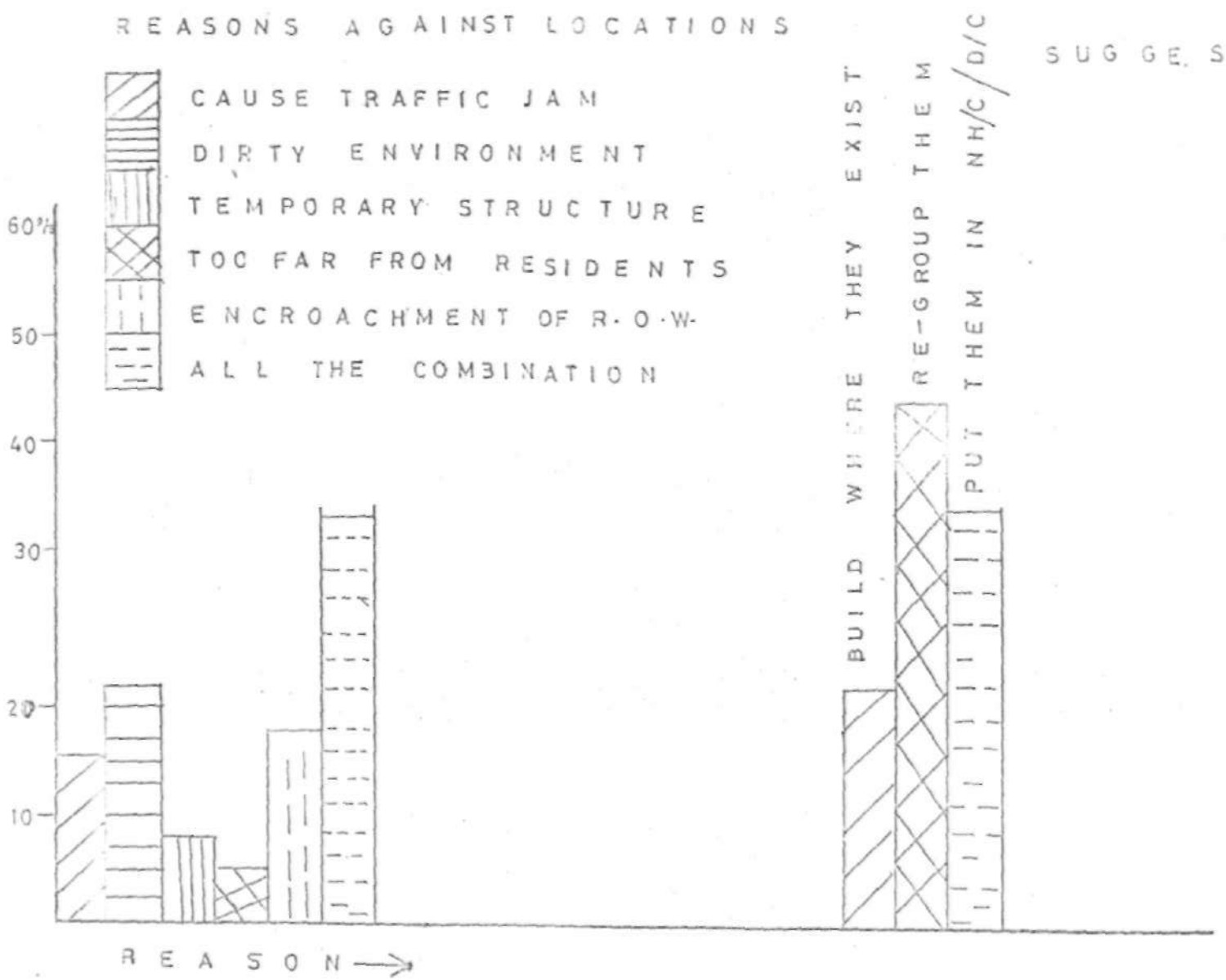


fig 18

AHMED, Z.
M.SC. THESIS
URP/1992/1993
A.B.U. ZARIA

3.5.0 GENERAL INFERENCES DRAWN FROM THE STUDY

From the survey conducted on the informal sector economics activities in Abuja, the following are the general inferences drawn based on the findings and as regards to planning implications for the sector.

1) The issue of informal sector is taken as a adhoc basis
2) The informal sector prolifivate at a very fast rate therefore their magnititude is not known and future land requirement is difficult to anticipate.
3) The sector is restricted to peripheries outside Phase I and these areas lack facilities / utilities.
4) They use temporary structures with thaft, zinc, planks presenting ugly untidy environment.
5) The existing locations cause environmental problems, mixing of land uses, noise, traffic congestion etc.
6) Informal sector operators / workers have low educational training so their care for environmental quality is low, therefore their waste disposal methods are crude this leads to poor sanitation health hazard and generally poor urban environment.

CHAPTER FOUR

REVIEW OF EXISTING PLANNING STRATEGIES

The master plan for Abuja was prepared by International Planning Associates (IPA) and was approved in 1979. The comprehensive plan for the development of Phase I was completed in 1980. It includes the detailed design of the city center and the residential areas of Phase I namely Garki, Asokoro, Wuse and Maitama Districts.

The aims of the master plan for Abuja are to create a most attractive environment for the national seat of government and to provide decent and healthy living conditions for all the city residents. To achieve the aims, the plan made a number of proposals to be implemented. The proposals include approximate percentages of total employment by the informal sector when the city is fully developed, their spread within various commercial centers and employment areas as well as spatial standards or land use intensity range for various categories of informal sector.

The plan states that there are some major uncertainties with respect to the informal sector component of the service and industrial sub-sectors such as domestic services or retail trade. It also note that the impact of the activities are difficult to predict. It does not however judge their spatial implications to be significant owing to the widespread likelihood of multiple worker house holds and the fact that a substantial portion is employer housed.

4.1.1 PLAN PROPOSALS

The master plan approximated that by the time the city is fully developed 42% of total employment will be from the informal sector. The employment in the informal sector is expected to increase by 27% in industrial sub sector, 58% in the service sub-sector and non in the public sector.

The plan recommended that 48% of informal industrial sector will be in sector centers, 52% in district centers. Of the informal sector services, 10% would be in the central business district (CBD), 20% in sector centers, 69% in District centers and 1% in special centers.

Table 21: Land area proposed in various centers by Master Plan

Centers	Approx land area	% allocated
CBD	1,658.00 hect.	10%
Sector center	72 - 132 hect.	48%
District centers	41.3 hect.	52%
Neighborhood	14.0 hect.	0.7%
Spectral centers	10 - 15 hect.	1%

In allocating population and employment to various centers and sectors of the city, the master assurmes that the informal employment in small-scale activities will dispersed within residential neighborhoods or in sector centers. It is argued that this will happened because informal sector is closely related to household activities.

Spatial standards or landuse intercity range were given for the various categories of the informal sector as follows:

automobile service 0.2h / establishment
workshop in District center 0.5h
shops in District center }
market places in Dist-centers } 3.0 hectares
maintenance and services in employment areas 2.0 hectares
employment facilities in employment areas 0.5 hectares
informal workshop in employment areas 100m2
for enclosed workshop
10 workshops of 20m2 each in Neighbor hood centers (0.5h).
Advance factory unites in employment areas 5.0 hectares

The advance factory unites proposed by the plan is to be built by the authorities and allocated to the informal sector on rental basis.

4.1.2 DEVIATION FROM PLANNING PROPOSAL AND REASONS

So far the plans proposals for the informal sector within the city have not been implemented, none of the existing commercial centers or employment areas confirm to the mater plan. The sector has not been allocated spaces within these centers.

Some reasons have been given for not implementing the plan's proposal. These reasons include among other things the following.

i) Commercial centers were not ready for development there were no roads and other utilities which formal establishments can use, so the areas earmarked for informal sector in the employment areas were allocated to banks and offices while in District and neighborhood center the space allocated to department stores.

ii) There is delay in implementation of the plan, therefore rate of development is faster than plan implementation.

iii) Due to pressure for land employment area concepts changed, areas main for factory units for informal sector allocated as office complexes.

4.2.0 EXISTING PLANNING POLICIES AND ACTIONS

The master plan made provisions for the informal sector as earlier stated. However, at the implementation stage there are changes in policies and actions.

The present policy on informal sector has changed from what has been proposed. Green areas are curve out and allocated as corner plots which is expected to take care of the informal retail and service activities. Undeveloped neighbor hood and district centers are redesigned and allocated expected to serve the informal sector.

Wuse II and Garki II employment areas are also redesigned, areas are marked out for mechanics and associated works, expected to be managed by the municipal local government.

Furthermore, Apo village has been given to mechanics, temporarily pending the time a permanent solution is thought. Other informal sector activities like carpentry works, metal works, electrical repair services are to move to temporary sites too pending time when an alternative sites are marked for them.

4.2.1 EXISTING LOCATIONS OF INFORMAL SECTOR ENTERPRISES

The informal sector enterprises are concentrated in some particular locations within the city. The major areas of concentration are Garki village site where about 6090 of mechanics and associated works operate, over 45% of carpentry and wood works, metal works and concentrated; the federal secretariat site where there is about 35% of canteens, 25% mechanics, retail traders; the old motor park site has concentration of retail traders, Julius Berger junction and the new Wuse motor park site. Other areas are the neighborhood centers district centers and along some major street and around offices like the F.C.D.A secretariat, foreign affairs complex and hospital sites etc.

The informal sector enterprises presently cover about 39.87 hectares of land within the phase I areas of the city as against the 86.6 hectares proposed by the master plan. The areas covered is within the margins proposed by the master plan, which is an indication that the proposal is adequate.

However, they might not have achieved the aim even if they were allocated within the proposed areas because of the rate at which they prolifirate as well as the nature of their activities.

Furthermore some reasons have been given for not implementing the plan's proposal. These reasons include among other things the following:

i) Commercial centers were not ready for development, there were no roads and other utilities were formal establishments, so the areas earmarked for informal sector in the employment areas were allocated to banks and offices while in District and neighborhood centers the spaces have been allocated to department stores.

ii) There is delay in implementation of the plan, therefore rate of development is faster than plan implementation.

iii) Due to pressure for land employment area concepts changed, areas mean for factory units for informal sector have been given as office complexes.

4.2.2 LOCATIONS AS PROVIDED BY THE MASTER PLAN AN ACCESSEMENT

The master plan made a number of proposals to be implemented with a view of ensuring the smooth functioning of the commercial activities within the urban frame work. the main points were based on the distribution of the informal section activities within commercial centers and residential neighborhood aimed at achieving convenience and aesthetics.

The informal sector activities were distributed within the central area, sector centers, district and neighborhood centers according to espected accurence based on previous study of informal employment and labour participation in other Nigerian and African towns; (see table 21)

However, the master plan admitted that, there are some major uncertainties with respect to the informal component of the commercial sector, therefore, impacts are difficult to predict. It further stated that their spatial implications are not judged to be significant owing to the likelihood of multiple worker households and the fact that a substantial portion is employer housed.

Furthermore, the plan assumed informal employment small-scale activities to occur on a dispersed basis within residential neighborhood. It is also assumed that the largest centers - the commercial centers and sector centers - will be predominantly "modern" in retail / service but in the district centers it will be dispersed and retail and service activities will be a mix of modern and traditional forms.

The master plan has made provision for the informal sector in the various commercial centers and employment areas but there are some major draw back. The proposals are based on some unrealistic assumptions. The plan could not predict the impact and spatial implication of the informal sector activities. The plan further stated that the spatial implication are not going to be significant. It also stated that the informal sector activities will be move predominate in the neighborhoods and district centers while large commercial centers will have "modern" type of activities.

From the above, it can be concluded that the planners did not take into consideration the socio-economic background of the citizens, traditional and cultural set-up. Therefore, the forms of urban planning adopted became inadequate and insufficient. The plan does not reflect needs and aspiration of indigenous people, this threatens the functional unity of the city of Abuja. The majority of people that are not civil squart are traders and informal sector operators that squall in any available space within the city.

The plan did not recommend any public or commercial activities along streets, which is unrealistic in the Nigerian situation and for certain whether it is recommended or not some will emerge as shopping streets out of our way of life.

Furthermore, there is strict and rigid separation of land uses or residential, commercial and employment areas which is also unrealistic in the Nigerian context. Mix - land uses could be allowed in certain areas outside the designated multi-functional corridors.

Finally, the short coming of the master plan may be attributed to the fact that it was not prepared by Nigerians typical of plans for Nigerian cities and other cities of the third world.

4.2.3 PLANNING IMPLICATION OF EXISTING POLICIES AND ACTION

The following are the general inferences drawn from the results of the field survey and analyses of the situation of informal sector economic activities taking place in Abuja city.

i) There is policy, requirements and provision for the sector in the master plan.

ii) Fixing the sector within the urban areas may be difficult due to the nature and characteristics of the informal sector activities, as well as the pressure from the formal modern sector for land.

iii) There is slow pace of development and implementation of the master plan therefore areas mean for informal sector is over taken by other activities.

iv) As a result of ii and iii above there is change in land use and concept in employment areas and commercial centers. Factory units, informal sector workshops etc. proposed have been turned to banks and office complexes.

v) Apart from mechanical repairs and associated works like welding, vulcanizing etc. that are given temporary site in Apo village outside the phase I, other activities are not considered or taken care off.

vi) The informal sector activities are still considered on an adhoc basis; that is, it is only when there is a problem or challenge that the issue to getting them a place arises.

vii) As long as this attitude of treating the informal sector on an adhoc basis continues the problem will continue.

viii) The number if the informal sector establishments is not know and the rate of polifiration is unimaginable.

ix) Implementation of plans and planning decision are not taken by planners but administrators.

x) Areas given to mechanics have no roads, electricity or water, therefore it makes it difficult for them to move and establish there.

xi) Accelerated development and corner shops strategy main for the sector is not really given to them therefore the whole purpose is defeated.

xii) Informal sector activities are attracted to areas of high accessibility of both consumers and facilities.

xiii) The activities of the informal sector cause problems especially traffic congestion in commercial centers and institution areas where the are concentrated.

xiv) The activities of this sector is part of African in general and Nigerian in particular way of social and cultural system, therefore, we cannot eliminate it but have to integrate it in our urban systems.

xv) The existing locations of the informal sector activities is not convenient and cause a lot of environmental and urban management problem.

xvi) From the survey, it is indicated that the city residents prefer the sector to be regroup in specific location to achieve good environmental quality and aesthetics.

xvii) The management of informal sector activities is left between the municipal authorities, environmental protection agency and planning and surveys department of F.C.D.A, thus there is conflict between planning, implementation and management policies. This lead to duplication of duties and confusion, the operators do not know who is the right authority to pay land rates, tax etc.

xviii) The space requirements for the various activities ranges between 7 x 8 for mechanics to 8 x 6 for carpentry works and about $2m^2$ for retail traders and electrical repair services.

xix) Negative planning is most of the times undertaken but bulldozing and resettling the establishments in temporary places where there is no infrastructure for smooth operation.

xx) The informal sector economic activities play a vital role in provision of essential services, employment, generation of income and skills to residents of the city who cannot be absorb by the modern formal sector.

xxi) The sector operating on temporary sites use cheap labour, old zinc, wood etc for construction which reduce the beauty of the environment and conflict with the permanent modern structures surrounding it.

xxii) They operate on pavements, walk ways, undeveloped plots, open spaces distorting the scenic beauty of the environment and causing traffic congestion, delays and accidents.

Finally, the present planning actions embarked open by the authority will not solve the problem because of the nature of their activities. The sector can be integrated into the urban plan as proposed by the master plan and other strategies can be sought of to incorporate them fully into commercial area.

CHAPTER FIVE

PHYSICAL PLANNING REQUIREMENTS, DESIGN PROPOSALS AND RECOMMENDATIONS

This chapter presents planning proposals aimed at solving the problems of informal sector activities in Abuja city. The proposals are designed to achieve the aim of the initial city plan of a healthy and conducive living and working environment.

5.1.0 PLANNING AND LOCATIONAL PRINCIPLES

There are some guiding principles in the preparation of a planning scheme. There are also guiding principles in the location of various land uses in urban areas to achieve maximum aesthetics, environmental quality and compatibility.

A number of factors may be responsible for the location of certain activities in particular areas of the urban centers, such factors many include the availability of land, compatibility and complimentality.

Making adequate space available to accommodate informal sector establishments is a major factor that should be considered. This may be difficult in already developed sites, but in subsequent developments strict adherances to provision of the master plan must be insisted upon by planners or plan implementation committee.

Adherance to the provision alone may not be adequate. The authorities do not have to restrict themselves to neighborhood or district centers. Organised open spaces within residential areas could be earmarked for some of the informal sector activities that have no serious negative impact such as shoe repairs, tailoring services etc.

Accessibility to sites, to operators and consumers is an important factor in locating informal sector activities. Locations should be

in close proximity to residences, transport routes where consumers can easily get to them. Also the availability of infastructural facilities and utilities on the sites should be a major factor in locations of informal sector sites,

The terrain should also be gently indulating or relatively flat. Hilly terrain or valleys should be avoided for fear of flooding.

In locating informal activities within the residential areas, the level of noise, types of by products, wastes etc. should be taken into consideration to avoid health hazard.

Finally, location of informal sector activities should be in such away that it balances safety, convenience and aesthetically good environment

5.2.0 GENERAL LOCATIONAL CONCEPTS

Based on the locational or spatial characteristic of informal sector activities discussed in earlier section it is possible to suggest some locational principles to be used in design proposal for the sector.

The informal sector activities are concentrated in the following areas:

i) traditional markets and shopping centers
ii) motor parks and transport terminals
iii) public institutions like offices, hospital etc.
iv) Within residential neighborhood (see fig. 6 p 35 location of informal sector enterprises)

These activities are located in the above areas because of some factors like accessibility to consumers, facilities, transport etc.

Based on the above facts informal sector enterprises can be re-group and integrated within or near these areas in order to have

orderly development, easy access for both operators and consumers, ensuring free flow of traffic within the areas. This will further give the activities identification and thus formalisation by authorities, which will enhance provision of facilities like waste bins, water, electricity etc.

Furthermore, controlling the type of structures, construction materials, waste disposal will be easier for the authority. It may even allow the authorities to assess their impact and needs for further policies and actions, as well as collection of levies for maitainance.

5.2.1 Alternative locational concepts

From various studies on site selection of sub-sectors of the informal sector within an urban area two alternative location concepts have evolved.

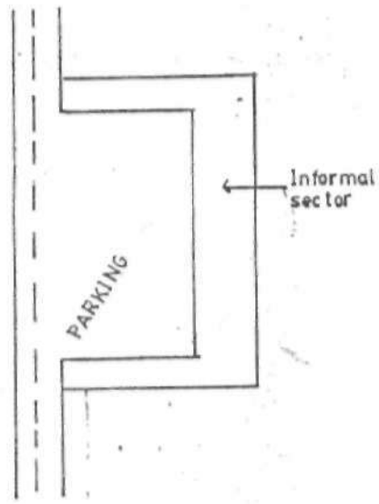
First concept favours the location of these activities within urban area. Based on the concept of hierarchy of city centers, thus from city level to sector, district and neighborhoods. Using this concept informal sector activities can be integrated within one urban areas.

At the city and sector levels large enterprises like mechanical repairs, metal works, carpentry works can be accommodated. In districts and neighborhoods services that require little space and create less environmental problems should allowed.

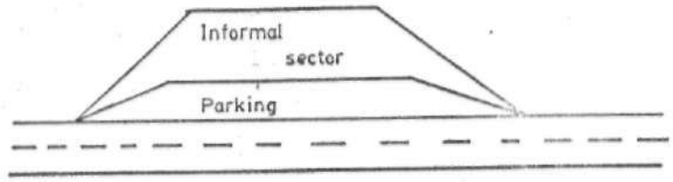
The other alternative prefers location of informal activities outside the city, mostly along regional routes, large mechanical repair services and associated works like welding, vulcanizing and carpentry, metal works etc. are located.

LOCATION ALONG MAJOR ROADS

a,

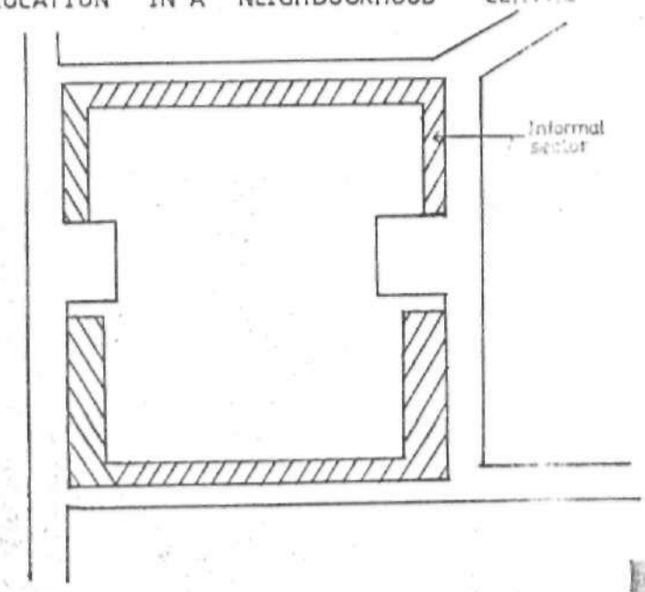


b,



c,

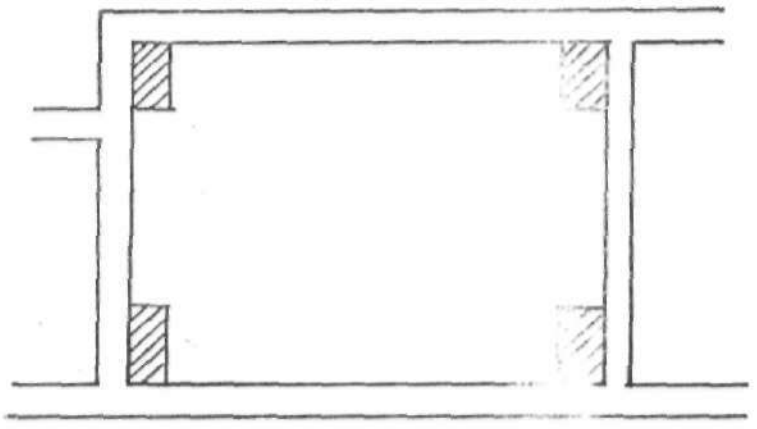
LOCATION IN A NEIGHBOURHOOD CENTRE



AHMED, Z.
M Sc Thesis
1992/93
URP

fig 11

LOCATION WITHIN A MARKET



Both the first and the second concepts have its own advantage and disadvantages. The first alternative have the advantage of have these activities within close proximity to consumers, urban utilities and other service as well as the advantage to the authorities, because the management, control and revenue collection. On the other hand it has the disadvantage of lack of enough space for large enterprises like mechanical repairs.

The second alternative have the advantage of adequate space for enterprises since it is outside the urban center. However, the disadvantage is its being far away from consumers, it may not have adequate utilities and services and control will also be difficult.

The Abuja master plan adopted the first alternative by making provisions for the informal sector within the commercial centers, from the CBD to neighborhoods in hierarchies.

5.2.2 Site selection and analysis

The characteristics of informal sector enterprises will determine the criteria for design and provision of facilities. These characteristics include the size of the sector, the flexibility, operational characteristics, composition, operational capital, space required for operations and acceptability of areas located by the operators.

In order to avoid change of land use and reduce implementation problems, the sites proposed for informal sector in the master plan can be retained in subsequent phases and strict adherence to the plan will have to be insisted upon. In addition provision for public and commercial activities along major streets should be provided to reflect the socio-cultural characteristics of the people.

There should be extension of parking spaces and stores sites made along Festival road and Muhammadu Buhari way to other streets in

Garki and Wuse to accommodate activities like shoe repairs, watch, radio services etc.

For mechanical repairs and associated works, carpentry works, metal works that requires large spaces and produce noise and pollution areas away from residential areas is preferred. Therefore the canteen sites in Federal Secretariat (Durumi District), the Julius Berger junction area should be integrated into the detail plans of Kude and Durumi districts.

Furthermore, within the employment areas of Garki II and Wuse II that are not yet developed an area should be mark out for all categories of informal sector, from mechanical repairs and associated works to metal, carpentry, electrical repairs, hawkers, Restaurants etc. to reduce the urban management and planning control problems to a minimum level.

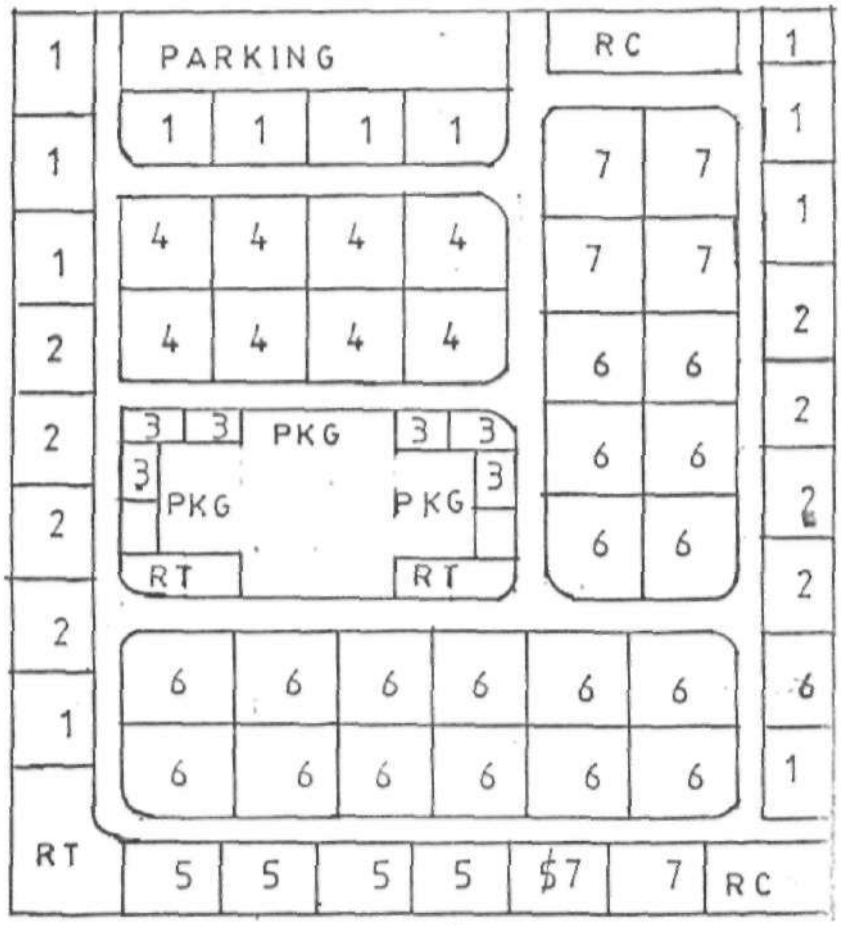
Having identified areas these activities to be located. Their location will involve stabilisation and relocation. Stabilisation is aimed at fixing mobile operators of informal sector activities like hawkers, shoe repairers etc to a particular area in order to plan for and control their operations. Relocation on the other hand is the movement from one location to another.

5.3.0 DESIGN CONCEPTS

To ensure that the activities are compatible with each other within the site and overall urban system, there is need to plan their location within the site.

The sites within employment areas, CBD, district and neighborhood centers must have proper layout design using all necessary planning standards and regulation. The sites on streets and within residential areas may not have enough space for that therefore, some things may be overlooked.

PROPOSED LAYOUT FOR INFORMAL SECTOR IN ABUJA.



1	Spare parts
2	Rewine / Battery chargers
3	Kiosk
RC	Refuse collection
RT	Restaurant
4	Electrical repairs
5	Metal works
6	Mechanical repairs
7	Carpentry works,

AHMED, Z.
M Sc Thesis
1992/93
U.R.P.

fig 20

5.4.0 PROPOSAL FOR PROVISION OF UTILITIES

The supply of water and public taps within the sites is necessary for both operators and consumers. The water can be tapped from existing water mains within the districts. This will minimise the level to illegal connection as well as generate revenue for the authority.

Supply of electricity is also necessary because most of their works depends on power. Some of the existing locations are served but most of the connections are illegal.

The provision of public places of conveniences is very important to both operators and consumers. This will enhance the environmental quality of the area, because as of now none of the existing sites have public toilets. People ease themselves in the bush and in open space.

Attendants could be employed and operators should be responsible for management of the public places of convenience, also supervision from municipal authority or environmental protection agency will be necessary to ensure that the place is kept in good condition. Some fee could be charged to generate revenue for maintenance.

To keep the areas of informal sector activities clean, frequent and regular refuse collection is necessary. Specific areas should be reserved for refuse collection and regular disposal by the authorities concerned. This is necessary because lack of proper waste disposal is a serious problem in existing locations.

For any site zoned for the informal sector activities, certain services are necessary for the proper use of the site, within the areas apart from workshop /shops, supporting services such as restaurants, open spaces, circulation areas are necessary. Proper layout of roads for easy movement of both vehicular and pedestrian

traffic is very essential in only informal sector activity site.

5.5.0 SPACE STANDARDS AND SITE REQUIREMENTS

Standard are set to ensure efficiency, compatibility and good environmental quality. Standards are of two types: set standards which are derived, accepted and applied, and empirical standards which are those that have emerged through practice and have been accepted.

Lack of adequate data on the informal sector activities, their requirements urban setup are not known. Due to their informality the acceptable planning standards for other sectors may not be applicable to the informal sector.

However, the Abuja master plan proposed design standards for neighborhood and district centers where the informal sector is supposed to be located. For any site zoned for informal sector therefore, these standard may be used with slight modification to suite the sector.

5.5.1 Land use structure

The land use structure refers to the percentage allocation of specific uses within the informal sector site 1.4 specific area to be allocated for each category of the informal sector (refer to table 22)

Table 21: Allocation of land within informal section site.

Land use	% Proposed
Work shops	45 - 50
Open spaces	5 - 10
Utilities & services	15 - 20
Circulation & Pkg	30 - 35
Other uses	1 - 5

The Abuja master plan land use structure proposal has been discussed in section 4.1.0 (Pg,77). The proposals given here are based on what is existing and the required from the results of the field survey carried out.

5.5.3 Space requirements

The space standards proposed here are based on what is existing and the minimum required (Refer to Table 22)

Table 22: Plot sizes by categories of informal sector

Type of category	Existing occupied space	% of satf.	Recommend
Mechanics and associated works	for a mechanic and 4 others 56m2	30	144m2
Carpentry & woodwork	48m2	68	50m2
Electrical repairs	2 - 12m2	52	4 - 24m2
Shoe repairs / cobblers	2m2	87	2m2
Metal works	68m2	56	96m2
Canteen	12.5	48	20m2

Source: Field survey (1992)

The majority of mechanics (70%) indicated that their sheds are not adequate because they work in a group with welders, vulcanizers, spare parts dealers, electricians etc. This is why an increase in their plot sizes is recommended.

However, the other categories like those in wood works, electrical repairs etc. indicated that their areas of operation is adequate. The non-reduction of plot sizes is based on expectation of expansion in one future and the enterprises grows.

In the master plan, planning and design standards interms of set back parking, building heights are set for district neighborhoods centers where the informal sector is supposed to be accommodated. These set standards are to be strictly adhered to harder to avoid encroachment as roads, walkways and open spaces.

Set backs

Traffic congestion is a major problem cause by informal sector activities because of the way the encroach on roads, walkway or pavements. To avoid this it is necessary to have adequate set-back between their areas of operation and the right of way. It is therefore, recommended that a set-back of 15m be allowed from the center like of the public right of way.

Set back for a sub-sector of the informal sector (the service industry) has been recommended by Vegale (1974) as follows for various roads.

Table 23: Recommended set-back for service industry

Type of road	Minimum (m)	Desirable (m)
High way	24	30
Major road	18	21
Collector road	15	18
Access street	12	15

Source: After Vagale (1974)

Building height

All buildings within informal sector activity site should be a single story, no high rise is allow to avoid accidents like fire, explosion etc.

Access roads

All access roads to areas of informal sector activities should be 7m wide with 5m hard shoulder on either sides for side walk and services.

Parking

A limited number of car parking spaces exist solely for visitors to the site and for emergency or official vehicles.

No on-street parking is to be allowed in these areas. Instead off-street parking will be provided and will be directly in to the plot, this is to avoid congestion.

Waste

External storage areas and provision of solid waste disposal system to be provided in order to kept the environment clean.

Building materials

This is to be decided during detailed design and work but materials has to be durable and aesthetically acceptable.

CHAPTER SIX

IMPLEMENTATION STRATEGY AND MANAGEMENT PROPOSALS

6.0.0 INTRODUCTION

The most important aspect of any physical plan is its translation in to reality. Any plan that is not implemented and manage properly is as good as no plan. The Abuja plan like other master plans of Nigeria urban centers is facing the problem of slow pace of implementation and choice of priority projects.

However, urgent attention is required to reduce the menace of informal sector activities in the city. The implementation of the proposal, will integrate the sector into the urban plan, improve the environmental effects cause by the sectors activities, change the aesthetic quality of their location and maintain a convenient working and living urban center.

The implementation process will involve and cut across various process government organisations that are responsible for management of the city. The organisations are the Federal Capital Development Authority (F.C.D.A) through its department of planning and surveys, land department of F.C.T., Abuja environmental protection agency, the public health unit of health department and Abuja municipal area council.

6.1.0 POLICIES FOR IMPLEMENTATION PLAN PROPOSAL

First and foremost planning should move from plan design to plan implementation. Planners should insists on being part of what is happening because, it is not every one that can interpret plan or road plans. Because recommendations and plan implementations are not done by planners but administrators important aspect of the plan is neglected in favor of others.

Another important aspect is coordination between the various agencies responsible for the city management. So far there is no coordination between the department of planning and surveys

(F.C.D.A) Abuja, Municipal governments and Abuja environmental protection agency in siting and managing the informal sector sites.

Coordination is necessary to achieve the aim of the project and the implementation does not lie with single agency, physical planning being a multi-disciplinary profession in nature. The department of planning and surveys should take the leading role of selecting and planning of informal sector sites as well as coordinating the general activities of the various agencies involved in the implementation process.

The Abuja environmental protection agency should be responsible of maintaining proper sanitary conditions of the environment by collecting and disposing of solid waste.

Another important policy aspect that should be adopted is involving the informal sector operators themselves in planning, by requesting from them some inputs on the sizes of plots required, designs etc. If they can contribute by giving briefs on their requirements, planning for them will be easier.

Direct allocation of land to the informal sector with designs, so that they build on their own will be another alterative, since government cannot afford building for them as proposed.

6.2.0 CONSTRUCTION

Small adequate plots to be provided to the informal sector activities. Minimum development conditions should be impose by authorities to ensure that developers do not have to erect expensive building as soon as they are given the plot.

Furthermore, adequate time period should be given to the developers because of their small capital, three to four years development period may be conducive instead of the six month given to them currently.

The materials to be specified should be cheap, durable and locally available. Burnt bricks, asbestos and aluminium roofing sheets could be specified. These will enhance the beauty of the environment and avoid ugly temporary structures associated with informal sector sites.

Initial plot charges should not be levied in a lump sum considering their small capital base. They should be phased and, indeed, reduced to a minimal level during the first few years of occupatio of a plot.

6.3.0 PROVISION OF UTILITIES

Site clearance, provision of utilities compensation to indegens and access roads should be provided by the authority. Charging system for these facilities should be reasonable enough because if high fees is charged it will affect their development and results in higher prices to the consumers.

6.4.0 FINANCING

As earlier mentioned the government cannot afford building the informal sector sites as proposed by the maser plan. Therefore alternative sources of finance will have to be sought.

The following may be potential sources of finance for implementation for the informal sector projects.

a) The F.C.D.A could provide the sites, pay compensation where necessary and provide infrastructure in the site.

b) The Abuja Municipal government that is going to benefit by through revenue generated from the informal sector establishment should share the cost of providing facilities with F.C.D.A.

c) *The National directorate as employment peoples' Bank could be* involve could be involved by given loans and making sure that the beneficiaries of their scheme utilised the funds properly and build to specification in the designated areas.

d) Other interested backs especially the Urban Development Bank could also be involved in implementing the project, they could participate in developing infrastructure within the sites.

6.5.0 COST RECOVERY

The allocation of sites should be strictly to those who operate these activities. Only genuine registered operators or those already operating in other areas should be considered.

The rents to be charged should be based on their sales / earnings but should not aim at recovering the cost of the project within the shortest possible time. The cost recovery period should be spread over a long time.

However, much as the charges are not to be too high they should not be too low as well. This will ensure that only those who could develop the sites would be allocated to avoid land speculation. From the survey conducted, it was found out that 33% or respondent are ready to pay as much as N500.00, 24% pay between N200 - M300 and 17.5% between N100 - N200 per month.

Table 24: **Convenient fee at a good location**

Amount in N	No	%
less 100	14	4.4
101 - 200	56	17.8
201 - 300	76	24.1
301 - 500	28	8.9
Above 500	104	33.0
Total	315	100%

Source: Field Survey (1992)

Furthermore, those who can not afford building alone could form a team to use one site.

6.60 EFFECTIVE MANAGEMENT

This will be seen in terms of improving informal sector sites because implementation of plan does not end in allocation of site and provision of infrastructure. Effective site management is necessary to maintain orderly development and good environmental quality.

It is recommended that the development control unit of the department of planning and surveys be charged with the responsibility of regulating and monitoring activities within this sector. This is the preparation of relevant planning controls and the rigid enforcement of these controls within the area.

However, it will be necessary for the unit to work hand in hand with other agencies like the Abuja Environmental protection agency and the Abuja municipal government.

6.7.0 SUMMARY AND CONCLUSION

The informal sector, plays a very important role in urban development in third world countries in general and Nigerian urban centers in particular. It has become a characteristic feature of third world cities.

The informal sector in Abuja like any other Nigerian urban center has not received the required attention despite the proposals made in the master plan. As a result of this neglect the activities of this sector have grown to such dimension of becoming nuisance to the environment posing challenge to the physical planner.

This sector continue to grow despite the neglect by authorities, so there is urgent need to integrate the sector into the urban plan to curb the environmental problems they cause as well as create a conducive environment. Many governments are finding it difficult to manage the informal sector activities in the urban centers.

Furthermore, the activities of this sector ar likely to spring up much faster in Abuja than any Nigerian urban center because of its position as the new capital city. So whether provision is made for them or not they are growing and unless planning is taking care of them they will continue to pose environmental problems.

In view of the above facts, effective action is required urgently, because the informal sector has became part of our socio-cultural life.

BIBLIOGRAPHY

1. Abuja Master Plan by I P A

2. Afibola, V. 1986 Role of informal sector in urban development. A case of Kaduna. (B.Sc. ABU Thesis)

3. Alhassan, M. 1986 Role of informal sector in urban development. Case of Bauchi (B.Sc. ABU Thesis)

4. Alfa, Mohammed, 1982 Problems and Strategies for controlling unauthorised developments in central area Minna. M.Sc Thesis ABU.

5. Atungwu, G.G. 1985 Problems and Prospects of Service Industries in Benue State. (Unpublished M.Sc Thesis ABU Zaira).

6. Bormley, R. 1978 "The Urban Informal Sector": Why is it worth discussing? World Development 6,(9), 1033-1039, Pergamon press.

7. Bawa, M. S. 1985 Socio-Economic Processes and Growth: An analysis of petty commodity production in Sokoto city. (B.Sc. Thesis).

8. Bienefeld, M.A. and Godfrey, M. 1975 "Measuring Unemployment and the informal sector some conceptual and statistical problems" Institute of Development Studies Bulletin Vol. VI.

9. Davis, R. L. 1978 "Issues in Retailing" In: Davis R. and Hall, P. (Ed). Issues in Urban Societies. Penguin.

10. Fapalunda, Olanrewaju 1978: The Informal Sector of Lagos " An inquiry into Urban poverty and employment" International labour office World employment programme Research working paper WEP 2-9/WP 32.

11. Frankman, M. and Clark, D. 1973 "Employment in the service sector in sub-sahara Africa". Journal of Modern African Studies. Vol. II, 201 - 210.

12. Georges, Nihan et al 1978: "The Modern Informal Sector in Lone". International Labour Review. Vol. 118 (5) 1979.

13. G. Nihan and R. Jourdian "The Modern Informal Sector in Nouakcholi' International Labour Review Vol. 117 No.6 (1978).

14. Hassan, M. I. 1991 Planning For Urban Informal Sector: Problems and Prospect. Urban Field Seminar. Department of Urban and Regional Planning, Ahmadu Bello University Zaria. Nigeria.

15. Herrle, Peter 1982 "The Informal Sector: Survival economy in the third world metropolitan cities" Economics, Vol. 26 P.112

16. The Urban Edge: Issues and innovations. Vol. 13 No. 1 1989.

17. The Urban Edge: Urban Enterprenuers and the "Real Economy" Vol. 1 No.2 (1993)

18. International Labour Office. 1970 "The nature and extent of the employment problem;. In: Richard, H., Dakad, E. Singler, H. and Wilson, F. (Ed. Third World Employment. Problems and strategy. Penguin Modern Economics Reading 29 - 41.

17. International Labour Office. 1972. "Employment, income and equality": A strategy for increasing productive employment in Kenya, International Labour Review.

18. Journal of Institute of town planners India Vol. 1 No.3 1982 (114)

19. Koenigsberger, O. H. 1973 Planning legislation in developing countries. The proceedings of the town and country planning, summer school.

20. Kopenigsberger, O. H. 1976 "The absorption of Newcomers in the cities of the third world". O.D.I Review 1. No. I (UN) United Nations.

21. Keith, Griffin and Azzizur, Rahman Khan 1978 "Poverty in the Third World": Ugly facts and fancy Models World Development Vol. 6, No. 3, PP. 295 - 304

22. Keith, Hart. 1973 "Informal income opportunities and urban employment in Ghana" Journal of Modern African Studies 61 - 89.

23. Kude, E. 1988 The Socio-spatial dimension of Commercial retail activities along Ahmadu Bello Way, Kaduna. (Unpublished M.Sc. Thesis A.B.U. Zaria.

24. Madhu, Sarin. 1978 "Urban Planning, Petty Trading and Squatter Settlements in Chandigrah" India. In: Brombley, R. and Gerry, C. Casual Work and Poverty In Third World cities. Wiley and Sons.

25. Mabgunje, A. L. 1980 "The Development Process": A spatial perspective Huchinson University Library. PP. 181 - 188.

26. Mabagunje, A. L. 1980 Urbanization in Nigeria.

27. McGee, and Yeung, Y. M. 1977 "Hawkers in South East Asia cities, Planning for Bazaar Economy" - International Development and Reconstruction Ohava.

28. Moser, C. O. N. 1978 "Informal sector or petty commodity: or dependence Urban development. World Development Vol. 6 No. 5 9/10.

29. Morwood, H. C. 1975 "Informal industry in Developing countries in: Town Planning Review Vol. 46 No. 1 University of Liverpool Press PP. 91.

30. Ojibo, S. 1989 Planning For Service Industries: Problems and Prospects. Urban Field seminar. Department of Urban and Regional Planning Ahmadu Bello University, Zaria, Nigeria. PP.23

31 Olubumi, 1980 Unauthorized Residential development in metropolitan Lagos. Characteristics and Planning solutions.

32. Paul Bairoch. Urban Unemployment in developing countries. International Labour Office Geneva.

P. R. Soouza and V. E. Tokma. "The informal sector in Latin America", International Labour Review Vol. 114 No. 3 (1978).

34. Sethuraman, S. V. "The Urban informal sector. Concept, measurement and policy" International Labour Review Vol. 114 No. 1 (1976).

35. Sethuraman, S. V. "The Urban informal sector in African", International Labour Review Vol. 116 No.3 (1977)

36. Sinclair, S. W. 1976 "Informal Economic Activity in African cities" Journal of Modern African Studies Vol. 14.

37. Tokman, V. E. 1978 "Competition Between the informal and formal sectors in Rethinking". World Development Vol. 6 No. 9/10

38. Ukpong, I. I. 1987 "The informal sector: Employment and skills Development Research Bulletin No. 01/86. Center for Development studies University of Cross River State. PP. 1-24.

39. Weaks, S. G. 1973 "Where are all the jobs? The IFs in Bugis Uganda". African Review Vol. III No. I PP. 111 - 132.

40. Werhin, H. W. 1974 "The informal sector implication of the International Labour Office Study of Kenya". African Studies Review Vol. 7 No. I

41. Zubairu, B. G. 1983 Hawking in the City: Need problems and physical planning solutions - Case of Kano. M.Sc. Thesis A.B.U.