THE PERIPHERY OF OWERRI: A STRATEGY FOR AN ORDERLY DEVELOPMENT.

M.Sc. (U.R.P) Thesis

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Dedicated to my dear wife Margie.

(For her most valued support in my efforts).

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AMAM ALBAN ACHOLONU.

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CHAPTER ONE.

INTRODUCTION.

1.1 STATEMENT OF PROBLEM.

The third National Development Plan for East Central State[1] reaffirmed the truth that the Igbos lacked an urban tradition. At the end of the Nigerian Civil War, however, the area which is the most densely populated region in the country outside metropolitan Lagos, started to experience an unprecedented high rate of urbanisation, exceeded perhaps only by that of the city of Lagos.

Unfortunately, the rapid urban growth is characterised by lack of essential infrastructural investment. The civil war had reduced or destroyed the infrastructural capital which previously existed. Owerri township (Fig. 1) which alternatively fell under the control of Federal and Biafran troops represents a climax situation in the said handicap.

Later on, the creation of Imo State and the consequent capital status conferred on Owerri on the 3rd February, 1976 produced a new growth impetus on a town that had hitherto grown rather at a relatively snail's pace. This historical event has extensive and

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1. Official Document No. 5 of 1975. 3rd National Development Plan, East Central State, Programme, Min. of Econ. Dev. Enugu, p. 115.

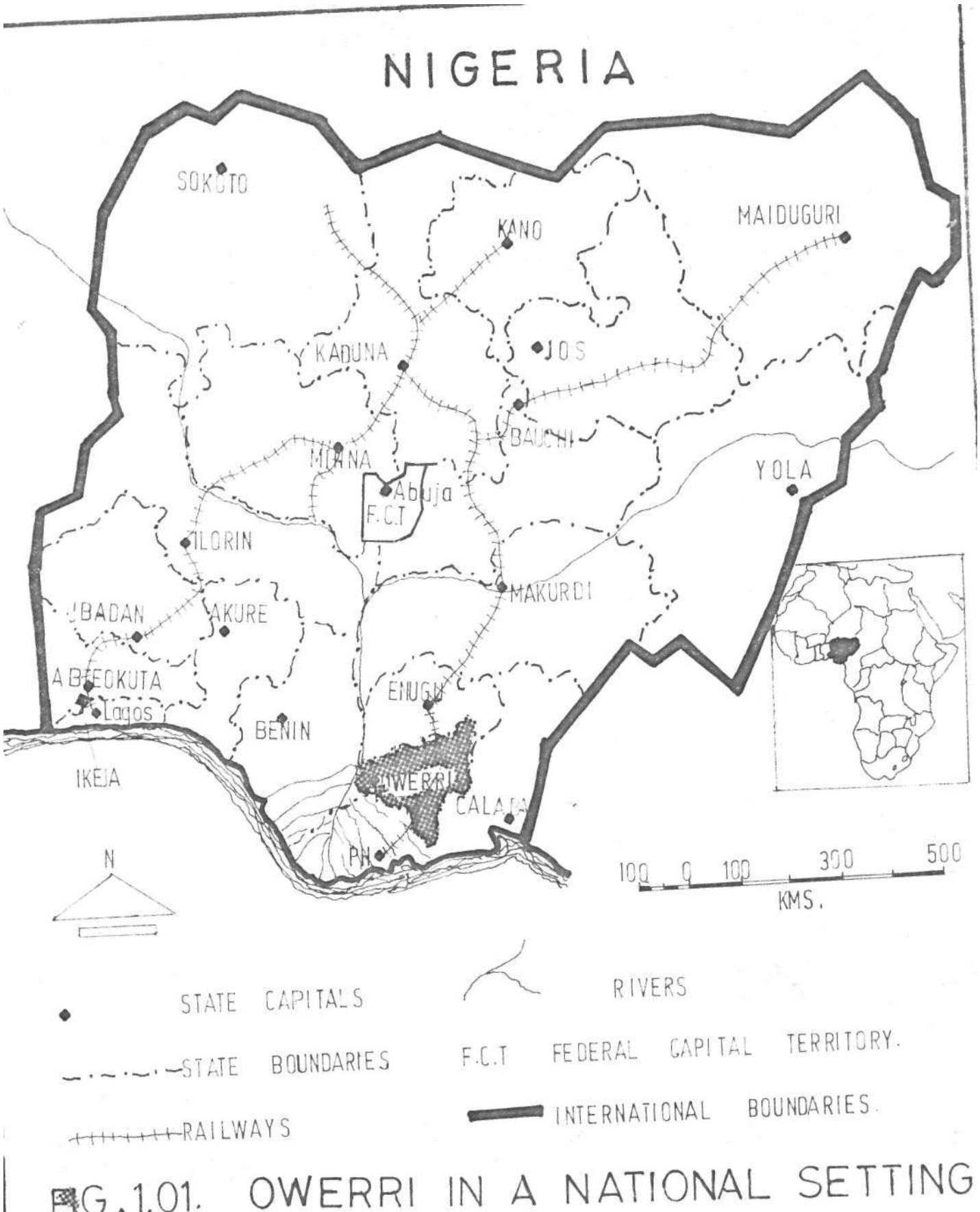


FIG.1.01. OWERRI IN A NATIONAL SETTING

overwhelming effects on the town and its periphery. It has resulted in drastic physical and economic changes with significant spatial impact on places within and outside the known limits of the city.

The city's population was swollen by migration but sustained by a large and unexpected rise in natural increase of population immediately after the civil war. The immediate result of these events was a critical housing shortage aggravated by lack of new buildings to meet the demand, and the conversion of many residential property to better paying commercial functions. At the same time, speculative investment on land produced a demand for land by both individuals and firms seeking to establish at the new state capital. Rapid search for building sites away from the congested city plus governments' acquisition of parts of the existing open land for the development of the state capital, directed the attention of developers to the villages at the periphery of Owerri.

Currently, the hierarchy of centres inside and outside Owerri is undergoing rapid alteration. New spheres of influence are gradually emerging and new ties between the city and its hinterland are occuring. The most evident among such relationships between Owerri and its periphery is the

dormitory function currently being performed by the village-settlments for workers at Owerri. Numerous pressures and various spill-overs at the peripheral region of Owerri are going on. Above all, unplanned and often speculative development of the villages around Owerri township is occurring without restriction. Signs of the emergence of slum characteristics are in fact beginning to gather mementum.

The situation seems to be complicated by the apparent uni-directional orientation in the development priority of Owerri and its periphery. Both the town and its periphery seem to have the same expectations and demand the same amenities. Increase in tenant population in the peripheral settlments as a result of inadequate accommodation in the township makes this issue urgent. There is thus a dramatic change in the conventional urban-rural system which has put tremendous unexpected pressure on the environmental facilities and has defined new demand pressures for those facilities in places usually considered as rural areas.

Although an urban master plan has been completed for the town, it is obvious that the observed pressures cannot be fully controlled by its provisions which

incidentally relate to the t wnship alone. Moreover, the control on physical development exercises exerted by the master paln requirements, has also produced its own effects on land outside the scope of the plan. Hence, a careful investigation to establish a suitable strategy for ensuring an orderly growth and develop- ment of the perihperal settlements appears a worthwhile undertaking in order to avoid the dual occurrence of slum and modern city phenomena at one and the same time.

1.2 AIM AND OBJECTIVES.

The aim of the study is to determine what measures could be taken to achieve an orderly develop- ment of Owerri periphery. Accordingly, efforts will be directed towards achieving the following objectives.

(i) To assess the amount of disorderliness in the present growth and development of Owerri periphery.

(ii) To find what factors are responsible for the above situation.

(iii) To assess the consequences of disorderly deve- lopment on the settlments at the periphery of Owerri.

(iv) To suggest measures that will control the magnitude of disorderliness and increase efficiency in and compatibility between the developments in the city and its peripheral settlements.

(v) To propose a development strategy which will be consistant with the urban-periphery needs of Owerri and increase the interdependence of both so as to achieve balanced development.

1.3 SCOPE AND LIMITATION.

In the first instance, the research intends to identify what exactly are disorderly at the periphery of Owerri and to what extent is the disorderliness observed. Attempts are made to quantify the observations, where possible, in order to be able to appraise the general consequences of the situation. Landuses in the areas are assessed in terms of efficiency. Attention is focussed on the part of accessibility sanitary arrangement, adequacy and regularity of facilities, services and utilities. Efforts are made to determine the causes of the observed disorderly development and suggestions are proposed to eliminate them and improve the situation.

The researcher realises that problems associated with peripheral developments in cities are recurrent. As the city expands spatially, new horizons open up at its fringe zones which call for planning considerations. Consequently, the present study is viewed as one of a number of steps needed to bring

specific planning issues, related to the settlements at the periphery of Owerri into sharper focus.

Essentially, the present exercise will try

(i) To examine the Owerri periphery in terms of its present growth pattern and find how favourable or unfavourable it is for its proper physical development and future needs.

(ii) To show a suitable method of looking at the proper functions of the peripheral settlements around Nigerian towns in the context of overall national goasl and objectives, and

(iii) To identify the most suitable combination of economic activities which will help the periphery of Owerri to perform its proper functions which could complement those of the city for a balanced development of both.

The study suffers from some limitations, like the absence of a systematic and documental landuse survey of the areas studied; and non-availability of detailed aerial photographs for all the vallages sampled for study. Consequently, it has not been possible to produce in this thesis, a detailed landuse map for the study area.

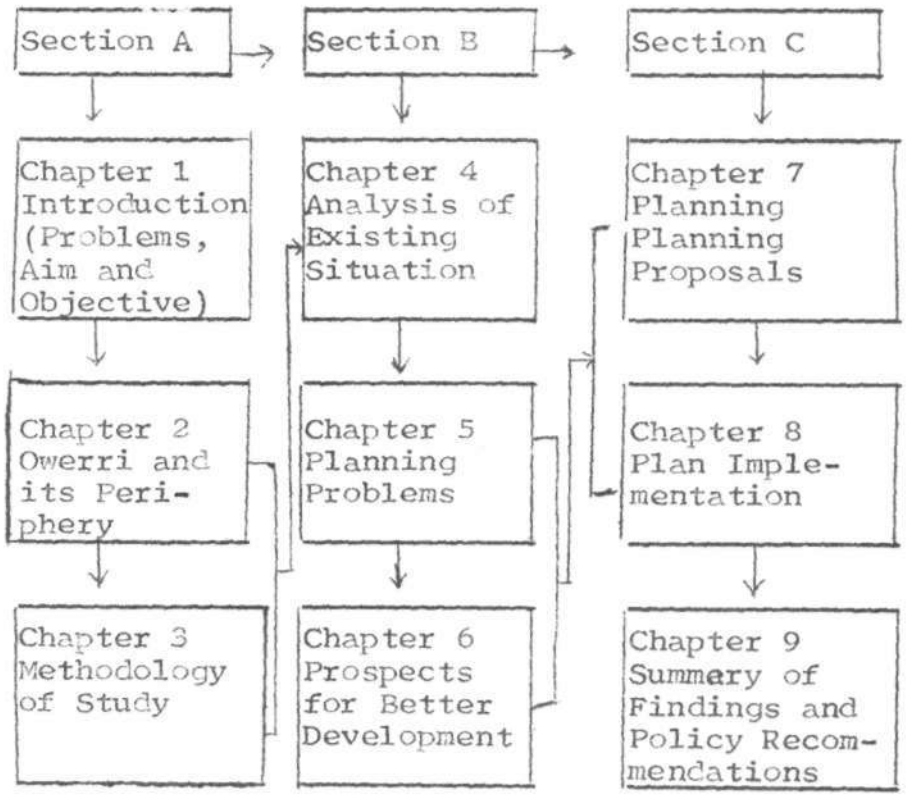
Other problems result from the absence of reliable census data particularly on the migration

situation. Of equal importance is the absence of comprehensive street plans and data on the number of available houses in the neighbourhoods surveyed. These shortcomings have unavoidably placed some limitations on the accuracy of the sample size and sampling procedure.

1.4 STRUCTURE OF THESIS.

The thesis is subdivided into three sections (Fig.1.02) Each section is made up of three chapters.

Fig. 1.02: STURCTURE OF THESIS.



Section one is made up of chapters one, two and three. The first chapter briefly states the nature of the research problems, the aim and objectives of the study, the scope and limitations and justification for it. The second chapter describes in brief, the history and geography of Owerri and its periphery. It comments on the climate, its people and the basic socio-economic forces which have helped to shape the physical forms in the area. In addition, the periphery of Owerri is defined and put in a proper perspective for the study. The third chapter describes the methodology of the research.

Section two consists of chapters four, five and six. It focuses on the analysis of existing situation. The extent of disorderliness at the periphery is evaluated. Apart from particular discussions on the existing administrative framework and changes in the boundary of Owerri township in chapter four, a general review of existing literature on planning problems of city peripheries is presented in chapter five. Of course, a few planning strategies adopted in some cities of the world are discussed. The case of Owerri is examined more closely and its problems, causes and consequences identified. Chapter six explores the prospects for better development of Owerri periphery in the light of available planning resources there.

The third section which includes the remaining chapters, makes planning proposals after an evaluation and reasoned selection from alternative strategies. Chapter eight proposes institutional and organisational framework for the Owerri Capital Development Authority (OCDA)[2] whose duty it is to implement the proposed plans in chapter seven. The last chapter summarizes the findings and recommendations in the study. It also suggests a guideline for the integration of Owerri urban peripheral settlments with the city and proposes a guideline for similar exercises elsewhere.

1.5. JUSTIFICATION FOR THE RESEARCH.

This research can serve as a timely effort to make a conscious analysis of the impact of the growth of Owerri and the proposed master plan on the settlements at the periphery so as to be able to encourage positive forces and control negative trends in the overall development of the capital area. The logic behind a careful examination of the impact notion[3] derives from our general level of ignorance on this subject. The usual assumption is that economic

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2. The OCDA is an autonomous statutory body set up by Imo State Government, Edict No. 2 of 1978 with the sole responsibilitty to implement the Owerri Master Plan and ensure proper Development of Owerri Urban Region.

3. Hoover, (1969) p. 352 in Malcolm J. Moseley: Growth Centres in Spatial Planning, (Pergamon Press) p. 115.

improvement initiated in the growth centres will spread to their less urbanised hinterland, but actually we do not yet know much, particularly in quantitative terms, of the way in which a favourable economic effect is progagated from an urban growth to the surrounding territory, or the range and speed of the various impacts.

Accordingly, Thomson[4] emphasized that a region or city can be a potential vectim of its economic or political success unless far sighted planning is undertaken. He says that Paris was at one period of her development faced with such a danger. What saved it was the realisation by its planners that planning must seek to structure development so as to permit indispensable growth while maintaining the quality of the environment. Actually, this study is a search for a proper planning methodology which will guarantee the continued overall growth and development of Owerri and its periphery along desirable directions in this period of her success through increased political functions.

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4. Ian B. Thompson: The Paris Basin, OUP (1974), pp. 7 and 18.

Some of the known negative features of urbanization in the rural areas of many African countries result from their disregard planning and development considerations. This has create a gap between the urban areas and their rural hinterlands in their levels of economies, developments and standards of living.

Studies in peripheral planning or development such as this one are motivated by the desire to remove or reduce the gap and socio-economic differentials between urban and rural areas. It tries to create the basis for ensuring easy physical and economic integration between the city and its rural hinterland and promote efficient exploitation of the natural resources in the rural areas by diverting sufficient productive investments, services and labour forces to such areas. These motives of course are in agreement with national development objectives in Nigeria.

A study like this and its findings can in fact open up the way to a chain of ideas, thoughts, debates or policies which can be of practical value in the implementation and review programmes of the Owerri Master Plan. It can also call attention to the special needs of Imo State, where urban and rural

areas are closely knit together within a relatively small geographical area of land, thereby creating a situation where land is a highly valued resource. In this context, innovations successfully implemented at the perphery of Owerri can quickly diffuse to other neighbouring urban centres and their fringe areas. This will in turn produce a grand spatial and functional pattern of urban-rural relationship which will promote balanced and rapid development of the state as a micro-region.

Moreover, the study promises á unique opportunity for achieving great economies through building planned and economically active rural settlments in urban peripheries in the state. The approach to rural development will remove the likelihood of making a costly mistake of dispossessing the people of their limited land resources through and uncontrolled pattern of horizontal urban growth. In the case of Owerri, such an event can result in socio-political conflict because the indigene has long been proud of his wide area of land resources and has shown traditional reluctance to alienate it.

The overriding motive in this exercise is to shift emphasis from coventional planning as a means of solving existing problems to that of trailing the line of future development. Such efforts in anticipating the course, speed and pattern of urban growth, apart from having functional value, represents planning behaviour.

CHAPTER TWO.

OWERRI AND ITS PERIPHERY.

2.1 LOCATION AND SETTING OF OWERRI

Owerri, the capital of Imo State in Nigeria, lies approximately on the point of intersection of longitude 7° East and latitude $5^{\circ}29'$ North (Fig. 2.01). The town is the convergence of the roads from Onitsha, Orlu, Okigwe-Enugu, Umuahia, Aba and Port Harcourt. It is set on the norther part of the esatern coastal lowlands, which generally lie between 90-300 metres above sea level. The periphery slopes rather gently south wards in alignment with the general dip of the rocks from about 90 metres, at the northern margin to about 30 metres, in the south, towards the coast.

Within this setting, Owerri lies in a pleasant physical landscape which in addition to a vast open countryside gave it initial advantage over other towns in Imo State for selection as a state capital. The urban region occupies an almost hilles, gently rolling plain. As if to break the monotny of such a topography, the Nwaorie stream cuts the territory into two from north to south with a slight tributary from the east. This natural feature has been used to great advantage in formulating an urban structure plan of a Twin City concept for Owerri.

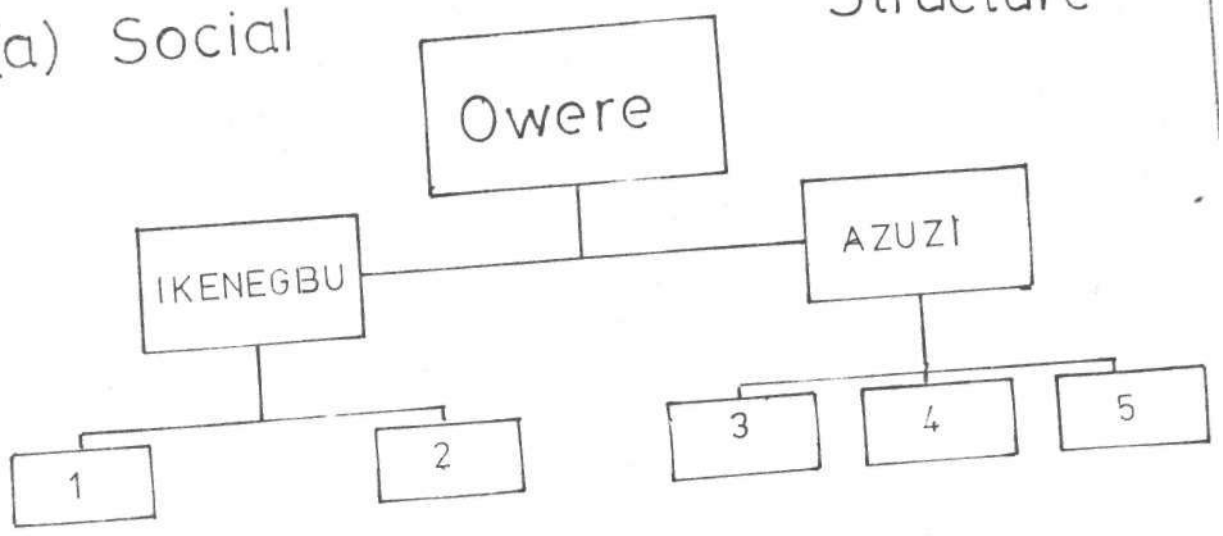
2.2 HISTORY OF THE EVOLUTION OF OWERRI TOWNSHIP.

Like a number of other townships in Igboland, Owerri grew from the traditional central market of five kindred communities which make up"Owerri nchi ise". In fact, four of the kindreds namely Oronjo, Amawom, Umuodu and Umuoyeche had originated in pairs from the related communities of Ikenegbu and Azuzi (Fig. 2.02a)Umoyima, the fifth community, is an early migrant population from Nekede, which was readily incorporated into its neighbouring territory of Azuzi. Of course, the traditional dual structure in the socio-political organisation is still reflected in the residential pattern of the communities within Owerri township (Fig.2.02b).

In the absence of large-scale urban agglomerations in Igboland, the colonial administrators tried to identify strategic and convenient places in which to meet the people Centrall markets, which provided common links between individual villages became attractive focal points for their needs. "Until recently, the most popular medium for announcing messages from the divisional officers or schedules of mobile medical services was by ringing the bell at the market palces"[1] Thus, in 1903, Owerri became a government station.

1. Acholonu A.A. (1974) Rural Markets in Mbaise Division (ECS). An original eassy for the award of the B.A. (Hons) Degree in Geography, June 1974, p. 35.

(a) Social Structure



TRADITIONAL

COMMUNITIES IN OWERRI TOWNSHIP.

(b) Residential Pattern.

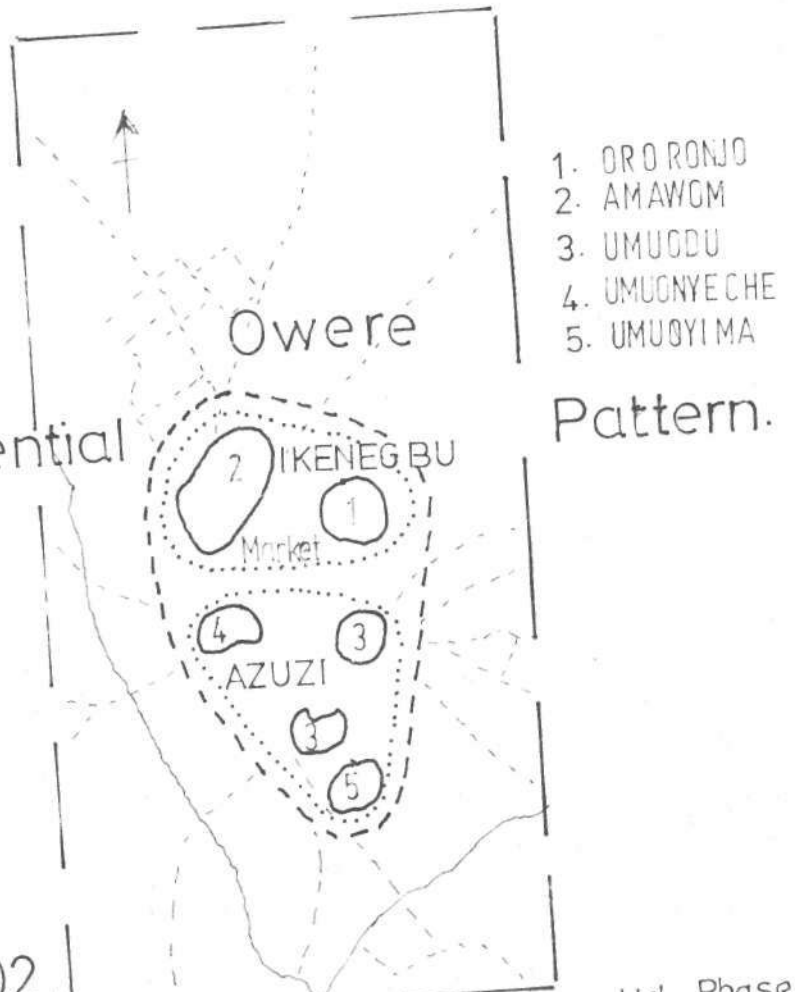


FIG.2.02.

Source: Fingeruth & Partners Ltd. Phase II Report.

By 1918, Owerri had become the headquarters of the Eastern protectorate including the divisions of Port Harcourt, Opobo, Bende, Okigwe and Agwu. This period witnessed not only effective administration of the territory but produced marked physical alterations of the station which opened the way for the emergence of township characteristics in Owerri.

The growth of Owerri has not however been sustained for a prolonged period. The initial growth propensity shown by the attainment of colonial administrative headquarter was soon reduced when Port Harcourt and Umuahia provinces were created. Her functions and importance were correspondingly reduced as she became a divisional headquarter. However, in 1940's the exploration of Oil in Nigeria and the consequent choice of Owerri in 1953 by the Shell D'Arcy exploration Company as its residential camp brought new hopes for her revival. Economic growth in the town was marked by residential expansion, market reconstruction and the construction of a new motor park.

In fact, the pioneer plan of the town was prepared in 1948, by Tetlow, a British Town Planning adviser to West Africa. Apparently, the present alignment of the existing roads and buildings in Owerri

today are traceable to his plans. By 1963, the Shell Company moved its headquarters to Port Harcourt and once more Owerri sank back into a state of relative stagnation, until the recent events associated with the creation of nineteen states in Nigeria.

2.3 THE PERIPHERY OF OWERRI DEFINED.

The periphery in a geographical sense refers to a region or territory which surrounds another. It thus forms a sort of demarcation between the area surrounded and all other places outside it beyond the surrounding region. With reference to urban areas, a city's periphery refers to areas of residual influence of the city. Such influence can be political, economic or social hence there can be several overlapping zones of such influence from a given city.

Generally, a city's periphery can be identified most clearly in terms of geographical distance. It can include districts which are served by the city's broadcasting or television stations, areas covered by newspapsers circulation by city vendors or areas connected with the city by other forms of daily spatial interactions among their inhbitants.

Thus, the city and its periphery are geographically contiguous but exhibit certain distinct socio-economic characteristics. In his studies of urban rural fringe land, Hushak (1975)[2] introduced a concept which appears relevant in the study of urban peripheries namely - the area where land is in transition from agriculture to urban use.

The periphery of Owerri in this study connotes those areas and settlements immediately adjoining Owerri township and which have recently shared from the problems and prospects of the growing township. The concept derives from both the geographical distance in the location of extent of such areas from Owerri as well as their intimate functional relationship with the township.

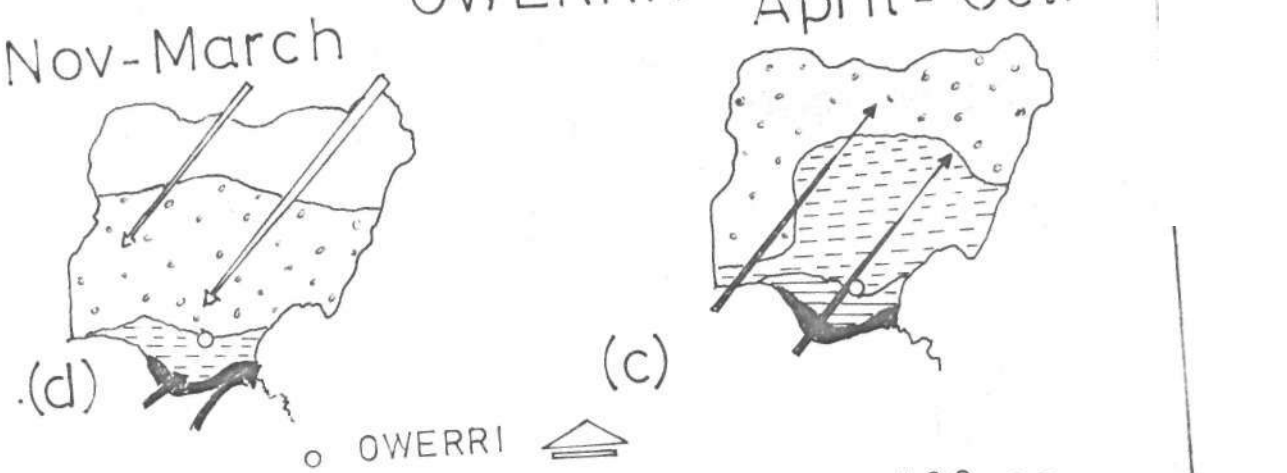
2.4 CLIMATE, SOIL AND VEGETATION.

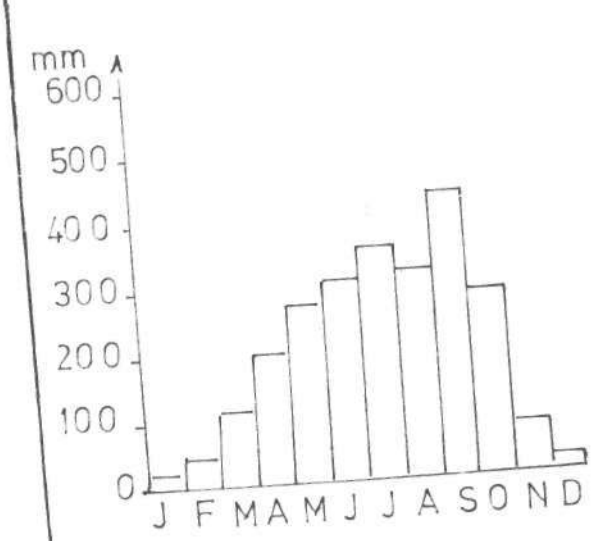
Owerri and its hinterland form part of the sub-equatorial region of Nigeria. In this region, the average annual rainfall is generally above 150cm since there is rain all year round with double maxima in July and September. In fact, Owerri records an average annual rainfall of about 240cm (Fig.2.03a) The main seasons (dry and wet seasons) of almost equal duration are distinguishable.

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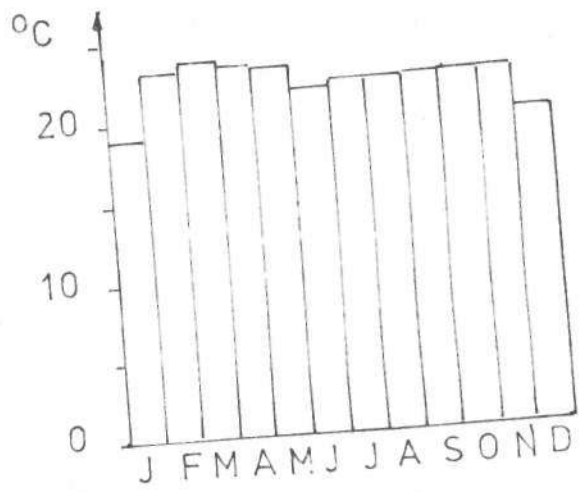
2. Hushak Leroy J. (1975), "The Urban Demand for Urban-Rural fringe land". Land Economics, Vol. LI, No. 2, May 1975.

CLIMATIC CONDITIONS IN OWERRI.





Mean Monthly Rainfalls
(a) 1908 - 1960



Mean Monthly Minimum
(b) Temperature 1975.

FIG. 2.03.

Source: Nigerian Meteorological Services Owerri

Mean annual temperature in Owerri is about 27°C (80°F) while a relatively low annual range of about 9°C (48°F) is recorded (Fig.2.03b). The relative humidity is lower in January, when the area is under the influence of dry tropical air mass (Fig.2.03c) than in July when the warm wet tropical air mass blows over the area (Fig. 2.03d)

Although Owerri and its periphery lie on parts of the tertiary rocks characteristics of the coastal plain of Nigeria, its surface soil is regularly reinforced by deposition. Thus, the areas falls within the high forest belt which grows on rich alluvial or volcanic types of soil. However, high forest of the evergreen type does not grow everywhere. This is because of intenses human activity resulting from dense population and consequent pressure on land. The overall effect is reduction in soil fertility in the area and little natural vegetation. In addition, the plain nature of the land and heavy annual rainfall cause much percolation and leaching.

2.5 POPULATION DISTRIBUTION AND RURAL SETTLMENT PATTERN.

Owerri urban region and her neighbouring part of Mbaise and Orlu are among the oustanding areas in Igboland where population densities are comparable to those of the Nile Basin. According to the 1963 population census, the densities of population in these areas rise from 240 to about 460 persons per square k'lometre. Actually in 1963, Owerri division had a population of 267,146 on an area of 1,114 square kilometre which gives a density of 240. When states were created in 1976, the population in the area increased to about 368,263[3] which raised its density to about 331.

Although, the dominant rural settlement pattern is that of scattered nucleations, the highest density of population is found in the township. The pattern of rural settlment around Owerri is based on clusters of traditional communities, with varying degrees of relationship with the Oratta Community. Within the township itself and surrounded by the said communities, are the indigenous five communities mentioned earlier in this chapter, which formed the nucleus of urban population. In order to provide

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3. Statistics Division, Ministry of Finance and Economic Development, Owerri, Imo State.

"a meaningful and precise expression of the distribution pattern"[4], it is necessary to calculate the nearest neighbour statistic*.

To this end, thirty three settlements, identified within the geographical region of Owerri (Fig. 2.0) were selected for the exercise. After the calculation, the value of R which represents a measure of the degree to which the observed distribution approaches or departs from an expected random pattern is 0.500. This is a critical result since we cannot confidently assert that the pattern of settlements tends to either random (when R = 1) or to maximum aggregation, in which case R should be zero. Therefore, a test of significance (appendix 1) was oonducted. The hypothesis proved that we can accept that the pattern does not really tend to random distribution at ninety-nine percent level of confidence.

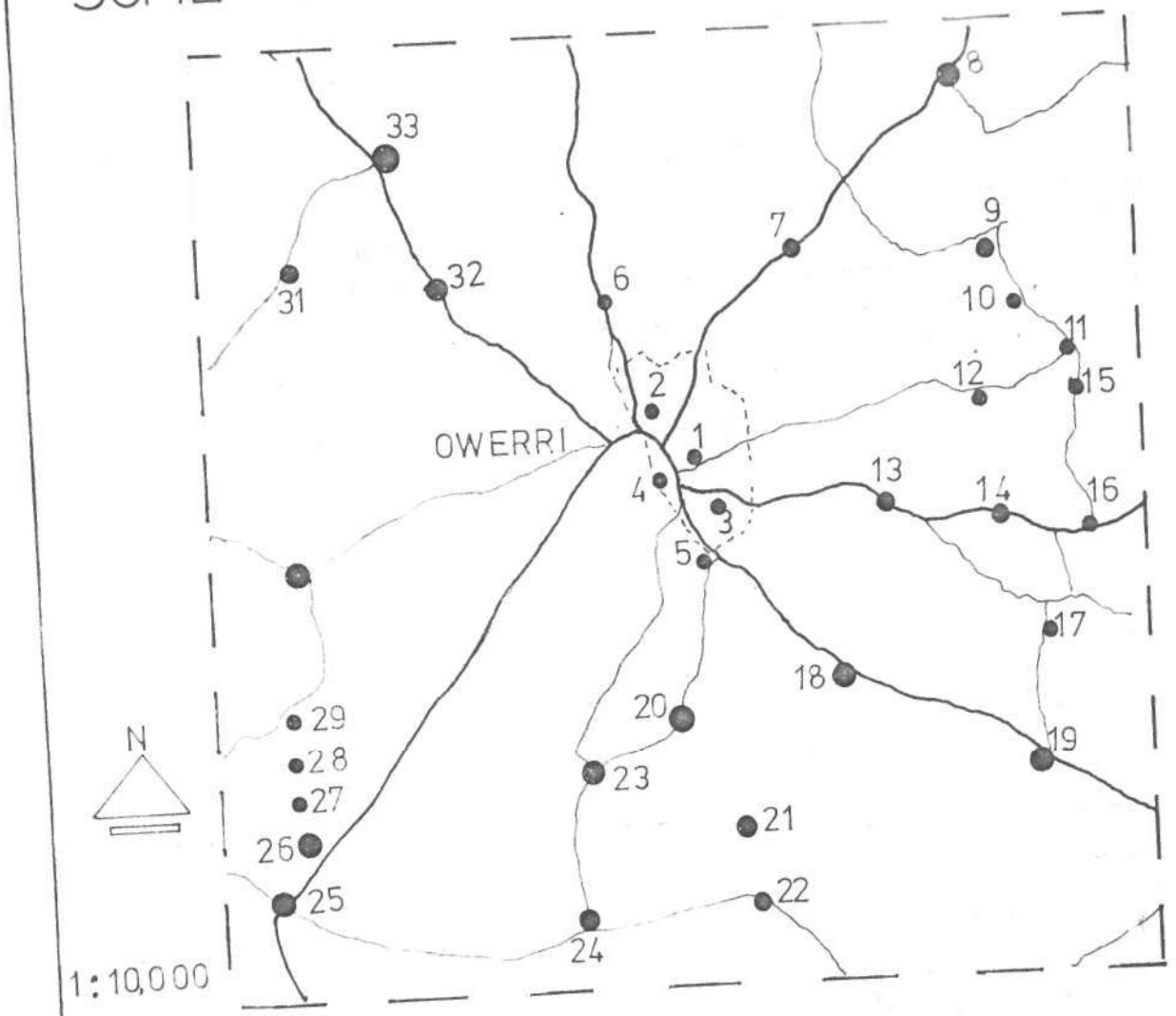
From the analysis made on these settlements with reference to their spatial distribution, it is interesting to note the small value of the average

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4. King L.J. (1968) in Spatial Analysis (ed) by Berry BJL, and Marble D.F. (1968) p. 160.

*Detailed discussion on "Nearest Neighbour as a measure of Spatial Relationship" is provided by Phili J. Clark and Francis C. Evans in Ecology, Vol. 35, 1954, pp. 445-453.

SOME SETTLEMENTS NEAR OWERRI



1. ORORONJO
2. AMAWOM
3. UMUODU
4 UMUONYECHE
5 UMUOYIMA
6 AMAKOHIA
7 ORJI
8 AKABO
9 OWELU
10 OWALA
11 UMUNAHA
12. ORATTA
13 EGBU
14 AWAKA
15 IHITE
16 EMEKUKU
17 EMII
18 NAZE
19 AGBALA
20 NEKEDE
21 AMAEZE
22 AMAORIE
23 UMUOMA
24 IHIAGWA
25 OBINZE
26 OBOKWU
27 UMUJEM
28 UMUOCHA
29 AVU
30 UMUGUMA
31 NDEGWU
32 IRETE
33 OROGWE

FIG. 2.04 Source: Surveys Division, MOW&H. Owerri.

distance apart from one settlement to another (1.25 kilometres). This is an indication of the nature of continuous occupance of land characteristics of many areas of Igboland, which poses a major constraint for resettlement schemes.

2.6 OCCUPATION OF THE PEOPLE.

Like their counterparts in other parts of Imo State, the chief occupation of the inhabitants of Owerri area is agriculture. As in other parts of the country, the traditional dominance of agriculture in the occupational structure of the people is reducing with time (Table 2.01) Such decrease in Owerri, was magnified by the sudden increase in the number of people working in non-agricultural sectors who moved into Owerri Urban Area when states were created.

TABLE 2.01: : SHIFT IN OCCUPATIONAL STRUCTURE OF THE PERIPHERY OF OWERRI.

SECTOR	NIGERIA 1953	1963	CHANGE	OLD OWERRI PROVINCE 1953	1963	CHANGE	OWERRI PERIPHERY 1978	CHANGE
PRIMARY	79%	67%	-15.2%	77%	51%	-33.8%	20%	-60%
SECONDARY	6%	12%	+100%	5%	15%	+200%	27.5%	+83.3%
TERTIARY	15%	21%	+40%	18%	34%	+88.9%	52.5%	+54.4%
	100%	100%		100%	100%		100%	

Source: (a). Imo State Capital Owerri - Planning Background Studies) Master Plan Report Phase II, page 23.

(b). Field work, August 1978.

The table shows that the orginal ratio of 51:49 (almost 1:1) between those engaged in 1963 changed to 20:80 (1:4) in the settlments at the immediate periphery of Owerri in 1978. This reducation appears like mass exodus from the farmland.

Farmers specialise in the production of food and cash crops. Palm produce constitutes the most important export commodity. Lying at the ecological boundary between the densely populated, land hungry central uplands and the agriculturally rich but sparsely populated rain forst plains and river swamps in the south, it is easy for inhabitants in Owerri area to supplement their deficit in food crops by importing from nearby producers outside Imo State. Plantains, Cassava, Yams, Cocoyams and Fruits are important local products. Rice, Beans and Yams are usually bought from neighbouring sources.

There are no large scale industries in Owerri and its surrounding region. Many people therefore engage in commerce based on the distribution of imported and a few locally produced foodstuf s and crafts. A significant number of people engage in craftwork and service industry, hence petty trading is common which keeps a large number of rural markets alive.

2.7 SOME ASPECTS OF LAND TENURE SYSTEM.

(a) GENERAL CONCEPT OF LAND

Among the Igbos, land is regarded as being sacred, and a land holder's interest is in perpetuity as a rule. Essentially, the first type of wealth a man leaves to his heirs at death is his rights or interest on different pieces of land.

Land in the African cutomary law does not normally include things growing on or attached to the soil. Consequently, when land is pledged or mortgaged to a greedy person, he can capitalise on this customary concept and so plant some economic crops on part of the land. In urban areas, people of ill-motives can put up permanent or semi-permanent structures on other people's land as a prelude or hidden overture for achieving permanent interest on the land at the death of the orgianal motgager. The possibility of this event is high in communities which have stranger population, as became the case at the periphery of Owerri.

(b) CLASSIFICATION OF LAND:

(i) Different Classes of Land can be distinguished according to their varying distances from the residential compound of the owner. Thus, there are compound land, nearby framland and far-away farmland.

Land alienation is acceptable according to the relative distance in the location of such lands from the family compounds. In fact, it is a disgrace to sell or mortgage compound land. Compound lands and some farmland provide grave-yards for the past and present generations. It is the third class of land that is a victim of mortgages and sales.

(ii) There are also individual land, group (Family or Communal) land and sacred land which may be groves or farmland. The deterinants of alienation in each case depends on the type of ownership or control exercised on the land.

(iii) The third classification is based on the uses to which land is put. In that sense, there are farmlands, groves and pasture. When the relative importance of any use is reduced or displaced then the land stands in danger of being alienated.

(c) LAND ALIENATION:

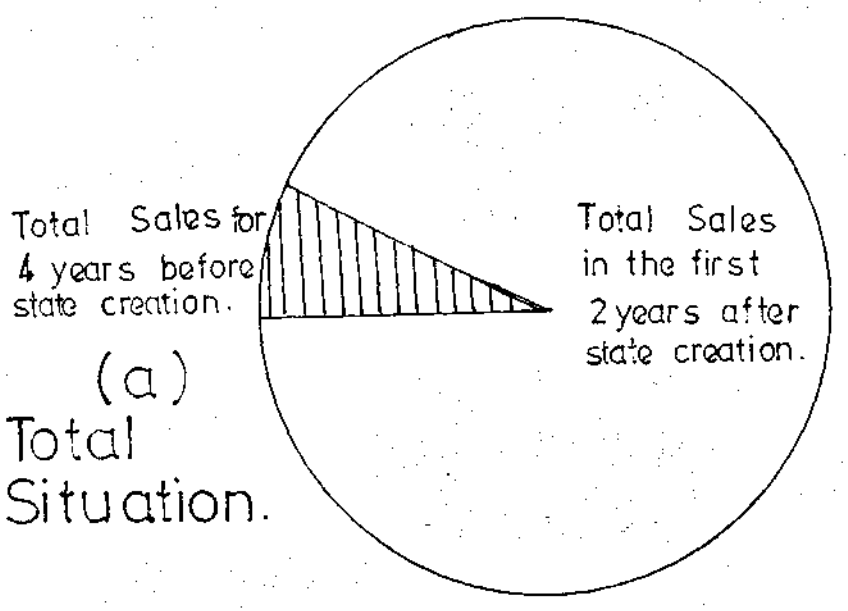
(i) Originally, Igbos practised redeemable sale of land in the form of mortgages, pledges or security for loans. Outright sale of land in the form of fee simple estate is a recent innovation. It can be traced to contact with western civilization, and in particular to the colonial administration. Its earliest form was through treaties signed with early British government representatives which produced what were later referred to as crown lands, found mostly in townships.

(ii) Lands traditionally granted to other users in good faith among the Igbos could become carelessly alienated if the occupiers outlive the original lenders, history may lose records of the actual facts about such land deed or transfer. These problems were eliminated with the introduction of written leases for rights to land.

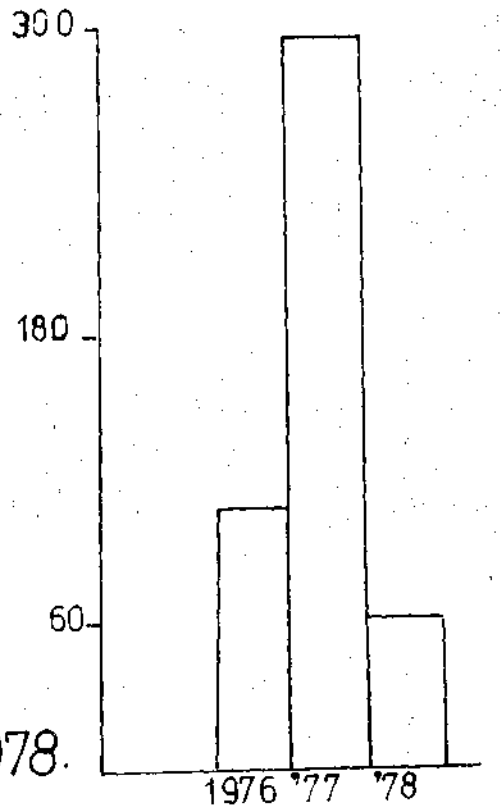
2.8 EFFECTS OF SOCIO-ECONOMIC FORCES ON LAND TENURE SYSTEM.

Records of land registrations, leases and deeds or conveyances at the periphery of Owerri, show that permanent alienation of land assumed alarming proportion with the creation of state and the capital status attained by Owerri. (See Fig 2.05). The main factors

LAND SALES IN OWERRI PERIPHERY



(a) Total Situation.



(b) Trend 1976-1978.

Landuse Decree

FIG 2.05

Source: Lands Division, MOW&H Owerri

responsible for large scale sale of land in the area at the siad period are:

(i) The declaration by Imo State Government in 1976 that fifteen kilometre radius taken from the centre of Owerri, the General Post Office, is a planning area Imo State Capital. This single action alerted and stampeded land-owners and speculators to anticipate vast economic opportunities, in addition to immagined commercial possibilities in owning land in areas surrounding Owerri township.

(ii) Using land for agricultural purposes seemed to bring less economic rewards than for other purposes like building temporary or permanent houses to provide badly needed accommodation for the in-coming population, and for some state government offices.

(iii) Since everything that provided shelter yielded handsome rent, following increase in the population of the rural settlments, there arose strong desire for landowners to invest in the housing industry.

(iv) Hitherto, there had been strong desire by a large number of inhabitants of the periphery to rebuild or reconstruct their houses. The Nigerian Civil War had caused large scale destruction of houses in Owerri area. A compelling demand on every head of household was how to find money to rehabilitate themselves by erecting liveable houses. The sale of land offered a ready sources of substantial cash to achieve this objective.

(v) In most of the villages near Owerri, there are neither fear of land scarcity nor any sign of impending shortage of agricultural land which could alarm the inhabitants on the need for preserving the remaining farmlands. This situation sustained the growing practices of land sale.

Thus, the process of change in the traditional land tenure system was in the direction of individualisation of land holdings in small parcels and plots. This happened especially in areas where there were on-going economic activities. The requirements of commerce and the need for capital money, the spread of education and contact with European ideas, and other factors fostered and encouraged the trend and development of individual tenure in urban and semi-urban areas.

CHAPTER THREE.

METHODOLOGY OF RESEARCH.

3.0 AN OVERVIEW.

The method adopted in the research was consistent at all levels. There was regular subdivision of activity areas between the researcher and all other assistants. In data collection for instance, the researcher undertook some aspects of the survey by direct observations, measurements and interviews while some trained assistants helped in enumeration surveys and administration of questionnaires. Similarly, the analysis was largely subdivided between personal or manual interpretation of data by the researcher and statistical evaluations by the computer. Nevertheless, the entire blame for any errors in the research or conclusions therein are to be borne by the researcher as the sole organiser of all activities.

3.1 RECONNAISSANCE SURVEY:

Some visits to the study areas, which were aimed at getting a bird's eye view of the whole situation were undertaken by the researcher at the earliest period of the research in July 1978.

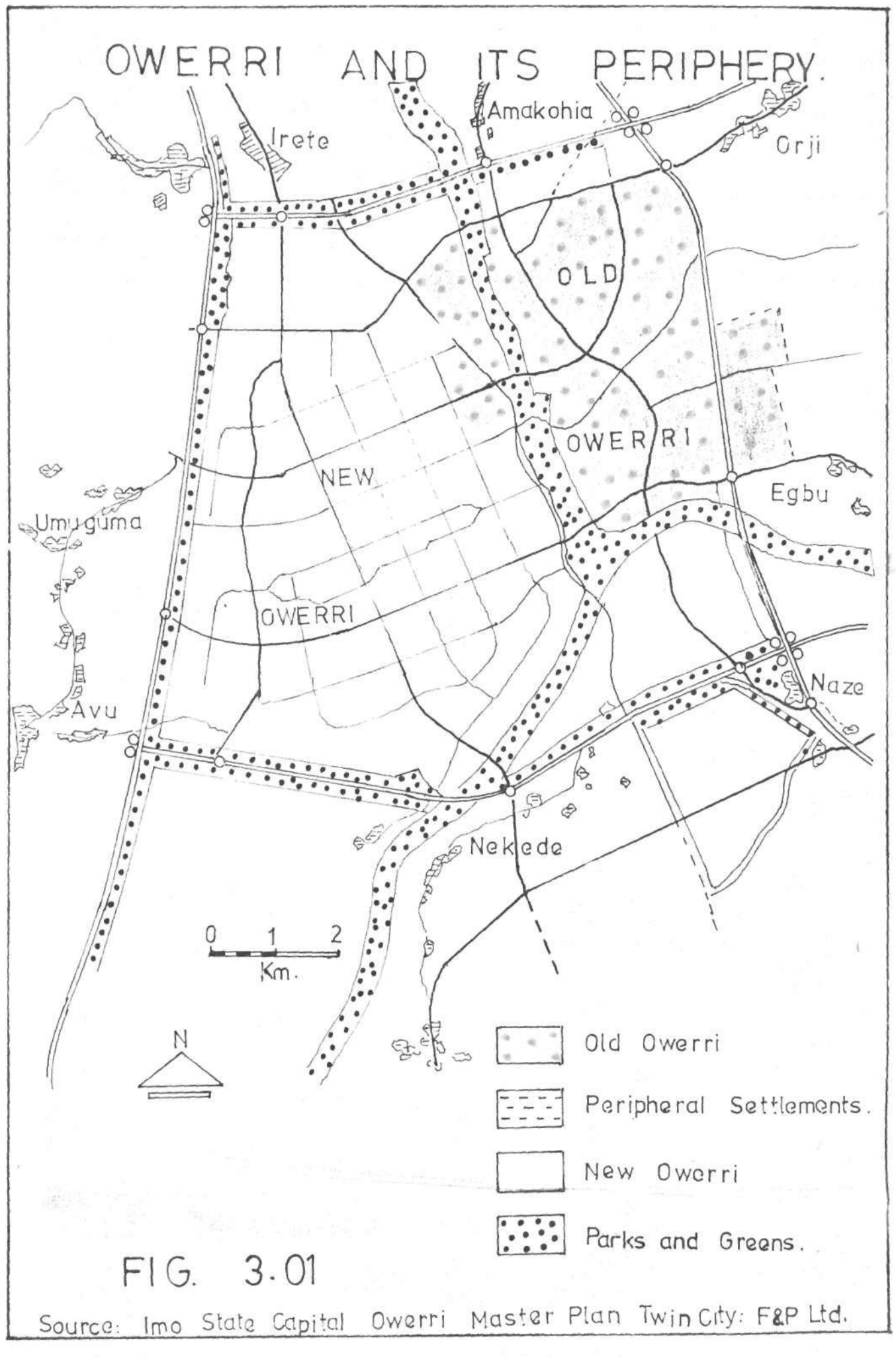


FIG. 3.01

Source: Imo State Capital Owerri Master Plan Twin City: F&P Ltd.

The visits helped to clarify the sizes of the study areas and their general characteristics, as a guide for the organisation of subsequent stages of the research. In all, eight villages, tentatively delimited within the study area were visited.

An essential result of these visits was the elimination of two of the villages initially selected for study. This decision was considered necessary when analysis of the preliminary information revealed significant variation between those villages (Avu and Umuguma) and the other six villages (Amakohia, Orji, Egbu, Nage, Nekede and Irete) finally studied (Fig. 3.01).

3.2 DELIMINATION OF THE STUDY AREA.

The concept of periphery as defined in the earlier chapter was employed in delimiting the study area. Accordingly, the following parameters were used to achieve a clear delimitation of the study area.

(a) GEOGRAPHICAL LOCATION:

All territories included in the study of Owerri periphery lie outside the proposed boundary of the master plan for Owerri twin-city but are contiguous with the urban area.

(b) DISTANCE FROM CITY CENTRE OF BOUNDARY:

Areas included within the periphery of Owerri are supposed to fall within specific distances from the city centre when measured as the crow flies. Hitherto, Owerri General Post Office has been regarded as the centre of the old city. However, the acceptance of the master plan for a Twin-City, by Imo State Government, has conceptually shifted the centre to the proposed civic centre. The territory considered for the purpose of this study includes all areas which are within three kilometres from the Twin City boundary.

(c) FUNCTIONAL RELATIONSHIP WITH OWERRI:

Location considered to qualify a peripheral to Owerri town should show measurable degree of functional relationship with the city itself; and some similarity of characteristics among themselves.

The above specifications in delineating the periphery of Owerri show some resemblance with the method recommended by Blizzard and Aderson in rural urban fringe research. They had considered an area outside the city boundary where full city

services cease to be available and the concentration of the people in the area so defined are more or less "non-village-rural non-farm population."[1]

Using the first two parameters of location and distance, the following rural settlements around Owerri township were identified.

TABLE 3.01: SETTLEMENTS ON THE IMMEDIATE PERIPHERY OF OWERRI.

Village	Location from Town Centre	Distance from Proposed Civic Centre (KM)	Distance from Boundary of Master Plan (Km)
1. Amakohia	North	4.0	0.5
2. Orji	North East	5.5	1.5
3. Egbu	East	4.5	1.5
4. Naze	South East	4.5	1.0
5. Nekede	South	4.5	0.5
6. Avu	South West	6.0	1.5
7. Umuguma	West	5.0	1.0
8. Irete	North West	5.0	1.5

Source: Field Survey July 1978.

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1. Blizzard Samuel W. and Anderson William F. (1952) Problems in Rural-Urban Fringe Research; Conceptualization and Delineations: Progress Report No. 89, State College, Pennyslvanin (1952) pp. 10-11.

When the third parameter was included, north Avu and Umuguma were eliminated. They achieve minimum distance criteria because of the proposed westward direction of expansion of the New Town (cf Fig. 3.01) and the proposed boundary near their present location. In either functional relationship with Owerri or similarity in characteristics with other settlments they fall short of required minimum specifications. Their population characteristics are far more rural than any of the other villages. Consequently the study concentrated on the six remaining villages.

It is necessary to point out that not all the geographical areas covered by the six villages were surveyed in detail. Some sections of the selected settlments, particularly Orji, Naze and Nekede, fell beyond the area delimited for study. Moreover, the magnitude of physical disorder, which intially attracted the attention of the researcher, reduced progressively with increasing distance from Owerri township. This again meant that only those parts of the villages where physical characteristics of interest occured were included in the study.

3.3 COLLECTION OF DATA:

Some basic information and maps which required visiting government offices and departments were collected personally by the researcher. Other types of data which called for simple enumeration were collected with the help of field assistants, after they had been fully instructed on what to do. Some of the data required no sampling or grading while others had to be sampled. In the latter case, the assistants worked in close cooperation with the researcher. Such jobs which involved measurements of physcial features, sketching and sometimes photographing, called for joint participation between the researcher and his helpers.

3.4 SAMPLING TECHNIQUE:

Absence of comprehensive street plans and reliable data of the ratio between migrant and native population in the settlments surveyed, made it impossible to adopt conventional methods of sampling for purposes of the study. Nevertheless, the sampling method was based on stratified random technique. Individual compounds, residential clusters and extended family units were picked from which a random number was selected for

questionnaire interview. The actual number interviewed in each case depended on the observed size of the residence. It often ranged from one repondent in single households to above five in clusters of dwelling units.

An equal number of questionnaires were initially administered in each of the settlements selected for survey, for comparative analysis. Where the number appeared not to have covered the required sample popupulation, more questionnaires were administered since the population in the villages were not equal. Thereafter, a more in-depbt study was made at Amakohia village to find out in detail, the actual operative factors and the observed phenomena in the transformation of a rural settlment into an urban form.

Amakohia was selected for two reasons, First, it is the nearest settlement to Owerri township among the samples chosen. Secondly, it represents the area of maximym alterations in physical, cultural and economic terms as revealed in preliminary comparative studies. In this way, it is hoped that important planning clues can be discovered from its features which are yet absent in the less affected settlments.

In all, a target sample of about five percent of the households for all the areas surveyed was aimed at. Questionnaires were addressed to heads of household since the best view of the variables examined was expected from their responses. Since newly built-up parts of the village occur in linear pattern along the roads, references to pattern of landuses are made in respect of land within one kilometre by five hundred metres at the most likely community centres on both sides of the major roads from Owerri through the villages to other towns.

3.5 INTERVIEW METHOD:

Interviews were by direct contact between interviewers and respondents. Two types of questions were asked - close ended or guided questions (Appendix 2) and open ended questions (Appendix 3). The first type of questions were administered with the help of field assistants to heads of households, while the second were personally conducted by the research on selected individuals like landlords, community leaders and other classes of people who appeared capable of giving useful information of the subjects of interest and related issues.

Responses from the first set of questions are recorded in specified codes for ease of analysis. Information got from open ended questions were sometimes recorded verbatim or on forms for subsequent analysis by the researcher. In a few cases, such responses were written down by the respondents themselves. This is true of literate people who are busy or those inviduals who could not be met personally for direct interviews. Questionnaires were left for these people to complete for the researcher to collect during a repeat visit.

3.6 DATA ANALYSIS:

Basically, two forms of data were collected, these that represent verbal, subjective evaluations of situations and those that showed response in specified pattern. The first group were analysed manually and cases of frequencies of response were indentified and used in arriving at some conclusions. Pre-coded data were fed into the computer after programmes for detailed analysis had been prepared as required.

Essentially, results from frequency tabulattions, correlation tests, cross tabulations for testing significance of relationships were easily got from the computer. Of course, in all cases, the researcher was left to interprete values calculated by the computer, in terms of their implications for planning the villages.

CHAPTER FOUR.

ANALYSIS OF THE EXISTING SITUATION.

4.1 THE EXISTING ADMINISTRATIVE FRAMEWORK.

Before recently, Owerri had been the headquarters of Owerri Province in former East Central State. When more states were created in 1976, Owerri became the capital of Imo State which includes the whole of former Owerri Province and parts of Ogoja and Abakaliki Province. During this period, the Owerri town planning authority existed as the only recognised executive authority for the planning and implementation of any schemes of development in and around Owerri.

Like its counterparts in the country, the authority was handicapped by limitations in authority, functions, staff and financial resources. Consequently, it limited its activities merely to general development control which largely involved receipts and approvals of building plans. Sometimetimes, the authority prepared a number of development schemes, without extending its efforts to make comprehensive plans for overall city development.

However, realising that the problems of urban centres in Nigeria cannot be effectively tackled within the existing framework of traditional local government structures, the Third National Development Plan proposed a movement towards a city-management system[1]. This implies that the administration of each of the major urban centres in the country will be headed by a manager of the status of a high level professional officer appointed by and responsible to the state government. The same idea was reechoed in the recommendations of Fingerhuth and Partners[2] who prepared the master plan for Imo State Capital.

Accordingly, the Imo State Government established the OCDA whose functions include the planning for the development of the area described as Owerri Capital Territory (Fig. 4.01). As can be seen in the map, the area incorporates all the settlements studied in this research. The commencement of the OCDA meant the exit of the Owerri Town Planning Authority. Its functions are not performed by the OCDA in addition to other functions assigned to it by the edict which established it.

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1. Nigeria 3rd National Development Plan: (1975-80), Lagos 1975, p. 291.

2. Fingerhuth and Partners Ltd., Imo State Capital Owerri Master Plan for Twin City, Owerri and Zurich, 1977, p. 45.

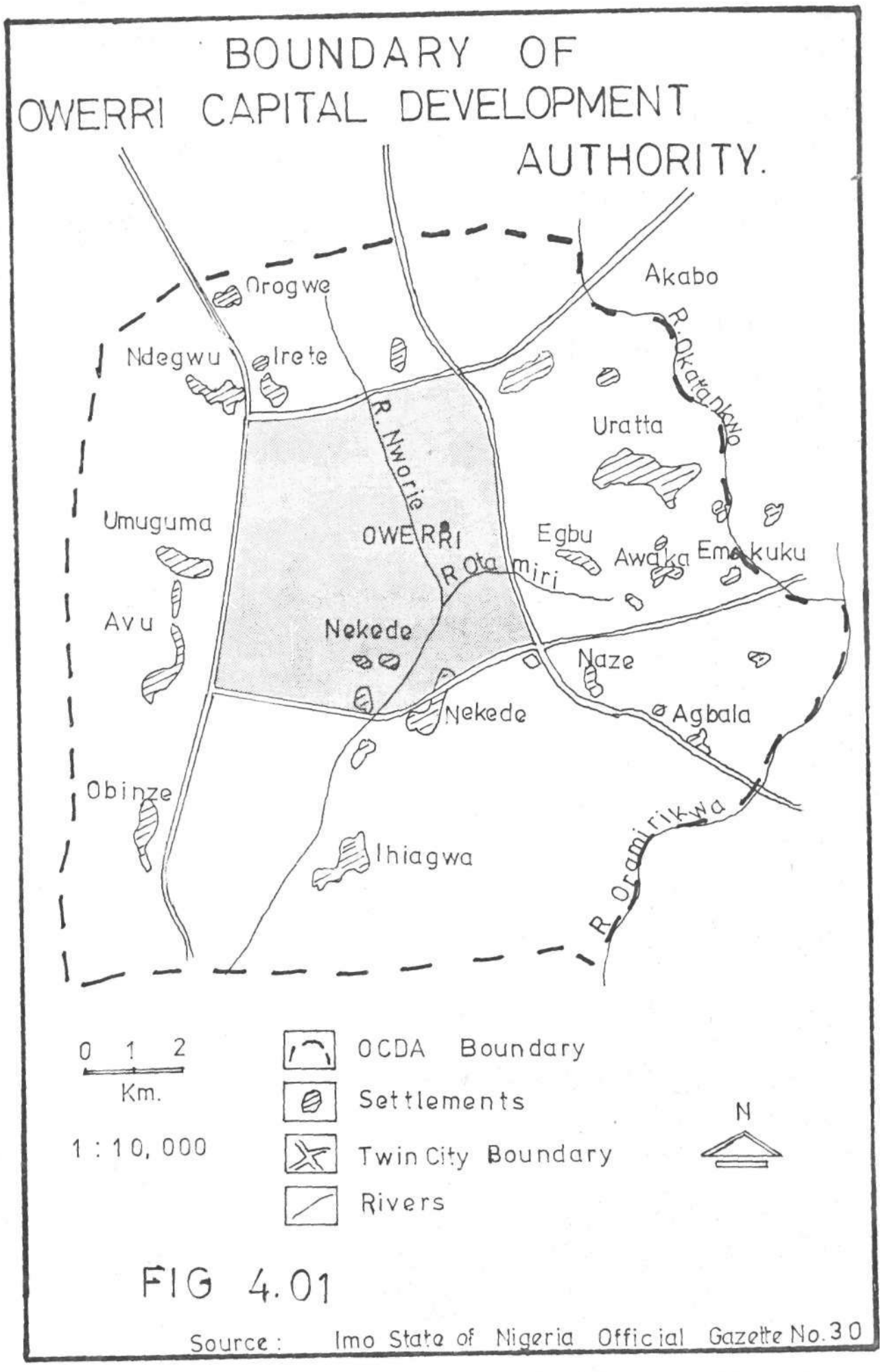


FIG 4.01

Source: Imo State of Nigeria Official Gazette No. 30

4.2 THE SPATIAL GROWTH OF OWERRI TOWNSHIP:

Owerri township, as observed earlier, originated from the unification of a number of nuclei traditional kindred settlements into a government station. Thereafter, gradual spatial growth which started at the central market place resulted in what can be described as old Owrri township. Between the time of its origin and the latter days of township stature, there had occurred several increases and declines in the population of the town. Two outstanding periods of population increase and decrease corresponded with the arrival and departure of the Shell D'arcy Oil prespecting company and the onset and end of the Nigerian Civil War.

Changes in the population of Owerri town have generally found expression in physical developments. When planned, such developments are characterised by the emergence of residential layouts like Ikenegbu, Works, Orlu-road and Ugwu-Orji Schemes. Such developments have also given rise to construction of roads and extension of city services to different directions of the town. When physical extension occurs on spontaneous basis, however, as has often happened, spatial growth is expressed through different and usually unorganized structures and shelters at peripheral locations of the town.

Usually, outward spread in cities is caused by increase in the population of cities. Growth in the population of a city can result from two main factors namely, natural increase and migration. In many developing countries migration to cities mostly result from rural areas. The most recent increase in the population of Owerri and its periphery is associated not with rural-urban migration but the arrival from Enugu and other parts of the country of civil servants and other classes of workers at the incidence of states creation when Owerri became Imo State Capital (Table 4.01). In this context, political forces are basic in the sudden population growth of Owerri and its periphery in 1976.

TABLE 4.01 MIGRANTS TO PARTS OF OWERRI PERIPHERY IN JUNE 1976.

Origin	To Amako-hia %	To Orji %	To Egbu %	To Naze %	To Nekede %	To Irete %
Owerri Town	28	20	7	20	8	28
Enugu	24	40	36	20	54	21
Other Towns in Eastern States	18	13	29	20	15	7
Rural Areas in Imo State	-	13	14	-	8	36
Bendel, Western State and Lagos	24	7	14	20	15	-
Northern States	6	-	-	-	-	-
Overseas	-	7	-	20	-	7
TOTAL	100	100	100	100	100	100

Source: Field Survey, July-August 1978.

Observe the small percentage of migrants from rural areas. The case of Irete is rather unusual. In three of the settlements, Orji, Egbu and Nekede, the largest percentage of migrants orginate from Enugu. These are most likely civil servants.

Multiplier effects of existing agglomerations also exert considerable force in attracting individual migrants. It also goes beyond the attractions which city based industries or employment centres offer to job seekers. Other industries are often pulled to existing ones in order to take advantage of scale economies. The attractive force of Owerri to migrants is not traceable to industries because there are no industries which can employ up to a hundred workers in the town at present. Rather it appears that socio-cultural factors are of much significance. In response to the question "why have you migrated to Owerri?", the largest response came from the group who were 'on transfer' at Owerri, while the third in the order are those who merely want to satisfy their 'desire to come home'.

From its earliest origin as a township, Owerri has produced and harboured different orchestral groups of national fame like late Israel Nwaba,

late Jonez and the recent ones among whom are "the strangers Band of Owerri, the Oriental Brothers International and the Peacock Guitar Band and many other promising starts in the world of music"[3]. This situation is enough to attract music lovers from far and wide to the town. Johnson (1972)[4] has emphasized the importance of such things as orchestra and art gallery in attracting people for permanent residence or for tourism apart from providing them employment. It has also encouraged people to live in particular cities as well as to locate certain kinds of employment generating functions in a given city.

Social attitudes in the form of individual preferences have also encouraged the spatial extension of Owerri. History shows that change in the people's taste and increase in personal wealth and affluence have often increased the craze for preferential treatment among human beings. In the cities, this attitude is expressed by the desire for larger living space and courtyards or gardens which in most cases can only be achieved

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3. Acholonu A.A. (1976) A Look at Imo State, A.J.E. Mbaise, p. 16.

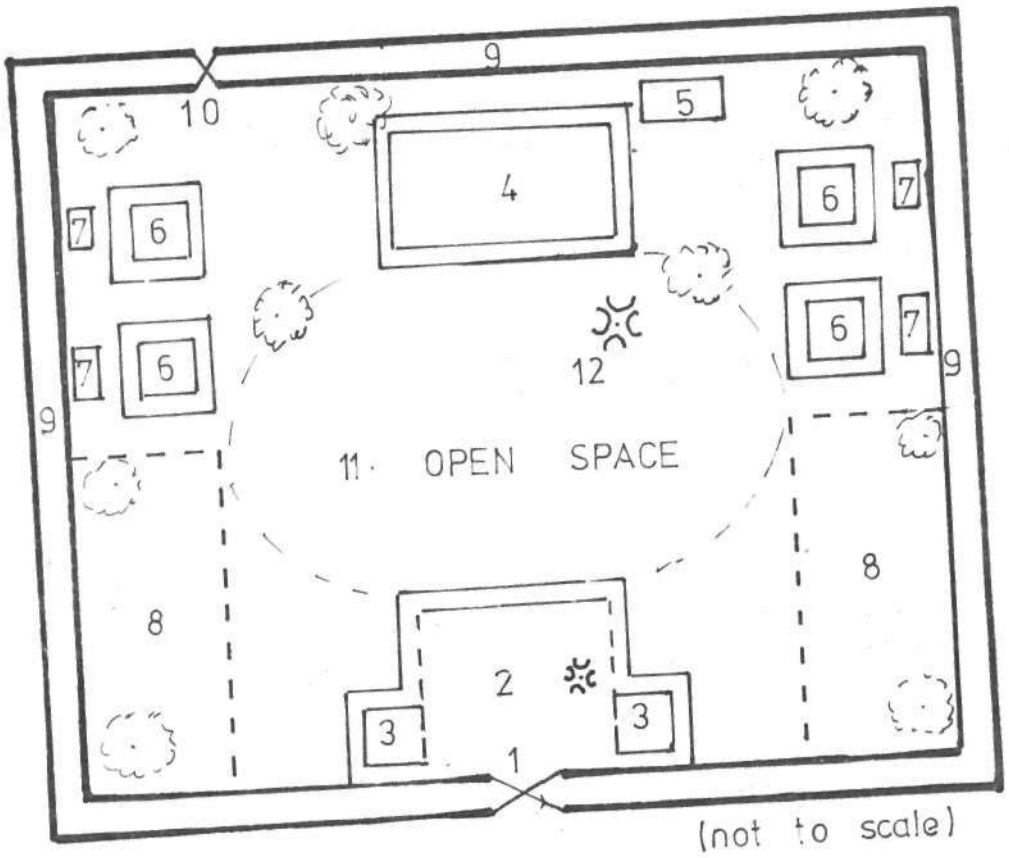
4. Johnson James, H. (1972), Urban Geography, 2nd edition, Pergamon Press, Oxford, p. 16.

easily at the fringe areas of the city. Colonial G.R.A. style of urban planning and the desire for single family houses is currently adding to the total land area occupied by Nigerian towns.

People are prepared to travel long distances daily provided they get what they want. In Owerri, this trait is shown in the flight to beautiful bungalows in the peripheral settlements by urban workers who have the means to commute daily to work. Thus, the wide-spread ownership of cars and motor cycles has in a large way encouraged this trend, since it removes the strain that would otherwise be imposed by poorly developed city transport system for living far out in the villages at the periphery of the town.

Other factors like cost of land within the city, (Table 4.02), speculation, government policies and new developments at the periphery have also contributed to the spatial expansion of Owerri township.

THE PLAN OF A TRADITIONAL IGBO COMPOUND



(not to scale)

1. Entrance Gate.
2. Visitors Reception Room.
3. Slaves Huts.
4. Head of Household's house.
5. Yam Barn
6. Wives Houses
7. Cocoyam Barn
8. Space reserved for son's houses.
9. Compound wall or fence.
10. Small Gate.
12. Family Altar or Shrine

FIG. 4.02

Source: Author's Observations

TABLE 4.02: LAND PRICES IN OWERRI AND ITS PERIPHERY 1977.

Location	Average Price per m2
Owerri (1976)	₦4.76k
Orji	₦2.75k
Naze	₦1.60k
Egbu	₦0.75k
Amakohia	₦0.49k
Nekede	₦0.18k
Irete	₦0. 6k

Source: Lands Division, MOW & H., Owerri, September 1978.

High price of land within the city centre as shown in the table can contribute to force potential developers to search for alternative sites at the periphery. In some cases, innovations within specific areas of the city periphery can bring such areas into sharper focus for investors. In the layout schemes towards both Amakohia and Orji have encouraged private developments in those parts of the urban periphery. The same effects are produced by the extension of pipeborne water and electricity lines to those peripheral settlements.

The overall effect of a phenomenon of spatial expansion of city, is the continual changes in the city boundaries and areas of its influence. Three boundaries can be identified in the spatial growth of Owerri.

(i) The boundary of the old nuclei settlements unified by the central market to produce the first government station in 1918. This area enclosed within that boundary is about five percent of the present size of the town.

(ii) The boundary of old Owerri town up to 1975. Perhaps about twenty-five percent of the total size of the present city is enclosed within that boundary..

(iii) The boundary proposed by the Master Plan area of the Twin City. Approximately seventy-five percent of the proposed area of the twin city is made up of the new area of land.

When viewed proportionately, the areas of land enclosed by the said boundaries in relation to the present size of the proposed twin-city could produce a ratio of 1:4:25. The change in the boundaries between the situation in 1918, 1975 and the expected time of twemty years in 1996, when the proposed

Master Plan is expected to have been implemented can be further appreciated if a comparison is made between the growth rates for the three stages identified.

Of great interest in the study is the creation of a new boundary for the OCDA, called the Owerri Capital Territory (CF Fig. 4.01). Planning proposals in this research are made for settlements in this territory. Further analysis of the existing situation will help to justify or reconsider the logic of allowing unrestricted expansion of Owerri town towards the periphery.

4.3 THE SITUATION IMMEDIATELY OUTSIDE THE CITY BOUNDARY:

Hitherto, the land outside Owerri Township had existed as agricultural land, owned by the original traditional settlements within the township and their neighbours outside the township. The settlements outside the town had been rural villages living in traditional Igbo compounds (Fig. 4.02). Each compound as shown in the diagram exhibits some unique planning forms and design concepts which emphasizes the central open space and unity of all the elements in a given compound. Streets radiate from each family compound towards the central (Fig. 4.04) place where matters of common interest are discussed.

Compound structure of houses are rapidly disappearing under the growing pressure for developable land, where to build new dwelling units. Increaing problems of overcrowding and demand for living accommodation has give rise to an unusual rate of constructional activities in the area. New buildings are rising up as old ones are either being improved or displaced.

TABLE 4.03: PROVISION OF HOUSING IN OWERRI PERIPHERY.

Age of Houses	Amakohia	Orji	Egbu	Naze	Nekede	Irete
Earlier than 1972	25	35	45	65	35	35
Jan. 1972-Dec. 1974	5	15	20	25	15	5
Total Before 1976*	30	50	65	90	50	40*
Jan. 1975-Dec. 1976	10	20	20	10	30	20
Jan. 1976-Dec. 1976	40	30	15	-	10	40
Total After 1976**	50	50	35	10	40	60**
Don't Know	20	-	-	-	10	-
Grand Total %	100	100	100	100	100	100

Source: Field Survey, August 1978.

The figures in the above table show close resemblance with the native-stranger population characteristics (Fig. 4.03), as well as the volumes of annual migrants into the settlements.

The growth of Owerri and the recent sopntaneous influx of an unprecedented volume of migrants has set into motion powerful forces of disequilbrium, which are resulting in both physical and socio-economic transformation of the villages at the periphery of the town. Perhaps, this is evidenced in the sudden change, not only in the sizes of the population of the villages but also their ratios of native-stranger population characteristics (Fig. 4.03a). Of course, these changes have been reflected in considerable shifts in the structure and composition of the labour force too (Fig. 4.03b).

Similarly, there are significant alterations in workplaces of the inhabitants at the periphery of the town, as can be seen from the following table.

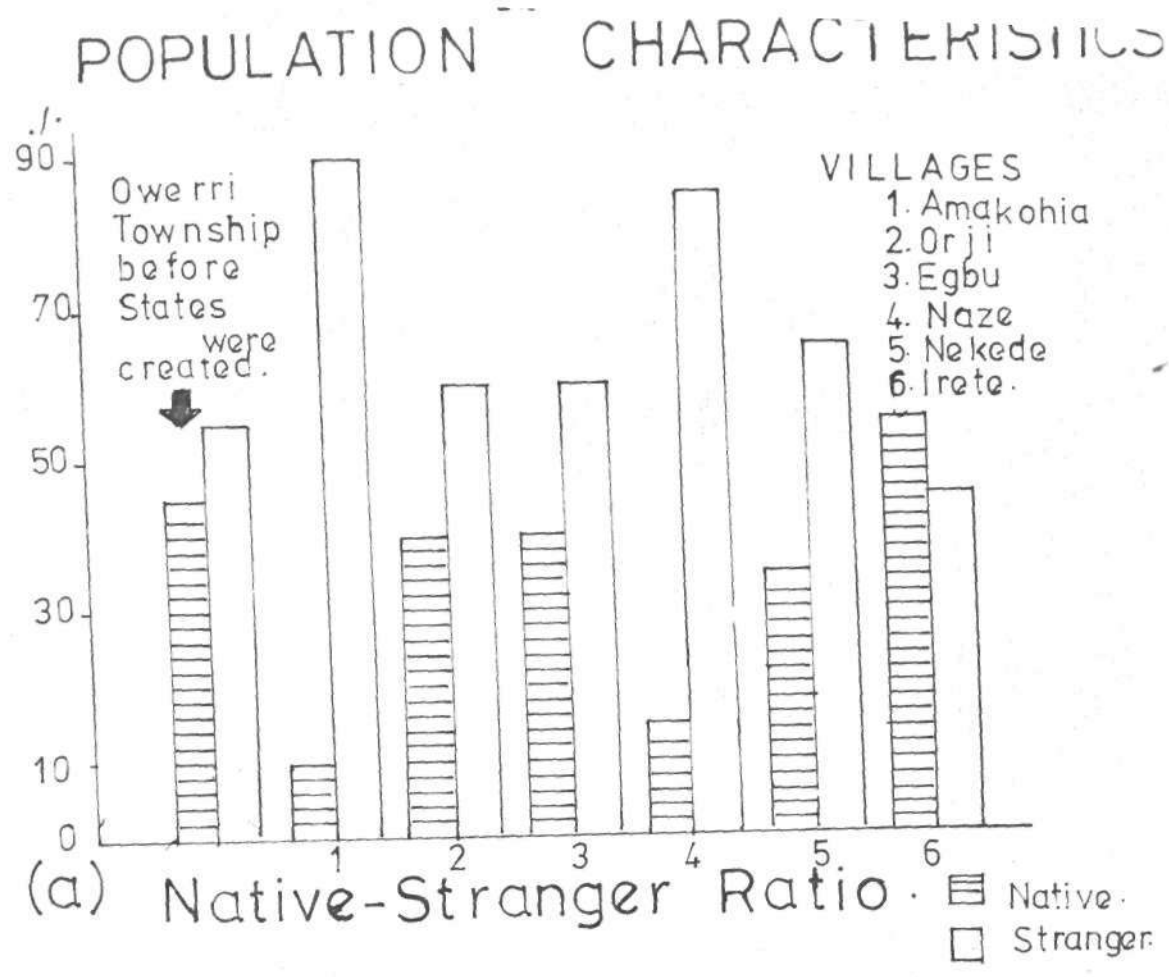


FIG. 4.03. Source: Field Survey Aug.1978

TABLE 4.04: LABOUR MOVEMENT IN OWERRI AND ITS PERIPHERY.

	Workplaces	Amakohia	Orji	Egbu	Naze	Nekede	Irete
Before 1976.	In the Village	15	25	30	50	35	35
	At Owerri	25	15	5	5	5	20
	Elsewhere/ Unemployed	60	50	65	45	60	45
		100%	100%	100%	100%	100%	100%
After 1976.	In the Village	55	70	45	40	75	75
	At Owerri	45	25	55	30	25	25
	Elsewhere/ Unemployed	-	5	-	30	-	-

Source: Field Survey, August 1978.

number of
There are increases in the workers in the villages where constructional activities are offering opportunities for employment. Increases are recorded also in the total percentage of workers at Owerri town. Perhaps this is an indication of where those who abandoned primary occupations in the villages found alternative employment. Of course recent migrations into the villages have introduced much distortion of the actual situation, because it is not the same labour force who have changed their areas of employment.

It is,however,interesting to observe the strength of working population who commute daily from the peripheral villages to their work places at Owerri. They have succeeded in doing so in the absence of reliable town-periphery public transport services because of the high level of car ownership. To confirm this observation, traffic volume counts were carried out on the major roads from these settlements at the peak traffic hours of 7-8 a.m and 3-4 p.m when most workers are either reporting for duty or going home. The results are as follows:

TABLE 4.05: AVERGAGE PEAK-HOUR VEHICLES FROM PERIPHERAL SETTLEMENTS TO OWERRI.

Origin of Traffic	Motor Vehicles*	Cycles**
Amakohia	200	181
Orji	168	184
Irete	101	356
Egbu	92	197
Nekede	89	105
Naze	64	62

* Cars, Buses and Taxes.

** Motor Cyles and Bicycles.

Source: Field Survey, April 1979.

The foregoing table shows that the least volume of traffic orginates from Naze followed by Nekede. Naze village has recently been by-passed by a new express road to Aba. This has reduced the attraction which commercial vehicles have for the old road to the village. The same consideration must have helped to produce for her a low percentage of stranger population too. The case of Nekede can be explained by the existence of Nekede farm, an important employment centre and the Agriculatural Development Corporation in the village. Moreover, most of her workers about 75% (Table 4.04) are employed in the village.

Perhaps the greatest area of pressure is with regard to facilities, services and utilities. There is inadequacy of water supply in all the villages. Electricity is not yet available in Naze, Nekede, Irete and parts of Egbu. Apart from the indigenes of these areas who are happy to live in their own houses without paying rents, most of the tenants in these villages have remained there under unsatisfactory conditions because there are no alternative accommodations. Others cannot afford to live elsewhere because their present residences are near their places of work. In fact, many of those employed in the construction works or on private business live in the villages to save extra costs of transportation.

4.4 DISORDERLY GROWTH AT THE PERIPHERY AND ITS CAUSES:

Rapid physical and socio-cultural transformation at the periphery of Owerri has been characterised by disturbing degrees of disorderliness on the landscape. Evidence of these are found in:

(a) THE BUILDING:

There is awkward irregularity in the sizes of the buildings, their arrangements along the streets and in relation to one another, and hence in their spatial distribution. In the absence of any type

of zoning guideline, some buildings appear too small in relation to their immediate neighbours. Of course, this can easily be traced to irregular plot subdivitions. When there is a corresponding high variation in the types of building materials used, as is often the case, some modern structures are bound to suffer economic devaluation as a result of their neighbourhood with shanty dwellings.

In spite of the general desire by government and private developers to improve their building standards, there is a dominance of prefabricated temporary structures in the villages. On the average, there is one temporary structure for every four permanent dwellings at the periphery of Owerri. Some of the so-called temporary structures are habouring large numbers of tenants (Plate 4.01).

Apart from the obvious departure from the traditional rectangular pattern of building arrangement within a compound, there is little conscious efforts on the part of developers to align their buildings along regular setbacks from major roads or streets. Figure 4.04 shows how the arrangement of existing structures along the Owerri-Orlu road demonstrates this element of disorder. Average distance of the buildings from the edge of the road ranges from 1.25 metres to 7.5 metres. This reflects the pattern of individual plot ownership.



Plate 4.01 A Giant Temporary Structure.

The above plate is the biggest so-called temporary structure found in the new residential area of Amakohia village.

Both wall and roof are zinc. There are twelve rooms. The area of each room is about sixty people live in this structure, without toilet facilities at all. Notice the half-open kitchen at the rear and the surrounding bush at the background where inmates dispose all types of refuse.



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RURAL-URBAN FORMS IN AMAKOHIA

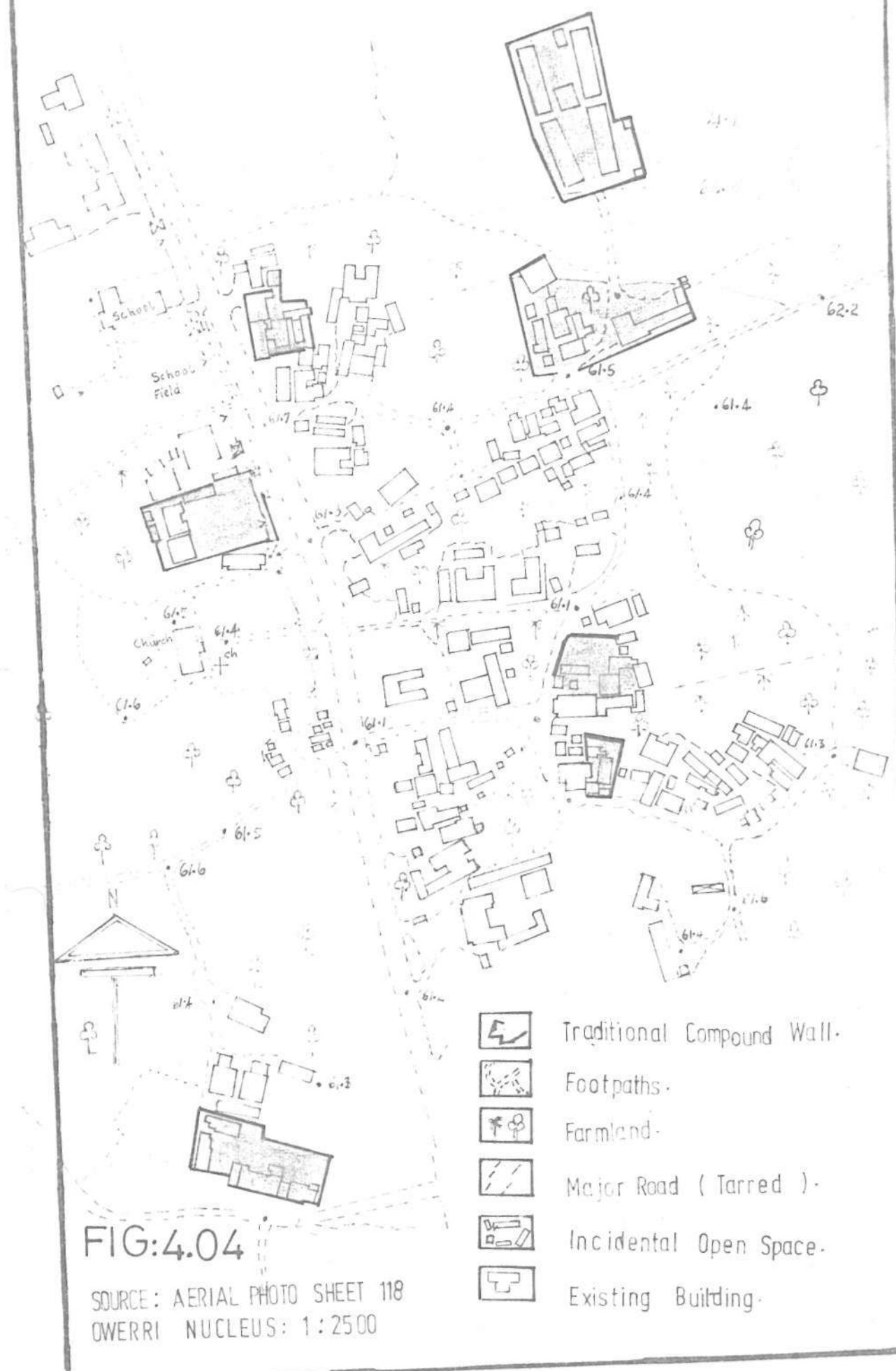


FIG:4.04

SOURCE: AERIAL PHOTO SHEET 118
OWERRI NUCLEUS: 1:2500

The overall spatial distribution of the buildings shows either mass concentration in some parts of the settlements or inexplicable scattering of houses in others. This creates incidential and often unuseable open space here and there.

The use to which different buildings are put, sometimes creates its own disorder by introducing the element of non-conformity. There is now a rush for accommodation by different uses. A number of existing traditional visitors' fore-rooms have been converted to commercial uses. In other cases, some highly inflamable commododities like petrol and kerosine are stored side by side with dry wood and timber under mat thatched roofs in typical window shopping fashion (Plate 4.02(a)). Such arrangements are likely to occasion fire disasters.

As a result of the organic growth of the settlements, location of different uses (conforming and non-conforming) is according to an individual's decision. In Amakohia village, one of the largest motor mechanic's workshop is located very close to a primary school (Plate 4.02b). Inevitably, the noise made by the panel-beaters and other workers at the workshop must distract the children's attention to their lessons.



Plate 4.02(a)
Competition between different uses. The traditional visitors reception shed of roof thatch is converted to commercial use. It is now used as a timber shed. Notice the adjoining long narrow path which ultimately terminates in a private compound.



Plate 4.02(b)
Destruction of dominant open space in a traditional compound by two new buildings. Note the live-sticks behind the mud-house. They are the remaining parts of the compound fence.

(b) ACCESSIBILITY:

The circulation pattern is not only generally circuitous, because they follow existing footpaths, but often discontinuous. Many roads end up in blind alleys or into private compounds (Plate 4.03a). It appears that the building of individual houses are embarked upon without adequate considerations to the total community structures, or accessibility and street network (Plate 4.03b). The streets are irregular, few and lack proper hierarchy, alignment and pavement. Generally, the roads and streets or avenues show confused layout and perform undefined functions. An estimate of the distribution of road network in the villages in shown in the following table.



Plate 4.03(a) A narrow street, covered by pools of ground water, terminates in a blind alley, in a private compound. This shows poor circulation system.



Plate 4.03(b)

There are many modern buildings without good access roads and water supply. The owner of the beautiful block arrowed may have to beg other lands for access to his building.

TABLE 4.06: PERCENTAGE DISTIBUTION OF ROAD NETWORK AT OWERRI PERIPHERY.

Classes	Ama-kohia	Orji	Egbu	Naze	Nekede	Irete
Tarred Road	25	25	25	25	25	30
Untarred-Motorable	36	36	25	20	37	20
Footpaths	39	40	50	55	38	50
Total %	100%	100%	100%	100%	100%	100%

Source: Field Survey, September 1978.

The situtation shows the dominance of footpaths. The reduction in this situtation in Amakohia and Orji can be accounted for by the increased presence of car owners in those areas (CF Table 4.05). Accessibility to their private residence which are improved but untarred are classified as motorable. The case of Nakede is occasioned by both the use of trucks in the agricultural farms within the survey area plus the existence of concrete aand deposits in the river basin which is mined for building activities. The roads to these deposits are motorable. Car parking facilities all over the periphery, occur in spontaneous pattern.

(c) SANITATION:

There is absence of adequate sanitary arrangements. None of the roads has proper drainage gutters. Consequently during the rainy season, surface drainage is chaotic as the roads are covered with pools of water (Plate 4.04a). In like manner, refuse disposal dumps are found randomly on roadsides (Plate 4.04b). These dumps are found sometimes located directly in front of residential houses where there are open spaces. They thus constitute not only aesthetic eyesore but health hazards by providing breeding grounds for rats and flies. They also constitute dangerous air pollutants. All over the villages, there are no organised waste disposal arrangements. A few households who cannot reach the roadside dumps have no choice but to litter their refuse within their compounds. In a few cases, they provide manure for the gardens.

Apart from observable poor environmental sanitation, household sanitary arrangements are also inadequate. Most of the roadside prefabricated structures which are described by their owners as workshops also serve dual purposes of workshops and residences. Sixty-eight percent of the artisans interviewed at Amakohia who own such structures, also



4.04(a) There is poor drainage. Pools of ground-water cover the roads during the wet season. This makes movement difficult for both motorists and pedestrians.



Plate 4.04(b)

(i) A roadside waste disposal heap is a hazard for all the people especiall for children who walk about bare-footed.

(ii) Children participate in solving the problem of inadequate water supply.

sleep in them at night. There is a dominance of bush and pit latrine system of human waste disposal in the villages at the periphery. This is because of inadequate water supply. Table 4.07 shows the distribution and absence of basic facilities and utilities in these areas. Since few households, less than 30% have access to tap water in the areas where there is pipeborne water, most people depend on surface stream for their water needs.

(d) RECREATION AND OPEN SPACES:

All over the villages, traditional forms of recreation seem to be disappearing and no adequate substitutes are replacing them. Where they are not completely displaced yet, they are insufficiently provided. One of the constraints in providing recreational facilities is the general absence of organised open spaces. The pattern of building construction going on in these areas, merely produce a number of incidental open spaces and vacant lands which may be misused, underused or even unused (Plate 4.05a). There is widespread devaluation of some open spaces and vacant lands with refuse. Cases of overuse of open spaces through crowding of buildings which are advantageously sited near school compounds (Plate 4.05b), the rural inhabitants at Owerri periphery have no access to organised open spaces and recreation grounds.

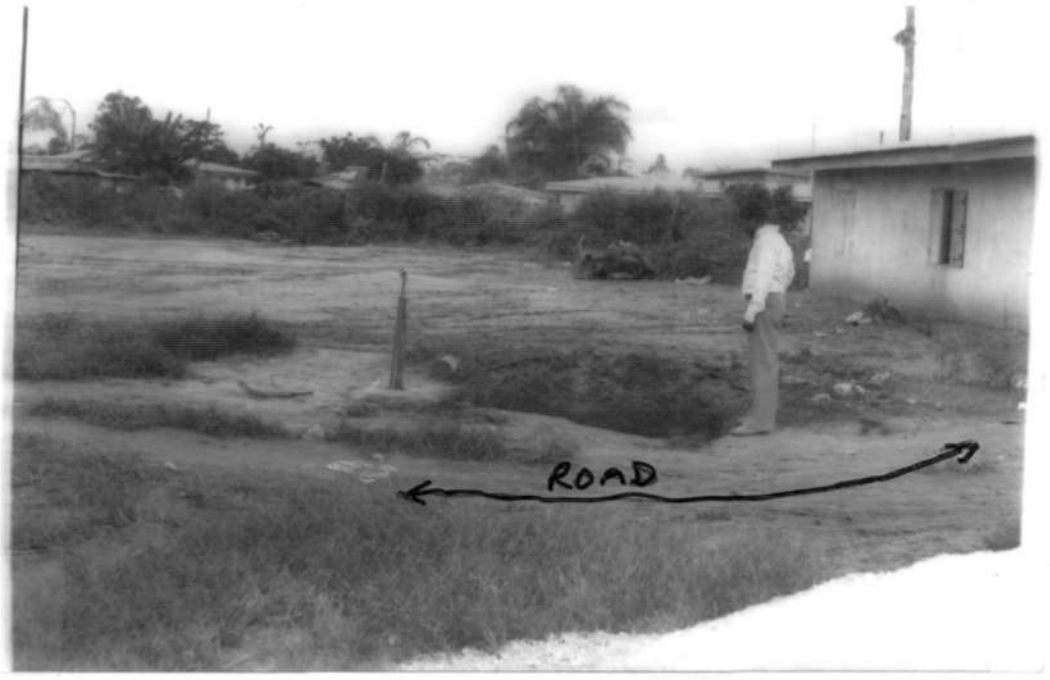


Plate 4.05(a)

An Incidental Open Space, hemmed in by residential buildings, is unused. The author takes a surprise look at a deep and dangerous trench beside a public water tap near the road opened by speculative developers.



Plate 4.05(b)

Lucky children whose parents live near school compounds always meet to play in the school fields. Elsewhere, there are no organised open spaces.

Disorder in this regard has resulted jointly from the disintergration of the traditional pattern of family compound which creates dominant open spaces in its layout and organisation of dwelling units. Absence of building byelaws in the areas also contribute to produce chaotic arrangement of built-up areas and unorganised random spaces. Eventually, there are no clearly defined community centres with the required amenties like good markets, schools, churches, dispensaries since these occur in scattered locations, and serve different overlapping interest groups. These cause a serious drawback in the efficient functioning of both the communities and the individual residential compounds.

(e) GENERAL FACILITIES, SERVICES AND UTILITIES:

These are generally insufficient in number and when provided, the quality and arrangement fall below required standards. In spite of the rapid growth in the populations of these settlements, they lack many basic facilities, services and utilities as revealed in the following table.

TABLE 4.07: EXISTING FACILITIES, SERVICES AND UTILITIES AT OWERRI PERIPHERY APRIL 1979.

Facilities, Services and Utilities	Amakohia	Orji	Egbu	Naze	Nekede	Irete
1. Primary Sch.	1	2	1	2	2	2
2. Sec.Sch/ T.T.C.	1	-	2	1	3	1
3. Maternity Home	-	2	-	1	1	1
4. Dispensary	-	-	-	-	1	-
5. Health Centre	-	-	-	-	-	-
6. Recreation Ground	-	-	-	-	-	-
7. Churches	4	5	1	2	5	3
8. Local Markets	1	1	1	1	1	2
9. Police Station	-	-	-	-	1	-
10. Fire Serv. Station	-	-	-	-	-	-
11. Postal Agency	-	-	-	1	1	-
12. Motor Park	-	-	-	-	-	-
13. Bus Service from Owerri	yes	yes	-	yes	yes	-
14. Pipeborne Water	yes	yes	-	yes	-	-
15. Electricity	yes	yes	-	-	yes	-
16. Petrol Station	-	1	-	1	-	-

Source: Field Survey, April 1979.

Inadequacy of these basic requirements can be appreciated more with reference to the population figures of these settlements. (Table 4.08) which have been considerably increased by in-migration.

Apart from primary schools, whose numbers are very low for the populations of the villages, a closer look at the Local Markets, which is one of the said facilities that exist in all the settlements will further reveals the level of inadequacy that prevail in some of the available facilities recorded.

TABLE 4.08: SOME LOCAL MARKETS AT OWERRI PERIPHERY.

Villages	Pop. 1962	Approx. Area of Mkt $(m)^2$	Weekly Periodicity	Daily Session in Hrs.
Amakohia	*1783	600	Daily	10
Orji	3,374	15,000	(1) i 4 days	3
Egbu	4,374	3,600	(1) in 4 days	6
Naze	4,974	900	(1) in 4 days	3
Nekede	*12,415	3,000	Daily	3
Irete	3,778	(a) 30,000 (b) 500	(a) (1) in 8 days (b) Daily	(a) 10 (b) 6

Source: Field Survey, September 1978.

Note: Facilites for physical expansion exist only in the present locations of Orji and Naze markets. The others may need to be relocated if physical expansion is to be achieved without destroying existing dwelling houses.

Apart from their small sizes (Plate 4.06), the building materials used for the sheds in most of these markets cannot stand bad weather for a reasonable length of time. All the markets except the bigger one at Irete are located near the major roads have daily sessions for varying periods of time. In spite of this, most of the inhabitants at the periphery say that they frequent Owerri town in order to buy their basic needs. This shows that the range of goods offered in the local markets is limited to perishable foodstuffs and very few other commodities.

Considering the populations served, it need not be emphasized that better marketing facilities are required at the periphery. The stated populations have increased much.. Amakohia for instance is one of the aettlements that received more than her appropriate share of the migrant population because it is the nearest village to the existing built up area of the town. Figure 4.03a shows that the relationship between her native population and the strangerpopulation is 1:9. With reference to Nekede, it is necessary to repeat that only a part of her population, approximately a third, fell within the sample area of study.



Plate 4.06(a) EGBU MARKET.

There are good roofs but the size of the market is small. Expansion is required.



Plate 4.06(b) ORJI MARKET.

The existing markets in both the area for incorporation into Owerri and in the agricultural settlements need to be improved. Better roof cover than found in the p;ate is essential, in both wet and dry seasons.

(f) CAUSES OF DISORDERLY GROWTH.

Some factors can be identified as contributing to the scale of disorderliness in the physical nature of the settlements at the periphery of Owerri. These are:

(i) Creation of Imo State: The creation of states and the capital status conferred on Owerri resulted in a massive in-migration to the city and the consequent spill-over of population to the periphery for accommodation. The presence of such huge extra population in the villages led to the construction of different structures to accommodate them.

(ii) Speculation and rising incidence of land sale:

Both of these factors mutually reinforce themselves and produce intricate pattern of plot ownership on which the new structures are put irrespective of any planning considerations. Figure 4.05 shows the sudden nature of the rise in the trend in land alienation. Only the land use decree stopped the trend. Nevetheless, in spite of the sudden official action which prohibits sale of land, other factors were in operation.

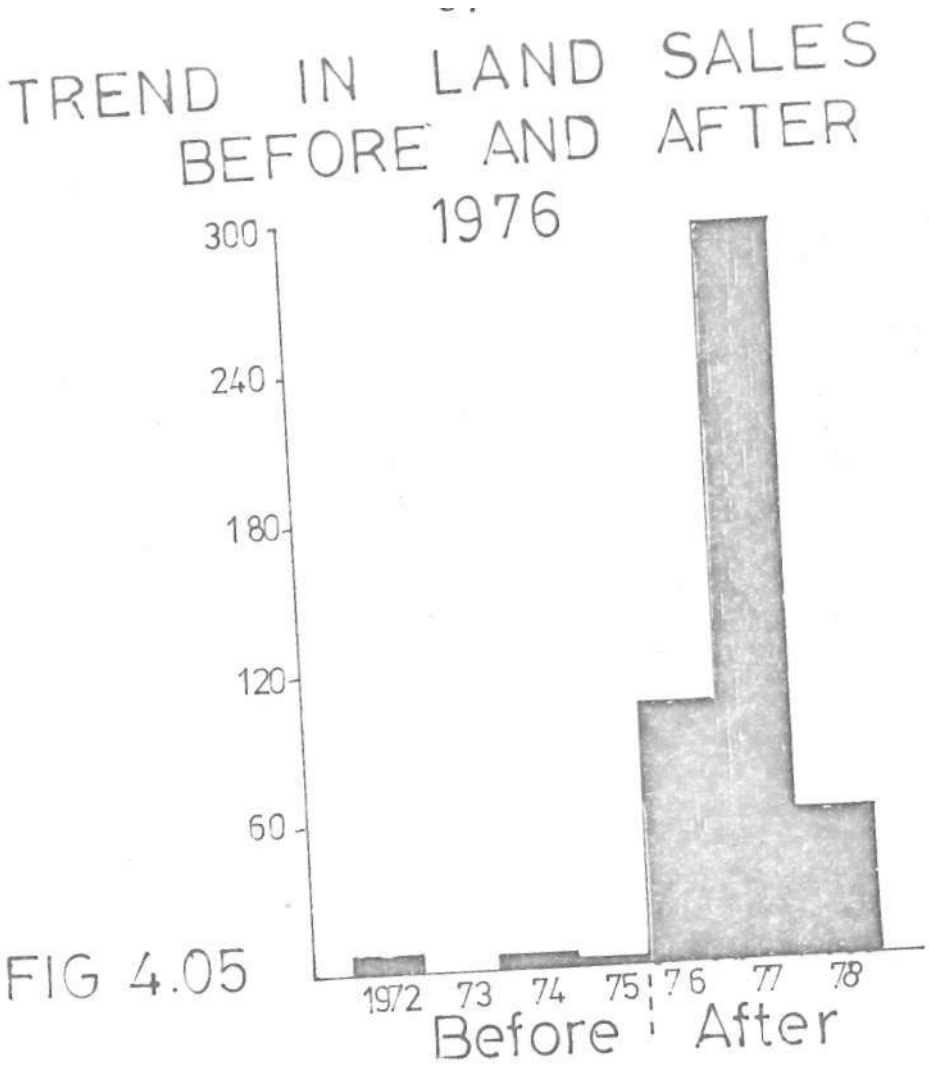


FIG 4.05

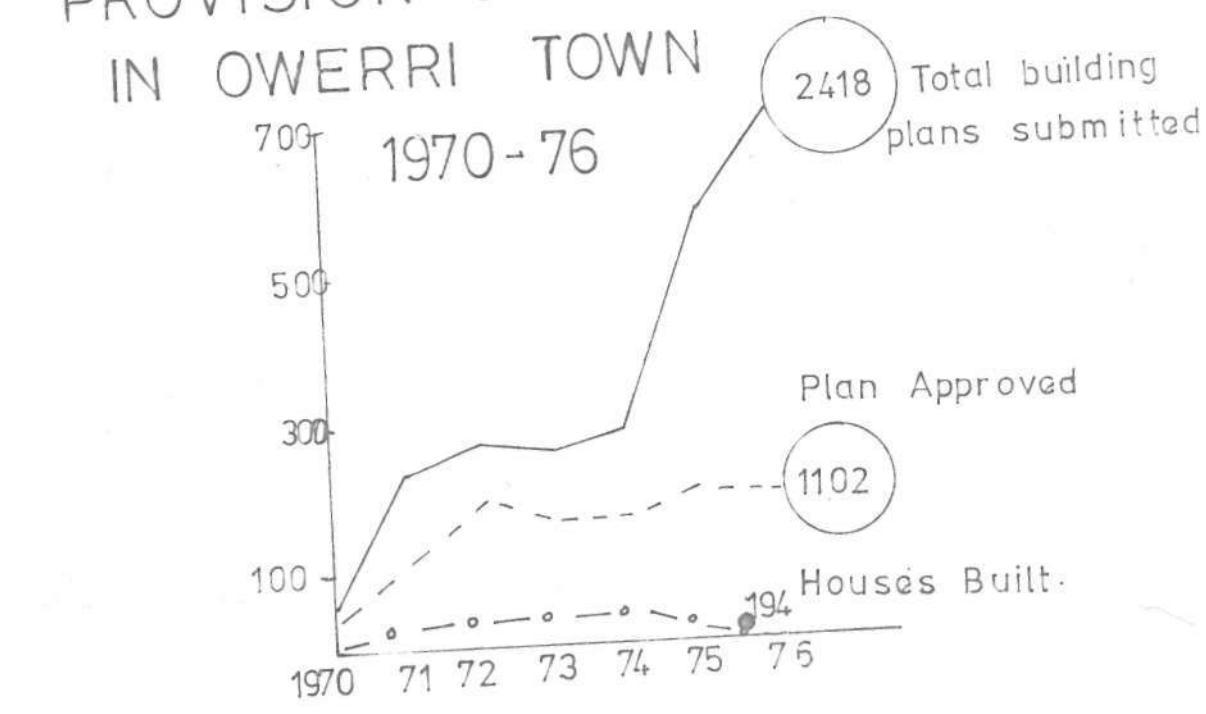


FIG 4.06

Source: Town Engineer OTPA 1976.

These include what Sada (1970)[5] describes as the avarice of landlords whose interest is to make as much money as possible from their plots of land and therefore have no scruples in adding as many adjuncts as possible to the original house planned.

(iii) New trend in Land Tenure System: Landowners in the villages at the periphery of Owerri recently show much readiness to sell their lands on freehold basis. This is a remarkable change in their tradtional attitude of land in which the concept of alienation was almost taboo. One of the consequences of individual alienation of land is the occurence of fragmental pieces of land owned by different people. Such pattern of ownership influence the way and manner in which developers build on their land without reference or obligation to one another, since no planning regulations are enforced.

(iv) The Owerri Master Plan: Proposals in the master plan specifies development controls within the boundary of the twin-city. This has the effect of diverting and intensifying the attention of many potential developers to the periphery where no such controls exist. For instance, out of 127

5. Sada, P.O. (1970) The Rural-Urban Fringe of Lagos: Population and Landuse: The Nigerian Journal of Economic and Social Studies, Vol. 12, No. 2 July 1970, pp. 225-241.

new structures in Amakohia village in 1977 only 5 received the approval of the planning authority of Owerri.[6] Of course, the slow process and low rate of providing houses at Owerri (Fig. 4.06) has failed to solve the acute accommodation problem in the town.

(v) Institutional Negligence: Obligatory requirements for plan approval, before development is embarked upon doe not extend to the peripheral settlement of Owerri, where disorderly developments are currently occuring. This means that there is absence of building byelaws or guidelines. Sometimes government interest or action appears lax and unsustained. This is clearly demonstrated in the declaration of a 15 kilometre radius from the centre of Owerri as a planning area without following it up with concrete proposals and development policies and proposals are not adequately backed with legal and administrative powers to enforce the standing orders and regulations.

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6. Town Planning Division, Ministry of Works and Housing, Owerri.

(vi) The Indigenous Population: The settlements at Owerri periphery developed organically and so represents in physical features, all the elements of co-habitation and extended family needs as characteristic of traditional African societies.. This is the origin of some intricate street patterns. In addition, the people are poor when compared with the business landlords in the township who are ready to make emergency financial arrangements in order to effect physical alterations within a short notice. In effect, the villagers concentrate on use of cheap building materials, carry out low maintenance schemes and have low concept of environmental quality. They are mostly illiterate farmers who do not actually build for rent but for their own residence. However, their simple dwellings suddenly assumed new commercial functions by attracting rents.

4.5 CONSEQUENCES OF DISORDERLY DEVELOPMENTS ON THE PERIPHERAL SETTLEMENTS.

(a) LOSS OF IDENTITY:

Perhaps the first and most obvious result of the on-going rapid alterations in the landscappe of the villages around Owerri is the apparent loss of identity. These rural areas which are being

engulfed by urban growth forces, resemble neither purely rural villages nor true urban settlements. There appear to be an on-going comptetion between urban and rural forms in which urban forces are gaining the upper hand. In most places, the traditional compound structure of building arrangements within an encircling rectangular wall, have been destroyed but have not been fully replaced by urban types of developments (Cf Fig. 4.04). This phenomenon is reminiscent of what Johnson (1972)[2] refers to as the rural urban fringe, a zone in which various rural and urban characteristics are mixed together.

(b) DESTRUCTION OF OPEN SPACES:

Apart from resulting in loss of identity for the settlements, disorderly physical development has resulted in unnecessary partition of land, relative reduction of plots for redevelopment, and eventual elimination of dominant open spaces characteristics of traditional compounds through a process which Mabogunje (1962)[8] described as growth by fission.

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7. Johnson James H., op. cit., p. 148.

8. Mabogunje A.L. (1962) "The Growth of Residential Districts in Ibadan: Geographical Review, Vol. 52, pp. 56-77.

This process is currently taking place in the villages to meet popular demand for housing in the midst of scarce living accommodation. By the process, many traditional compound houses which cater for extended family in-mates are replaced by few units of houses often designed for nuclear families. It further aggravates the existing scarcity of recreational playgrounds for small children.

(c) ENVIRONMENTAL DEGRADATION:

Disorderly growth of the physical environment removes the aesthetic quality of the landscape. It also reduces the total quality of the neighbourhood to see modern buildings struggling with shanty and squalid structures for prominence. The rubbish heaps on the roadsides constitute not only health hazards but terrible eyesore. Poor physical characteristics can quickly overwhelm the entire area by a gradual emergence of slum situation.

(d) HEALTH HAZARDS:

Poor sanitary conditions in any area are sure harbingers of health problems for inhbaitants of the area. Both the pollutants and substandard residential dwellings could singly or in combination affect the health of the inhabitants too. A number of respondents who were asked

if the roadside refuse heaps do not create problems, without exception dislike the features. One of them reported how his child was hospitalised because of injuries sustained accidentally when he ran into a refuse heap while he was playing with his mates.

(e) IMPROVEMENT COSTS:

Increased complexity in the scale of disorderliness will have corresponding increase in the average cost of remedying the situation. Demolition or improvement of existing physical developments cost both time and money, and have not always proved successful in Nigeria. Provision of the required infrastructure within the circuitous routes created by organic and haphazardly developed process will involve huge amounts of money if improvement schemes are belated.

(f) SOCIO-ECONOMIC CONSEQUENCES:

The process of indiscriminate sale of land which encouraged the process of plot subdivision has resulted in the reduction of agricultural land and agriculture based occupations without providing adequate substitute means of income in some cases. Similarly, the sale of land, particularly communal land has dispossessed a number of non-vocal members

of some landowning families of some reserved wealth, in the form of landed property. Disorderly growth has in different ways led to overcrowding, waste and other forms of misuse of scarce land and inadequate provision of badly needed open spaces.

(g) OTHER PROBLEMS:

All the affected settlements incidentally lie on the main gates to the nodal town of Owerri. One of the presently unemphasized but serious consequence of disorderly growth in the peripheral villages is the poor image they create for visitors to the city. It would be a contradiction of the principles of environmental planning to allow any landmark of special architectural value (Plate 4.07) not to receive adequate locational emphasis it deserves. This could happen when the corridors of an urban area are neglected. The first impression a visitor gets on entering Owerri is that of passing through the rapid growth and presently unplanned precincts of the town. If nothing is done to improve the situation, visitors to the town will continue to have false impressions about the image of the city from those created by disorderly peripheral settlements.

CHAPTER FIVE.

PLANNING PROBLEMS OF CITY PERIPHERIES.

5.1 LITERATURE REVIEW - TYPES OF PROBLEMS.

Generally, planning problems of many cities and their peripheries seem to result from the rate of spatial growth of such cities. Growth in this sense means increase in size and number. It connots quantitative expansion. With reference to a city, it usually involves both the increase in the size and number of its population and economic activities plus the extent of land occupied by its physical structures. Thus, spatial growth of cities specifically refers to the physical extension of the total land area occupied by cities. Planning problems become critical when the observed growth rate exceeds the capacity of the city government to provide adequate city infrastructure.

City peripheries are the growth fronts. It is on the peripheries that the most rapid physical growth impulses occur either in planned or spontaneous manner. Incidentally, it is one of the ironies of city history that some of the efforts made to cure the evils orginally caused by city growth have in fact enabled cities to grow

still more rapidly. This is particularly true about the provision of city utilties like light and water to peripheral locations which have the effect of producing accelerated physical developments in the areas affected.

Two broad groups of problems can be identified in relation to city peripheries namely:

(a) Environmental problems which are readily expressed physically on the city scape. Such problems can be solved where relevant instruments for their solutions are available.

(b) Actual planning problems occur in the form of querries, doubts and perplexities and are so recurrent that city planners wonder if there are complete solutions for them at all. Perhaps, this group are more problematic issues than the first mentioned problems.

(a) ENVIRONMENTAL PROBLEMS:

The symptoms and occurences of these problems are evidenced by changes on the physical landscape. They are often characterized by planlessness in the city or deterioration of planned phenomena. These were the commnest problems in West European cities during the early period of Industrial revolution.

(i) The physical problems are identified in the different systems and patterns of urban activities. They are seen in congested traffic, increasing journey to work, sprawling houses, general pressure on land uses manifest by use-competion, and non-conforming uses. Limitations on open spaces, shapelessness, formlessness, imbalance and lack of rhythm in sizes and structures in the city are among such problems which help the city lose its character and beauty.

(ii) Socio-economic problems are tied up with over-concentration of functions in a simple location, overcrowding of people and their activity centres, crime, authority and class discrimination which extended to segregation. Health problems are associated with slum occurrence, pollution, inadequate sewage and other hazards.

(iii) Institutional problems which affect city planning functions are observed in bad administration and poor management, inefficiency, absence of or loose control and haphazard or inefficient implementation of planned proposals.

Usually the solution of these problems can be attained through the provision of financial manpower, and other resources at the required level.

(b) ACTUAL PLANNING PROBLEMS:

The second group of problems are often appreciated by physical planners than any other classes of people.

Perhaps the basic distinction between a professional planner and a layman is that whereas both are interested in examining and understanding present issues, the former seeks there from to attain future goals. Consequently, when a professional planner looks at a current problem, he is interested in assessing its implications for the future. A city planner uniquely attempts not only to maintain efficient functioning of the city at present, but also to guide the direction of its spatial growth to a desirable pattern so as to maximise the efficiency in the overall functioning of the city systems.

Under circumstances of rapid spatial growth, the limitation on time and other constraints forces the planner to meditate on the different problems.

(i) Under whatever resources available to him, he imagines how to maintain the identity and image of the city. Every city has a unique identity and and image. Like names and ther personal characteristics by which people are recognised, it is these qualities which makes it possible for an observer to have a mental picture of one city as

distinct from another. The planning problem here is not only how to maintain or preserve such an image or identity but also how to improve and emphasize it in the face of rapid spatial growth, new structural accretions and the inevitable physical alterations associated with such dynamic forces.

(ii) As the city grows spatially and explodes into its know boundaries, the planner faces another problem of how to create a new image on the growing fringe of the virgin landscape, an image which is quite in accord with the existing images of the city. When this is not achieved, there is bound to occur monotony in spite of whatever an observer may regard as architectural feat achieved in such a city.

The complexity in the problem of creating a new image increases proportionately with increase in the area of future extension of the city all of which must be organized perceptually. Under such circumstances, Lynch (1960) says that the natural features are no longer a sufficient guide to structure, because of the intensity and scale of the development being applied to them.

'Moreover'; he further argues, 'the tempo at which rapid spatial growth proceeds is such that the emergence of buildings and other structures on the landscape are not slow enough to allow adjustments of form to small, individualized forces".[1]

(iii) The next problem is how to control the growth itself within reasonable speed, such that basic infrastructural developments can follow the pace of spatial growth. Inability, to scale down rapid growth to such a level, produces inefficiency and imbalance in the functioning of urban systems. It also leads to disproportions between shape, form size and structure of the city.

(iv) Apart from the issues that worry the planner in relation to the development front or the fringe zone of the city, the planner considers how to make the entire city a functional and flexible whole. Looked at a living organism, the city has cells and organs which operate in close interrelations. When one is functioning inefficiently, the others will be affected directly or indirectly. For instance, the urban transportation system, is an organ of the city whose function is directly related to the spatial growth of the city. The planner considers how to relate city growth to all city activities.

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1. Kevin Lynch, 1960, The Image of the City, The MIT Press, Mass, p. 166.

(v) The automobile revolution in Western Cities has taught city planners to anticipate technological innovations when planning cities. How to predict the trend and direction of technological changes which will affect the city, is a problem which faces many planners of modern cities, Of course, since there is no clear knowledge of what to paln in this case, the techiques of planning would prove ineffective in planning for indeterminate objectives.

(vi) Every city planner faces a peculiar problem of not only planning for a better growth and development of the city, but also how to make individual beneficiary and of course, other actors on the scene of policy formulation especially other professionals. Even when such plans are acceptable, the planner faces the ever-present problem of reducing those physical problems created by rapid spatial growth.

Whenever he tries to solve these problems, the planner encounters another set of conceptual issues on:

- how to minimise the need for commuting to work and at the same time maximise the ability to do so.
- how to provide quick access to the centre of the city and also create access to the periphery.

- how to separate some city functions and integrating others.
- how to achieve a balance between continuity and receptiveness to change and a balance between traditions and give the city identity and the flexibility necessary for adaptation to new conditions.

It appears therefore that any solutions to these problems exist more in the realm of private imaginations and guesswork than in any body of theories or empirical laws and practices. Moreover, there is no gurarantee that what succeeds in a particular circumstance will succeed in another.

5.2 ORIGINS OF PROBLEMS:

Planning problems in cities and their peripheries result from the spatial growth of cities. Spatial growth of cities in turn originate from a number of factors which include the following:-

(a) POPULATION GROWTH AND OUTWARD SPREAD IN CITIES:

Perhaps the earliest cause of physical expansion of cities is increase in city population. Growth in population and its outward migration from the central areas of the city may result from natural increase in the city's population. A stranger course of city population, of course, is immigration.

Among the known causes of migration, economic considerations appear to be dominant. Structural shifts in the economy, and the attendant income disparities are good promoters of this trend. Many European countries experienced its peak during the industrial revolutions also, while many developing countries are currently facing their own phase of it.

According to Peter Hall, (1962)[2] some three fifths of total increase in the urban population between 1939 and 1959, represented migrants from the countryside. He says that the great shift out of agriculture is common to all peasant or ex-peasant countries. It had contributed to the growth of Paris, the Randstad in Holland, the Rhine Ruhr area and in the U.S.S.R. Elsewhere, the same experience will continue at different scales.

(b) MULTIPLIER EFFECT OF EXISTING AGGLOMETATION:

As imdividuals are attracted to cities, so are industries especailly when they discover possible economic advantages. Industries are often pulled to existing ones in order to take advantage of scale economies. This consideration substaintially adds to the physical size of cities. Whereas, scale economies attract industries from outside the city, it appears that the same consideration plus the

2. Peter Hall, (1962), The World Cities, World Univ. Library, The MIT Press, Mass, p. 162.

existence of external economies more readily available to city-based industries, help to retain industries in any city. Keeble (1971)[3] observes that this consideration deters most expanding firms if not from relocating, deters most at least from moving to the peripheral development areas.

(c) SPECULATION AND COST OF LAND:

Within the city itself, several factors promote physical expansion. Usually, rising price of land within the city centres, forces potential developers to search for alternative sites at the periphery. Coupled with speculation, a lot of developments occur at the city fringe and thus encourage further outward growth because of present and expected economic profits from such investments.

(d) GOVERNMENT POLICIES:

Usually government intentionally or unwittingly promote rapid physical expansion of cities through various policies. Such policies result in industrial location or relocation, within or outside the cities, the decentralization of other employment centres and provision of new housing estates, all of which contributes to spatial growth of cities. Anti-earthquake policies, which limit the height of multi-storey buildings to below stipulated standards, have similar consequences of rapid spatial growth of cities likeTokyo.

3. Keeble D.E., 1971, "Employment Mobility in Britain in Spatial Policy Problems of the British Economy (ed) Chishold M and Manners G. Cambridge.

(e) TECHNOLOGICAL IMPROVEMENT:

As has been mentioned earlier, it is rather ironical that some types of technological improvements merely add to the dimensions of city size and the complexity of its planning problems. The effects of the improvement of the means of tranaportation on cities is a classical example. Other improvements in tele-communication system and other basic city services create residential intertia on many suburbanites. Consequently, their incentives to move and live into the cities are damped.

(f) NEW PHYSICAL DEVELOPMENT:

Like the effects of the improvement of transportation, new developments at the periphery promote rapid spatial expansion of cities. It is now common knowledge that the construction of new roads, railway lines and other transportation routes, hotels and tourist centres, extension and installation of electric lines and water mains to peripheral parts of the cities merely pull new developers and speculators towards such areas. Thus increase in the area occupied by the city is unavoidable affected.

(g) SOCIAL ATTITUDE AND INDIVIDUAL PREFERENCES:

Several studies including that by Peter Self[4] (in some English speaking countries) have found a close correlation between an individual's income and the size of his house plot. Obviously, this growing space consciousness quickly finds its expression in the rate of spatial growth of cities.

(h) LACK OF CONTINUITY IN PERSPECTIVE PLANNING:

Some plans are made with a long term motive to achieve some expected objectives. Even among physical planners, a design can aim at linking up, integrating, or incorporating settlements, and aesthetic objects of architectural values on the landscape with the city. When this is the case, a conscious effort can be made to channel city growth along definite directions. The overall effect of this action is a significant proportion of addition to the spatial size of the city. As planned extensions, they may or may not pose major immediate problems. More difficult problems arise when subsequent planners cannot appreciate the original interest, motives and orientations of previous planners.

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4. Peter Self (1961) Cities in Flood - The Problems of Urban Growth, Faber and Gaber Ltd., London, p. 26.

5.4 PLANNING STRATEGIES ADOPTED IN DIFFERENT CITIES OF THE WORLD.

Methods adopted in different cities have aimed at establishing a limit on the physical growth the settlments. Three different orientations can be distinguished in the various strategies adopted. These are aimed at:

- a forceful limitation of spatial growth.
- finding alternative solutions to problems of city oversprawl and
- accepting what cannot be rejected.

(a) COMPREHENSIVE MASTER PALNS (Fig. 5.01a).

One of the oldest techniques adopted in these directions was the preparation of master plans for the affected cities. It involved the preparation in broad outline of a structure plan for the spatial expansion of an urban area. The problem was that however well conceived and formulated a master plan is, it caters for a fixed period and extend of the city. As sonn as both components are exhausted, the inherent problems of city growth will inevitably re-emerge.

(b) CONTAINMENT POLICY - GREEN BELTS: (Fig. 5.01b)

The next approach is the containment policy[5] devised by British Planners to restrain the lateral growth of London Conurbation. One of the tools of achieving growth control used in this method was to establish a green belt around any affected city within which building could be controlled. It thus involved the use of force in restricting the spatial growth of cities hence it failed in most cases, or produced other side effects like over-swelling up of the populations of existing towns or producing new towns outside the belt which subsequently led to greater conurbations.

(c) DISPERSAL POLICY - NEW TOWNS: (Fig. 5.01c)

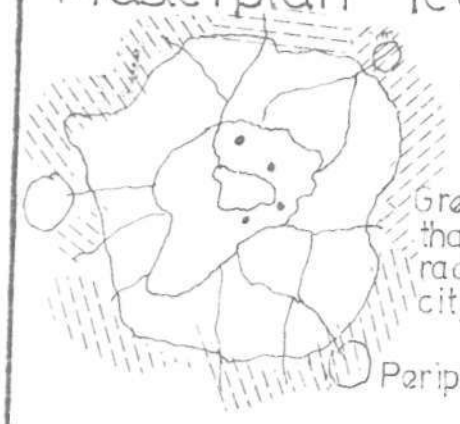
Dispersal policy was practised also as a sort of regional approach. It conceptualised a central city which is surrounded by a circle of satellite towns, all linked with each other by easy communication by physically separated by agricultural and recreational land. This approach was later modified in a number of growing metopolises. like Paris, Tokyo, Moscow, The Ruhr Basin of Germany and the Randstand into the principle of creating New Towns in order to decongest existing towns. New Town

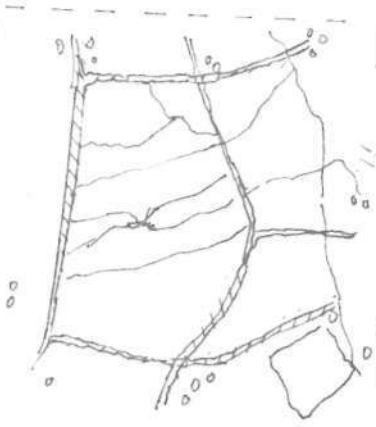
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5. Foley Donal L., (1963) Controlling London's Growth, University of Calif. Press, 1963 Berkeley and Los Angeles, p. 145.

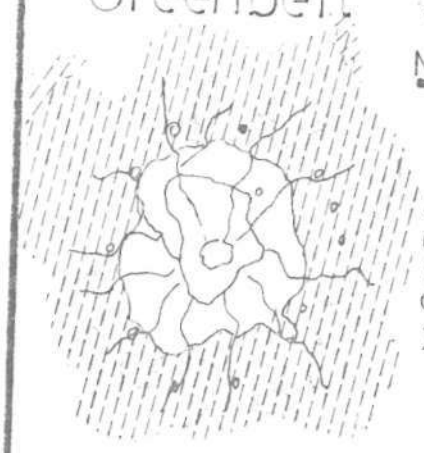
SOME CITY GROWTH CONTROL STRATEGIES

(a) Masterplan Technique.

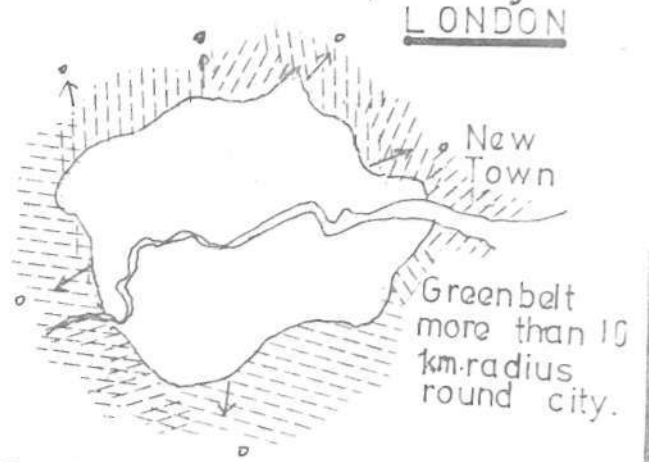


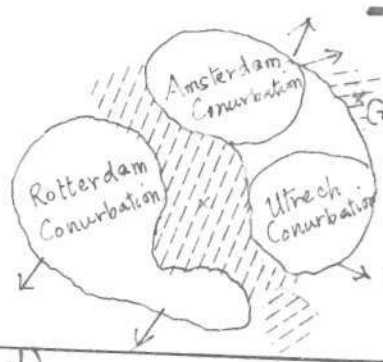


(b) Greenbelt Approach.

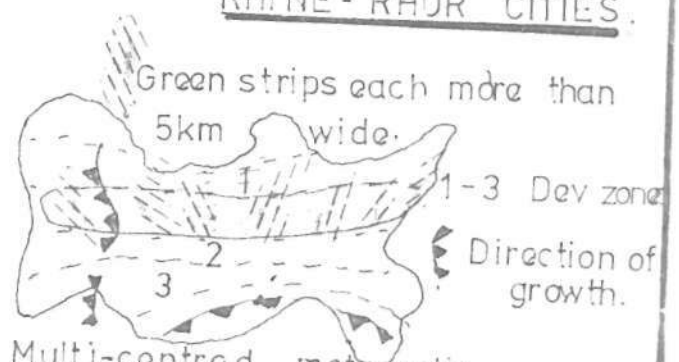


(c) Dispersal policy.





(d) Containment policy.



Drawings not to scale.

N

FIG 5.01

Sources: 1 Peter Hall The world cities.
2 Lloyd Rodwin British New Town policy.
3 F&P Ltd Imo State Capital Owerri Masterplan TwinCity.

concept was a great success but it also sometimes produced negative results. An example is "The Development of the New Town of East Kilbride, which was specifically created to relieve congestion in Glasgow only a few miles distant. Because East Kilbride, like Glasgow itself, is within a development area, it has flourished industrially, but it has drawn industry, not from its congested pavent city, but from all over England and America as well"[6].

(d) ADVANCE PLANS OR GUIDED GROWTH STRATEGY: (Fig. 5.01d).

The other strategy involved making advance plans for communication in future development zones. In planning the Ruhr area as described in its planning Atlas 1960, the law gave the SVR (the Siedlungs Verban Ruhr Kohlenbezirk) to establish the line of a future road development which is then kept open for an indefinite time. So the SVR can plan a future network in the sure knowledge that future development will not set the plan at nought"[7]

This approach can readily recommend itself to developing countries particularly from the economic point of view. To lay out in advance, sufficient land area, in planned network for a city's future

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6. Peter Self, op. cit., p. 139.

7. Peter Hall, op. cit., p. 153.

road system is very good where the government is incapable of paving the roads at once. This will have the double advantage of guaranteeing an orderly present spatial growth of the city and ease in the provision of basic infrastructure along the defined routes in future when resources for such undertaking are available.

5.5 THE CASE OF OWERRI - PROBLEMS IDENTIFIED:

As indicated earlier, very rapid spatial expansion of Owerri is linked with the sudden and abnormal increase in the city's population in 1976. The periphery of Owerri naturally shared from the overflow of the in-migratants when sufficient accommodation for them was not available in the town.

Apparently, Owerri somehow represents a different situation from the classical examples of Paris, London, Moscow, and the other cities referred to in the section on literature review. The distinction lies in the fact that although physical exapnsion in all the cases examined are related to increase in population, the problems of the peripheries have different dimension. Settlements at the outskirts of those cities were generally located more than

ten kilometres from their boundaries, but Owerri is almost ringed by many rural settlement within less than five kilometres from its boundary.

In addition to the problems of environmental deterioration analysed in the section under disorderly growth, the following planning problems are identified at the periphery of Owerri.

(i) The problem of non-inclusion of peripheral settlements in the master plan considerations. The planners recognised the urgancy of this gap when they specifically recommended that "in order to guarantee an orderly development of the region surrounding Owerri, a structure plan for the region has to be prepared".[8]

(ii) Another problem is the absence of a Green belt round the city. This has denied the peripheral settlements proper direction for suitable developments in their areas. Different strategies adopted in planning some cities in the world (Fig. 5.01), individually give prominence to belts of green round the cities as an essential tool for guranteeing orderly spatial growth in future.

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8. Fingerhuth and Partners Ltd., op. cit., p. 45.

(iii) Perhaps the most crucials problem observed is the lack of proper orientation in the future function and development of the peripheral settlements. In this regard, it is uncertain if they should serve the functions of rural agricultural villages, dormitory towns to urban workers, independent satellite towns, cottage industrial centres, market centres, tourist and recreational suburbs or what. A clear indication of the proper function of the settlements will determine what form of development could be proposed there.

(v) The problem of integration of the developments at the periphery with the city. This problem can be resolved when earlier mentioned issues are handled. Thus, it will be certain if the peripheral settlements will be developed as part of Owerri twin city or develoed as distinct entities in themselves which are functionally integrated with the town.

CHAPTER SIX.

PROSPECTS FOR BETTER DEVELOPMENT AT OWERRI PERIPHERY.

6.1 INSTITUTIONAL RECOGNITION OF NEED FOR PLANNED DEVELOPMENT.

More than a decade ago, the earliest development plan in the country recognised that "there is scarcely a town in Nigeria that is not in very serious need of replanning and proper laying out of further extension"[1]. Recently, the need for planned physical development in Nigerian cities and of course their peripheries, has been echoed by the Federal Government and is reechoed by different State Governments.

In the third national development plan, the Federal Military Government resolved to make serious efforts "to deal with the problems already created by the inadequacy of physical planning and urban infrastructure such as roads, housing, water supply, waste disposal and other social or communal facilities in the face of continuing rapid population growth and physical expansion".[2]

To achieve this goal, the Federal Military Government proposed and has to some extent effected the reformation of existing machinery of urban planning.

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1. Nigeria: A Ten Year Plan of Development and Welfare for Nigeria, Lagos, 1964, p. 27.

2. Nigeria: Third National Development Plan, op. cit., p. 291.

Different State Governments have also contributed in different degres towds attaining the stated goal. In Imo State, this objective has been expressed in the creation of OCDA. What is now needed is to equip the instituion with all the facilities it requires to enable it to cope with the responsibilities assigned to it.

The need for planning not only Owerri Twin City but its periphery is demonstrated by the scope of operation defined for the OCDA. The area within its care extends between 3-5 kilometres beyond the boundary of the Twin City (CF. Fig. 4.01). This region contains all the settlements being examined in this study.

6.2 A CASE OF EQUITY AND EQUALITY.

Imo State like other parts of Igboland, did not develop urban culture at the scales observed among the Yorubas and Hausas. With a regular and dense population distribution all over the region, there seem to be equal or similar expectations between both city and rural inhabitants. The demand for even development and same amenities was sharpened by the impact of the Nigerian Civil War which led to large scale destruction of the infrastructural investment. Rising expecations of rural inhabitants in this regard increase correspondingly with nearness to any township.

With thetremendous and unexpected increase in the population of Owerri and its periphery and the consequent pressure on the environmental facilities, unique demand pressures for such facilities are created in the peripheral settlements which had hitherto played secondary roles of rural areas like those in other parts of the state.

A close consideration of the scale at which these peripheral settlements have shared in the urban stresses caused by increased functions of Owerri, plus the contributions they are making towards the overall development of the city through taxes, rents and rates, obviates any feeling of injustice of benefits accruing from urban development are limited to the city alone, at the total exclusion of its periphery.

Since the ideal relationship between the city and its hinterland is that of interdependence, it it in the best interest of their mutual development and balanced economic growth that development impulses originating from the city should be allowed to spread evenly to its periphery.

6.3 FAVOURABLE COMMUNITY RESPONSE TO DEVELOPMENT PROPOSALS.

The spirit of community development which seem to have remained latent among Igbo, have been given the fullest vent since after the Nigeria Civil War when practically every community engaged in a self-help programme. Individual talents in Imo State and Community resources have been placed in the hands of able leaders for the promotion of community welfare and development.

While praising the people for their efforts in this regard when he reviewed the achievements of the state during a ceremony to mark the third anniversary of its creation, the Military Administrator, Colonel S.A. Adeniyun said that "all the achievements made as far by the government and people of Imo State were possible through the spirit of self-help of the people of the state"[3].

This trait among the people of Imo State is not absent among the inhabitants of the periphery of Owerri. The following table shows that several development projects have alrady been executed by the communities. Others are either being executed currently or are planned to be executed in the near future.

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3. Daily Sketch, Wednesday March 28, 1979, p. 3.

TABLE 6.01: SOME SELF-HELP DEVELOPMENT SCHEMES AT OWERRI PERIPHERY JANUARY 1979.

Projects	Amakohia	Orji	Egbu	Naze	Nekede	Irete
(a) Building Secondary School/College	EJ	OA	EA	EA	-	OA
(b) Building Primary School	OA	-	-	-	PA	-
(c) Rural Water Supply	-	EA	-	PA	-	O
(d) Road Construction	-	-	OJ	OJ	-	-
(e) Rural Electricity	-	-	PA	-	-	-
(f) Church Building	OA	-	-	-	OA	-

Source: Field Survey, April 1979.

EJ = Executed Jointly with another community orwith Government aid.
OA = On-going project by community alone.
PA = Planned to be executed by community alone.
EA = Executed alone by community.
OJ = On-going project being executed jointly with other community or government aid.

The same spirit can be tapped by government for the provision of needed services and amenities. An existing popular method of offering marching grants for programmes initiated by the people can produce very good results in this situation. Communities responed spontaneously to such incentives offered by government.

6.4 THE NEW LOCAL GOVERNMENT REFORMS.

As mentioned earlier, one of th most significant impacts of the new local government reforms is the introduction of the city management concept of urban administration. It has many advantages over the erstwhile institution of town planning authorities which tried to manage large urban areas with inadequate staff, finance and legal backing to enforce its regulations and implement development schemes. Consequently, the system had in many parts of the country degenerated to an irstitution that approved building plans without being able to monitor their development as specified in the approved plans.

On the other hand, the new system as represe-nted by the OCDA in Imo State, has extensive powers[4] and grand scope of operation in the planning and

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4. Owerri: 1978 Imo State of Nigeria (Powers and Functions of the OCDA) Official Gazette No. 2, Vol. 3, A21-A28.

deveolopment of its territory (CF. Fig. 4.01) whih extends beyond the boundary of the city. By statutory act, it set off with a high calibre professional staff of executive who progressively will be supported by an adequate number of qualified in specialised fields. Above all, the authority has the power to engage and train new staff or co-opt specialists for consultations and expert advice.

Considering its extensive job of implementing and periodically, reviewing the master plan of the Twin-city, as well as preparing and executing an urban-regional master plan for the Capital Territory, the authority in addition to annual grants from the government is given free hand to:

- borrow money, raise stocks and debenture and invest such money in profitable ventures.
- dispose, sell, mortgage, or otherwise deal with property within the capital territory in furtherance of its activities.
- enter into contracts and partnership with any persons or organization which in the opinion of the authority will facilitate the discharge of its functions, and above all to
- under such research as may be necessary for the performance of its functions.

In addition to these roles, the authority will carry out such planning functions as the preparation and protection to prohibit or even demolish unauthorised developments. While doing these as parts of the lawful pursuits of the aims and objectives of the edict which established it, the authority is protected from reckless litigations by affected persons or bodies. Perhaps, above all other administrative safeguard to guarantee efficiency in its function, the authority deals directly with the state government and thus avoids costly delays in the execution of its duties.

The OCDA is thus an existing institution for the implementation of all proposals for the efficient development of Owerri and its periphery. As far as proposal for better development at Owerrin periphery are concerned, it is an invaluable asset.

6.5 THE LANDUSE DECREE.

One of the events which increase the prospects of better development at the periphery of Owerri is the landuse decree of 1978. The decree provides that "all land comprised in the territory each state (except land vested in the federal govement or it agencies) in the federation are ... vested solely in the Military Governor of that state, who would hold

such land in trust for the people and administer same for the use and common benefit of all Nigerians in accordance with the provisions of the decree"[5].

The decree provides customary rights of occupancy, of large areas of land but not more than 5000 hectares to be granted to individuals in rural areas for agricultural purposes. To this end, local governments are empowered to institute land allocation committees for the purpose of granting such rights to any person or organisation for the said purpose, as well as for residential and other uses. Such a provision in the rural areas contrasts sharply with what should obtain in urban areas where no occupant may be allowed to hold or use in one state, a portion of undeveloped urban land exceeding half hectare in area.

As planning tool and with reference to the periphery of Owerri, the first advantage which is indicative of better prospects for development is that the decree will reduce or halt the growing incidence of indiscriminate subdivision of land into plots for erecting mainly residential buildings.

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5. Lagos: Decree No. 6, The Landuse Decree 1978, Federal Ministry of Information Official Gazette (Extra Ordinary) No. 14, Vol. 65, pp. A47-A67.

Such practice has been a major contributor to disorderly developments in the settlements at Owerri periphery. For the first time in the history of land tenure, control and administration of land is entrusted to the state government. This is a power which can usefully be employed to achieve desirable goals and efficient development in cities and their peripheries. Constraints which had hitherto been presented by landownership, control and administration in physical planning can now be contained within the provisions of the landuse decree.

6.6 AVAILABLE PLANNING RESOURCES AT THE PERIPHERY OF OWERRI.

A number of planning resources can be found at the periphery of Owerri which singly or jointly can promote possible alternative proposals. These include the existing physical resources, traditional interest in agricultural occupation, some socio-economic factors and important traditional administrative institutions. These can briefly be examined one after the other.

(a) RESOURCES FOR PHYSICAL DEVELOPMENT:

Apart from the factors discussed in the section on the physical conditions at the periphery (Chapter 2), we can add that the periphery of Owerri

contains a maze of roads and footpaths. Among such rural road network are some avenues and roads which are capable of being upgraded and developed to provide important links with other places outside these settlements. They can also serve temporarily as they are currently doing, with little improvement until finances are available for their expansion and surfacing.

There are in each of the settlements basic resources which can provide needed r w material for the establishment of cottage or small scale industries in future. For instance, the Naze-Egbu forested boundary can provide a suitable site for recreation and tourism as well as provide wood for the production of tootpicks and other needs for the urban populatiom. In Nekede, the stream side gravel depot can be developed into more commercial quarrying. Other small scale industries liked in the appendix may have enough raw materials bases to sustain them in these settlements. Of course a large part of the undeveloped open spaces within the settlements can be reserved fof the provision of some badly needed amenities.

(b) RESOURCES FOR AGRICULTURAL DEVELOPMENT:

The future of agriculture in the periphery of Owerri is bright considering the past fame enjoyed by this parts of Imo State as producers of foodcrops like cassave, yams, maize and vegetables. If agriculture is developed scientifically, production of such foodcrops will increase the average income of the farmers and hence their standard of living. The level terrain of the periphery of Owerri is an asset for mechanisation of agriculture.

Another factor which cannot be overlooked is the extensive open land available at the periphery of Owerri. Before the preparation of the master plan for Owerri Twin City, it was easy to acquire and approximate are of 72.5 square kilometres without resettling any people. This is a clear inidcation of the extent of this natural resource of open land which can most usefully be devoted for agriculture.

(c) FAVOURABLE SOCIO-ECONOMIC FACTORS:

Like many other rural areas in Nigeria, the periphery of Owerri contain a large number of employable cheap labour force to guarantee the success of well organised development scheme. These able-bodied

unemployed or underemployed people can readily be mobilized for a rapid acceleration of any development programme. Some institutions like the traditional hired labour schemes exist which will make such paid employment a normal practice. The people can also benefit from government extension schemes which exist in different areas of the state now. The urban population is a ready market for the products from the periphery too.

Traditional institutions like thrift contributions and age grade associations are sound basis for the establishment of cooperative societies. The new ratio of native-stranger population has introduced a social mix in the population and has created higher expectations in the minds of the rural population. This spirit of competion can be directed towards productive ends by letting the people develop their natural resources with which to increase their earning capacity.

It is interesting to observe a high level of similarities in the existing situation and other characteristics of the settlements at the periphery of Owerri (Table 6.02). Tests of singnificance in the observed variations in the values

OWERRI AND ITS PERIPHERY.
(INTEGRATING ELEMENTS)

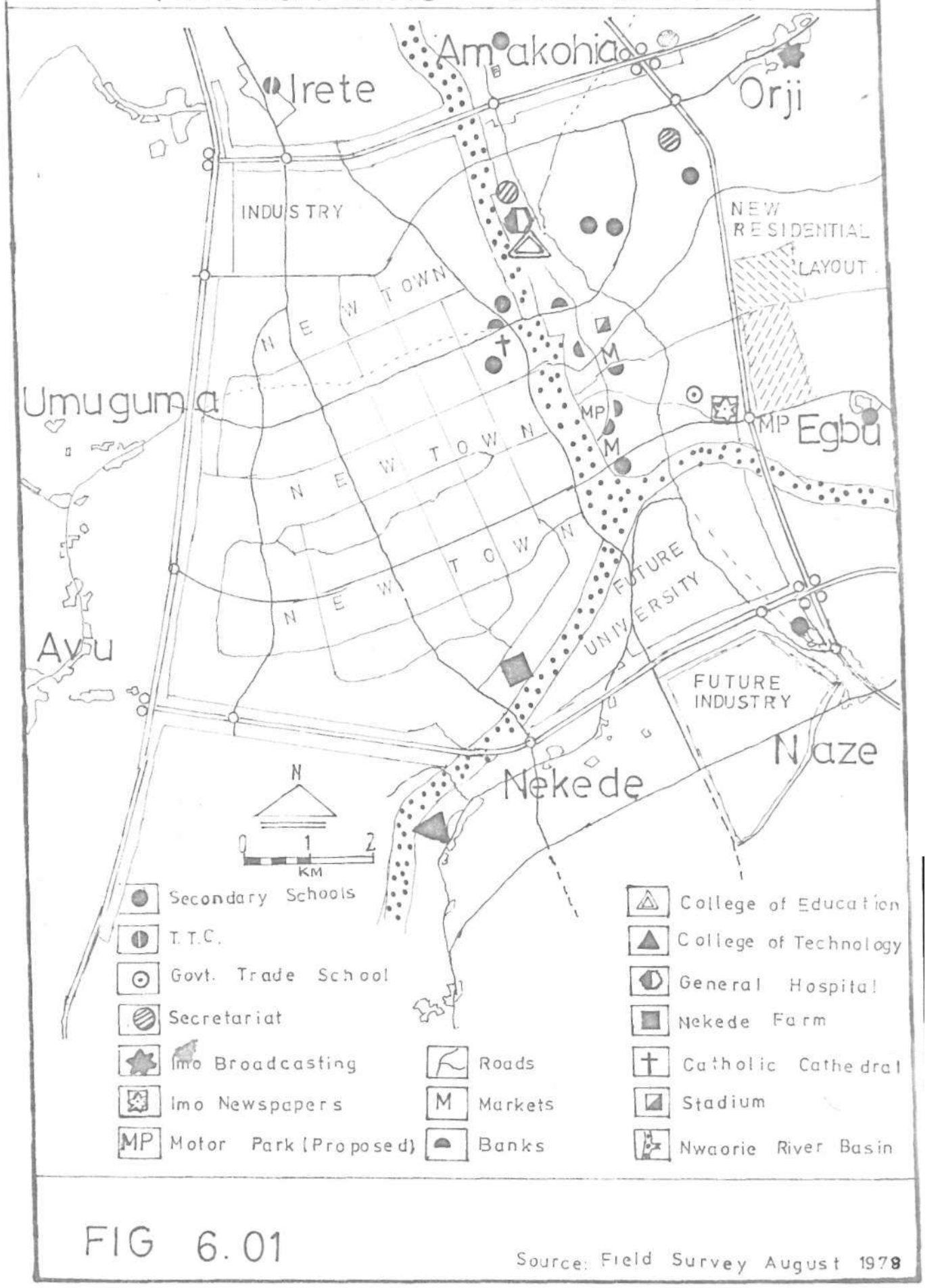


FIG 6.01

Source: Field Survey August 1978

show very low insiginificant results. This situation, apart from increasing the confidence of planning generally for the periphery, also reduces the cost factor as well as the administrative complexity that would be involved in planning for uniquely different situations within the periphery. A similar advantage exists in the observed general reduction in the magnitude of physical deterioration as distance from Owerri increases. This creates ample opportunity for effecting adequate control measures on negative tendencies while making timely plans to encourage positive tendencies.

TABLE 6.02: A MATRIX TABLE OF CORRELATION IN THE EXISTING SITUATION IN SIX VILLAGES AT OWERRI PERIPHERY.

Note attached values of significance of variation in brackets.

TEST1: (Family Characteristics).

.7150(.000)
.7604(.000) .7320(.000)
.5034(.000) .5533(.000) .6043(.000)
.8592(.003) .7362(.001) .8812(.000) .7058(.000)
.7956(.000) .8288(.000) .8744(.000) .7798(.000) .9030(.000)

TEST 2: (Population Characteristics).

.7626(.000)
.7422(.000) .8060(.000)
.5086(.000) .6678(.000) .6725(.000)
.7787(.000) .8358(.000) .8113(.000) .6503(.000)
.7254(.000) .8879(.000) .8820(.000) .7902(.000) .8239(.000)

TEST 3: (Housing Characteristics).

.8729(.000)
.8084(.000) .8981(.000)
.6451(.001) .6356(.001) .6471(.001)
.8948(.000) .9059(.000) .8953(.000) .6956(.000)
.9219(.000) .9525(.000) .8946(.000) .7004(.000) .9558(.000)

TEST 4: (Environemtn, Facilities, Services and Utilities).

.6681(.000)
.6536(.000) .9019(.000)
.2414(.117) .7661(.000) .7597(.000)
.5332(.003) .5615(.000) .6585(.000) .5352(.000)
.3629(.034) .8410(.000) .8126(.000) .8722(.000) .5021(.004)

TEST 5: (Amenities, Sanitation and Recreation).

.8611(.000)
.7737(.000) .8097(.000)
.8690(.000) .8651(.000) .7757(.000)
.8705(.000) .9559(.000) .8455(.000) .8687(.000)
.8700(.000) .9369(.000) .7622(.000) .9448(.000) .9054(.000)

READING GUIDE.

AB				
AC	BC			
AD	BD	CD		
AE	BE	CE	DE	
AX	BX	CX	DX	EX

A = AMAKOHIA
B = ORJI
C = EGBU
D = NAZE
E = NEKEDE
X = IRETE

Source: Field Survey, July-August 1978.

Another important planning resource at the periphery of Owerri is the close socio-cultural relationship found among different communities. For instance, it is said that Amakohia people migrated ~~migrated~~ from their Kit and Kin of Orji and today share common geographical boundary. Similar close affinity exists between Egbu and Naze settlements. This is an extension of the close cultural realtionship already identified within the five kindred nuclei settlements in Owerri township. It is this type of situation that has long promoted joint cooperation in different self-help community development projects. The same mutual understand-ind arising from common historical background can be taken advantage of while planning for development at the periphery of Owerri.

(d) EXISTING RURAL ADMINISTRATIVE INSTITUTION:

Although Igbos are republicans, they cherish constituted authority and respect elders. The recent exercise of government recognition of chiefs has supplemented existing traditional concept of authority in the villages. These chiefs and the elders can serve useful roles in community develop-ment committees for the overall benefit of the people. Equally important is the existence of

religious organisations like the Christian Mothers and Youth Associations. Such institutions can provide important forums for public education and public enlightenment campaigns to promote development concepts and ideas.

Some government institutions like rural cooperatives, national accelerated food production programmes (NAFPP), and Operation Feed the Nation (OFN) campaigns could be extended to these settlements at the urban periphery. Some of the modern buildings in these settlements which provided temporary accommodation for state government offices can be retained to house subsequent development institutions like banks, area offices collection and distribution centres of development inputs and government aids.

(e) ELEMENTS OF EASY INTEGRATION WITH THE CITY: (Fig. 5.01) (PLATE 4.07)

Planning for the integration of the periphery of Owerri with the city can be facilitated by the following factors:

(i) All the roads from other towns which give nodal character to Owerri pass through the existing settlements at the periphery.

(ii) There are some government offices and major employment centres presently located at the periphery or near its boundary with the city.

(iii) The observed high dependency ratio of the periphery on the city can be used to advantage in planning for the integration of both areas. If for example, complementary functions are established in both areas, their dependency will be mutual and so produce a balanced development.

CHAPTER SEVEN.

PLANNING PROPOSALS FOR THE DEVELOPMENT OF OWERRI PERIPHERY.

7,1 POSSIBLE FUNCTIONS OF THE SETTLEMENTS AT OWERRI PERIPHERY.

Before we can define what are the suitable functions for the settlements at Owerri periphery, it is necessary to determine what type of settlements they are. The analysis of the existing situtation confirms that the settlements are rural settlements, which are undergoing the process of transformation. In addition to that observation, some other concepts were also used to distinguish those settlements from purely urban settlements. The concepts applied are:-

(a) SIZE OF POPULATION:-

None of them contains a population of up to 20,000 which is the minimum standard for being classified as an urban settlement. Moreover, the villages do not occupy a single nucleated location. Some are spread out in small communities.

(b) OCCUPATIONAL DIFFERENTIATION:-

Unlike in Owerri where the urban population is engaged essentially in secondary and tertiary occupation, a large proportion between 16 and 45 percent of the inhabitants of the villages engage

in primary occupation. In the villages where the proportion is low, the cause is the high relative ratio of their migrant population, who are mostly not engaged in primary occupation.

Moreover, where building or construction activities are high, many farmers have termporarily abandoned farmwork to engage in higher paying jobs than farming. They are bound to go back to the farms when the new employments end particularly as they are employed as daily paid labourers. This will further increase the observed ratio of those engaged in primary occupation.

(c) TYPE OF SOCIAL RELATIONSHIP:

The type of social relationship in the settlements at Owerri periphery as measured by Tonnies concept of Gemeinschaft and Gessellschaft[1] reveals marked difference from what exists at Owerri town. In particular there are still very strong community feelings and tight social relationship between individual residents at the periphery unlike at Owerri town, where the sense of individualisation is high and nobody is his brothers keeper.

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1. Tonnies Ferdinand: Community and Association, (Gemeinshcaft and Gessellschaft), Translated by Charles, P. Loomis, 1955, Routedge and Kegan Paul London.

(d) INTERNAL STRUCTURE OF SETTLEMENTS:-

In spite of the crowded and disorderly appearance of the settlements at the immediate periphery of Owerri, there exist strong evidences or characteristics of rurality. Such evidences are found in the average density of footpaths, the general arrangement of the compounds and the dominant materials used for building dwelling units. The same situations are virtually absent in the urban settlement of Owerri, where the settlement is not organic in structure.

From these observations, it was obvious that the settlements at the periphery of Owerri are essentially rural in spite of the rapid physical developments going on there. It is in this regard that considerations for suitable functions of these settlements are made.

(e) POSSIBLE FUNCTIONS:-

As rural settlements near an urban area, a number of alternative functions are considered possible in the light of the physical situation of the area. These are:

(i) To develop the settlements as residential suburbs (A)

(ii) To develop them as agricultural settlements (B)

(iii) To develop rural industries like poultry farming and dairy (C)

(iv) To develop them as rural market centres (D).

(v) To develop them as recreation grounds and open spaces (E).

7.2 PLANNING GOALS AND OBJECTIVES.

The present pattern of development at the periphery of Owerri seem to lack well defined community goals and objectives. What is really happening is that every individual developer has his own priority, expectation and objective. Consequently, disorder results. An investment or action which pleases one developer may greatly dissatisfy his neighbour.

Since "appropriate planning action cannot be prescribed from a position of value neutrality, for prescriptions are based on desired objectives"[2] it is necessary to examine and determine the most desirable objectives in developing the rural settlements at the periphery of Owerri. Accordingly, reference is first made to stated national goals and objectives for rural areas.

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2. Etzioni Amitai: "Mixed Scanning: A third approach to Decision making" in Andreas Faludi ed. A Reader in planning theory, Pergamon Press, London, 1978.

After specifying that government will pursue an integral urban-rural development strategy based on a recognition of the vital functions of each segment and the need to equip it for its role in the overall development of the economy, the Third National Development Plan[3] outlines the main objectives of rural development as follows:-

To increase rural productivity (i)

To diversify rural economy; and (ii)

To generally enhance the quality of life in rural areas. (iii)

In addition to the above national goals, a couple of goals are also considered essential for the proper development of rural settlements at Owerri periphery, considering the local needs of the city and its periphery. These are:-

To make the function of the peripheral settlements complement that of the city. (iv)

To increase the opportunity for a balanced and an orderly development between the city and its periphery (v)

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3. Nigeria Third National Development Plan, op. cit., pp. 291-292.

7.3 SUITABLE ALTERNATIVE PROPOSALS.

Having outlined the possible functions of the settlements at Owerri periphery as well as the proper goals and objectives for development exercises there, the problem now is to identify the suitable functions within the stated constraints. If we weigh the possible functions listed A-D, in sub-section one, against the desired goals and objectives, suffixed (i) - (v), in sub-section two, then we shall arrive at the following table of hierarchies of alternative functions for the settlements, based on A goals achievement matrix .

TABLE 7.01: SUITABLE FUNTIONS FOR SETTLEMENTS AT OWERRI PERIPHERY.

(a) Equal weight for national and local goals and objectives.

		Alternative Functions				
	Goals	A	B	C	D	E
National Goals and Objectives	i	-1	1	1	0	0
	ii	-1	1	1	1	0
	iii	1	1	1	1	1
Local goals and Objectives	iv	1	1	-1	-1	0
	v	1	1	0	0	0
	Scores	1	5	2	1	1

4. Hill, M., "A Goals Achievement Matrix for evaluating alternative plans" JAIP, vol. 43 (1968), p. 19.

(b) Higher weight for national goals (2) than local goals (1).

		Alternative Functions				
	Goals	A	B	C	D	E
National goals and Objectives	i	-2	2	2	0	0
	ii	-2	2	2	2	0
	iii	2	2	2	2	2
Local goals and Objectives	iv	1	1	0	0	0
	v	1	1	0	0	0
	Socres	0	8	5	3	2

The goals achievement matrix - scoring (after Hill)

Positive value for progress towards desired objective.

Negative value for retrogression from desired objective.

Zero value for neither progress nor retrogression ...

A hierarchical order of the suitability of the possible functions shows the following results:

Functions	Scores(a)	Scores(b)	Average socres	Order
Development of-				
B. Agriculture	5	8	6.5	1st*
C. Rural Industries	2	5	3.5	2nd
D. Rural Market Centres	1	3	2.0	3rd
E. Recreation Centres	1	2	1.5	4th
A. Residential Surburbs	1	0	0.5	5th

From the result, development of agriculture emerges as the first order and hence should receive priority consideration so as to record the highest progress towards the achievement of the stated goals. It could be supplemented by the development of rrral small scale industries.

Low score for residential function was in consequence of its being evaluated at a sub-urban location. Nevertheless, a successful performance of either of the first two functions is directly related to proper residential development, hence further analysis of suitable residential environment for the proposed activities is necessary.

7,4 EVAULATION OF ALTERNATIVE SETTLEMENT DEVELOPMENT STRATEGIES.

In order to achieve the desired future situation, four alternative approaches to settlement development are considered:

(a) DEVELOPMENT OF NEW TOWNS: Fig. 7.01(a).

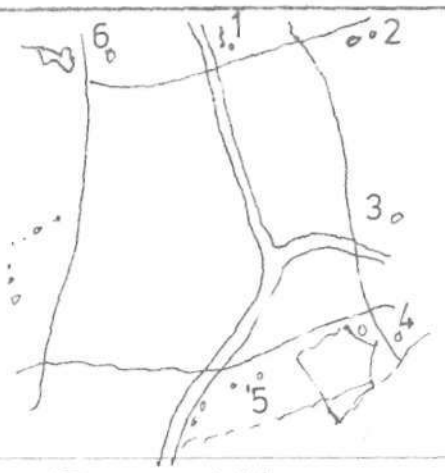
The possible arguments in favour of this appraach are that the existing settlements at Owerri periphery are disorderly and may prove problematic to replan and redevelop.

However, arguments against New Town Development in the present context of Owerri periphery are many. They include the huge expenditure it could call for, when the master paln for Owerri itself has not been implemented. Consideration for sunk cost makes such an exercise appear like digging one hole in order to fill another. It thus would involve unnecessary duplication of energy and waste of limited resources.

(b) CREATION OF SELF CONTAINED NEIGHBOURHOODS: Fig. 7.01(b).

This approach is rather in-ward looking. Its emphasis is on the provision of facilities, services and various amenities to the settlement in order to become self-contained. This is very

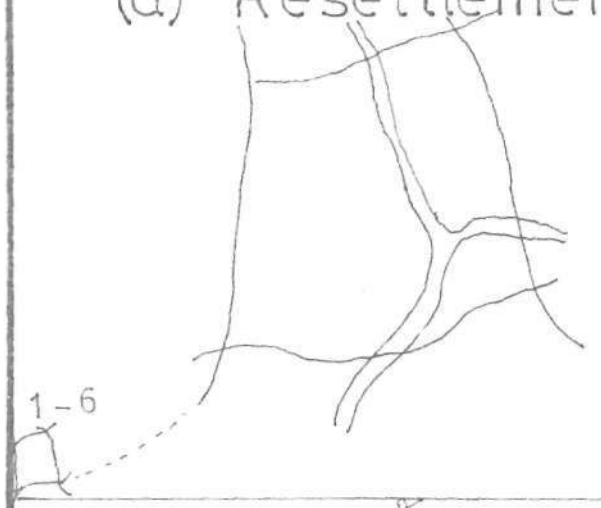
ALTERNATIVE APPROACHES FOR DEVELOPING SETTLEMENTS IN OWERRI.



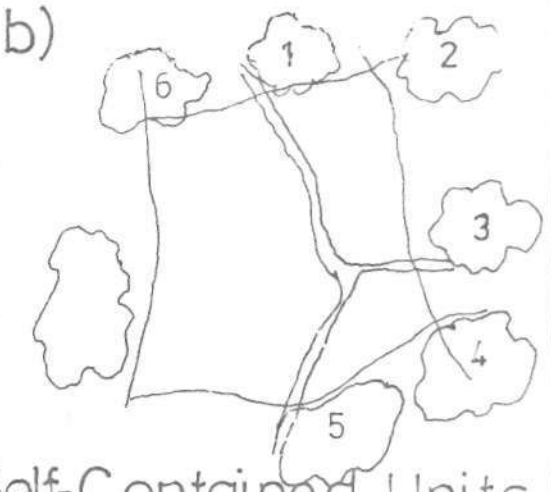
1 AMAKOHIA
2 ORJI
3 EGBU
4 NAZE
5 NEKEDE
6 IRETE

Existing Situation

(a) Resettlement

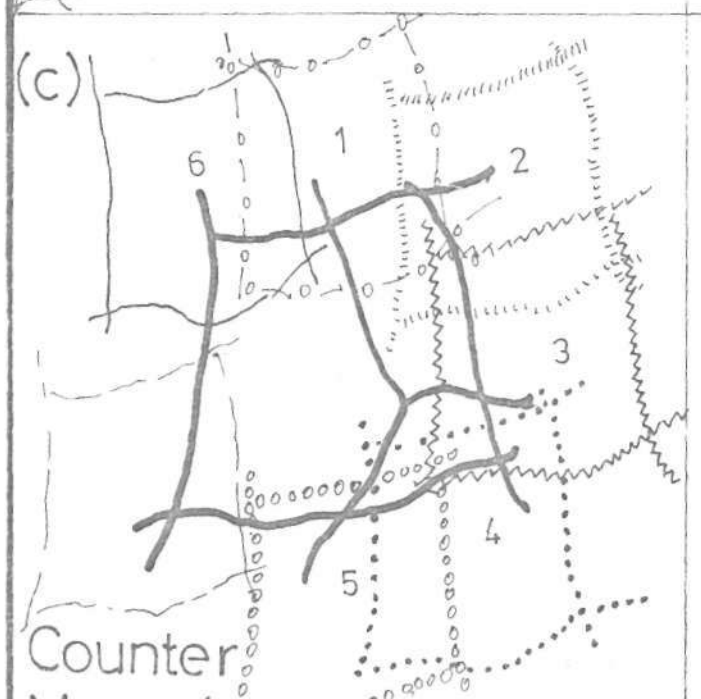


(b)

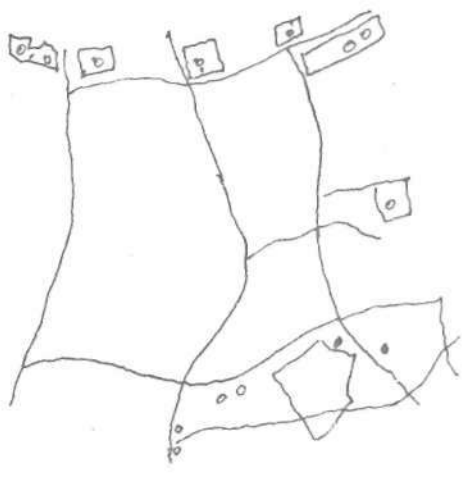


Self-Contained Units.

(c)



Counter Magnets to Owerri.



Improvement and Integration.

FIG 7.01 Source: Authors Concept.

expensive considering the prevailing poor infrastructural bases as well as the number of settlements involved at the periphery. The observed proximity of the villages to the city and between each other, underscores the ultimate concept of self-containment because they soon coalesce into one city. The approach will not contribute to bring about complementary relationship between Owerri and its periphery.

(c) EXPANSION OF SETTLEMENTS TO FORM COUNTER MAGNETS TO OWERRI Fig. 7.01(c).

The concept of counter magnetic development presupposes complete independence between the entities. It involves the introduction of industries, employment centres and all aspects of development currently found in the city, to the peripheral settlements. It is impossible to achieve this within the physical and economic context of the city and its periphery. Moreover, to attempt such a proposal would involve far more expenditure than the New Town concept.

(d) IMPROVEMENT OF EXISTING SETTLEMENTS AND THEIR INTEGRATION WITH OWERRI.

The concepts expressed in this alternative, are oriented towards ensuring great progress towards the attainment of the desired goals at minimum cost.

First of all, improvement of the existing situation will take care of the observed disoderliness at the periphery of the city at a relatively cheaper cost than any of the other alternatives. The second concept of integration with the city, is one of the planning problems already identified about the periphery of Owerri. Its attainment is one of the ultimate tools for ensuring an orderly development in the future. So this alternative is accepted.

7.5 SELECTED ALTERNATIVE AND ITS IMPLICATIONS FOR PLANNING.

Action for the achievement of the selected alternative calls for two things:

(a) IMPROVEMENT ACTION:

This involves mainly physical measures. The main inadequacies in the settlements already identified in the analysis of existing situation can be used as a guide for planning the provision of basic needs to the peripheral settlements.

(b) INTEGRATION POLICY:

This is a more complex problem. It calls for the clarifcation of three issues namely - How much of the areas peripheral to the city need be integrated physically with the city? How can such

exercise be undertaken successfully? Finally what programme of integration can best achieve the desired results, for other areas in the periphery which may not automatically become part of the city?

To answer the first question it is considered that the area defined by the boundary of OCDA be accepted for the purpose. It will save time and energy that would otherwise be spent in searching for a new periphery boundary. Moreover, the OCDA boundary extends to a distance of 2.8 kilometres from the Twin-city boundary in some areas and to about 5 kilometres in others. Within such a range, some areas of the boundary coincide with that delimited for this study which is a regular distance of 3 kilometres from the Twin-city boundary.

The next problem concerns the definition of integration programmes. Although this study has established a high correlation in the situations at the periphery (Table 6.02), it has also noticed a progressive reduction in the magnitude of the observed situations. Thus, there is a sort of pyramidal structure from the city-centre to the farthest extent of the periphery. The implication of this phenomenon to planning is the need to introduce varying solutions to differemt problems, in the city-scape.

Accordingly, two separate types of areas are distinguished for integration planning. The first are those areas which can easily become part of the city now as demonstrated by their relative distances from the city boundary and more, by the types of developments already there or near them. The next group are areas that should remain in their present locations and continue agricultural occupation on a priority basis. The subsequent section is devoted to a few proposals for the realisation of both objectives.

7.6 PLANNING PROPOSALS.

For the future orderly development of the periphery of Owerri, so that it can perform its most suitable function, for a balanced and complementary development of the city and its periphery, the following proposals are made.

(a) PRELIMINARY ACTION:

This will involve the following actions by government or its agency the OCDA.

(i) Declaration that all areas within the OCDA boundary are henceforth constituted into the periphery of Owerri and are to be developed as a green belt.

(ii) Determination of settlements which are to be physically incorporated as parts of the Twin City (Fig. 7.02) and whose present developments are to be improved and regularised.

(iii) Realignment of the existing boundary of the Twin City as it affects the newly absorbed settlements.

(iv) Demarcation of the city boundary from the remaining part of the periphery which will constitute the green belt.

(b) AREAS TO BE INCORPORATED INTO THE CITY:

It is proposed here that the whole of Amakohia, Egbu, Naze and Irete and parts of Orji and Nekede which are most adjacent to the city boundary be incorporated into the city.

(i) AMAKOHIA:

Amakohia is the nearest in distance to the city (Cf Table 3.01).

- It has recorded the greatest amount of transformation and disorderliness.
- There are outstanding integrating elements. Most of the tenants in Amakohia work in the nearby government temporary Secretariat, the general hospital and Alvan Ikoku College of Education (Fig. 6.01).

OWERRI PERIPHERY - DEVELOPMENT PROPOSALS.

Existing

Proposed

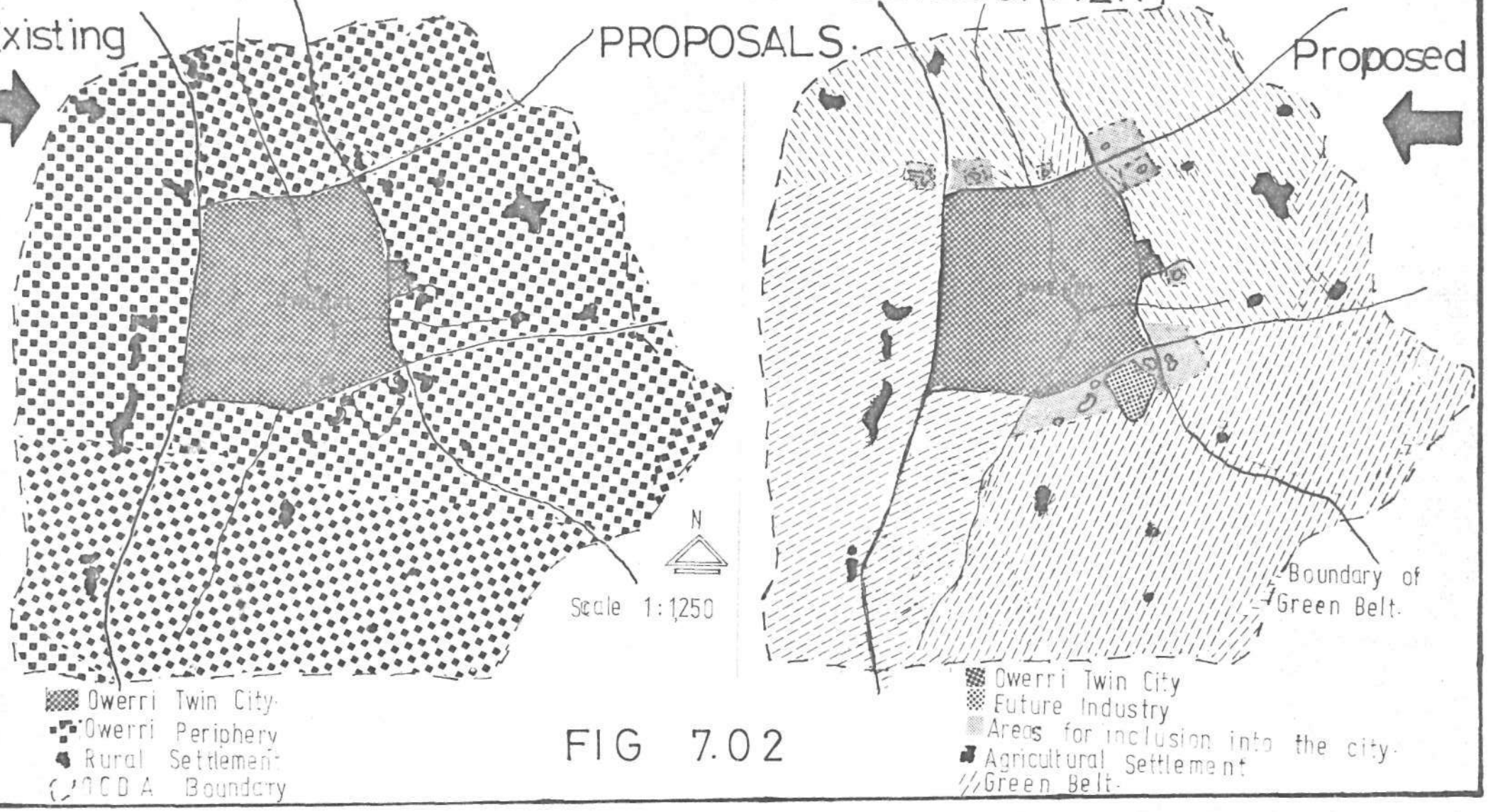


FIG 7.02

- Thus, Amakohia is already providing residence for many urban workers. It is difficult to justify its exclusion as part of Owerri township.

(ii) EGBU:

- Egbu is near to a developed residential area of Aladimma estate. (Fig. 6.01)
- Recent residential developments for the extension of the said estate as well as that of Ikenegbu layout are occurring in the area towards Egbu.
- Integrating instituions like the Imo Newspaper Corporation, a Trade School and a proposed motor park are sited along the Owerri-Egbu road.
- Full scale development of these institutions is bound to engulf Egbu.

(iii) NAZE:

- The problems and prospects of Naze exist more in the near future than at present. In location, it is the home of the proposed University for Imo State and the location of future industries in Owerri.

- It is next to Amakohia, in locational proximity to Owerri (Table 3.01).
- Its most suitable function in this context is as a residential district for workers in both the university and industries.

(iv) IRETE:

- Irete is located on the northern boundary of the area proposed for industrial development in the master plan. If it is excluded now from the city, it will almost surely grow into an industrial slum when workers from the industry will swarm it for residential accommodation.
- Proper development of Irete is very important considering its neighbourly location with the most outstanding architectural landmark in the whole city, the Catholic Cathedral, which has given character to the city (Plate 7). Such proper development cannot be attained if it is physically excluded from the city.

(v) ORJI AND NEKEDE:

Orji and Nekede are the two settlements whose entire geographical areas were not covered



Plate 4.07 OWERRI CATHOLIC CATEDRAL.
This is the most important land mark in the capital city. It is also a strong element of integra- The Bishop in-charge of different parishes outside the capital territory lives here.

A visitor to Owerri, heralds the Twin-city by seeing the dome of the Cathedral from a minimum distance of 1 km to the city. At such a distance, the visitor is in or around the present boundaries of the Twin-City and the settlements proposed for inclusion into the city. This is a strong case why such areas should naturally form parts of the city. It will detract from the principles of Town Planning to disregard the use of advantage of all locations from where qualities of aesthetic and architectural value in the city could be appreciated fully.

in the survey because they extend beyond the zone delimited for study. For them, only the most affected areas need to be incorporated into the city.

- The areas which qualify for both cases already have government establishments in them. The Imo Broadcasting Service Station is in Orji, apparently at a location which occupies the highest altitude in Owerri area. Similarly, the government farm and Imo Agricultural Development Corporation are located at Nekede. In fact the farm had existed as a settlement prior to the creation of Imo State. Recently, the Imo College of Technology has been sited in Nekede. This institution will stimulate development similar to that occasioned by the creation of a university.

- For both areas, the remaining portions of their settlements are physically separated from those suggested for incorporation into Owerri, by strips of Agricultural lands.

Planning considerations in both areas too should relate to their linear form of development along the major roads from Owerri.

(c) PLANS FOR ALL INCORPORATED AREA:

Proper integration of settlements incorporated into the city can be achieved through the following suggestion :-

(i) Realignment of the proposed Twin-city boundary to enclose the settlements suggested.

(ii) Survey of undeveloped land and existing developments in those settlements as a prelude to their improvement and regularisation.

(iii) Preparation of planning schemes to guide the OCDA in plan approval for new developments as obtains in other parts of the city. Belts for future developments about one kilometre deep from the edges of the major roads from Owerri can be demarcated for linear settlements.

(iv) Payment of compensation or assignment of new sites in place of demolitions made in the process of implementation of new developments.

(v) Maintenance of the boundary between the city and the periphery by planting tree crops like mango, citrus, guava, cashew and palms which will serve both aesthetic and economic functions.

(d) AREAS IN THE GREEN BELT: Fig. 7.02

Two areas can be distinguished in the periphery of the city namely, the existing residential areas which are to perform the functions of farm settlements and the unoccupied green belt itself. Separate development programmes are proposed for them and care must be taken not to repeat past neglect for such areas which resulted in disorderly development.

(i) FARM SETTLEMENTS:

These made up of all the existing settlements which are not incorporated in the city. They will live in their traditional environment and practi agriculture. Proper development in such areas will result within the following guidelines:

- Boundary demarcation of present extent of settlements.
- Requirement that residence in such areas should be primarily for people engaged in farming.

- Any other type of supplementary occupation must be small scale, agro-based with no more than a labour force of five and can only be established with the permission of the OCDA.
- All physical developments in this zone should receive the sanction of the authority to ensure full compliance with the defined functions of the periphery.

To achieve these the following schedule of landuse regulations are suggested for the farm settlements at the periphery of Owerri.

PROPOSED LANDUSE REGULATIONS:

Uses Permitted:

- Residential compounds(Fig. 4.02) .
- Primary Schools and Dispensaries.
- Other uses incidental to residential development which do not constitute hazard or nuisance to the inhabitants.

Uses Permissible if approved by the OCDA:

- Rural small scale industries which employ more than 5 people and situated in residential houses without risk to health such as crafts, weaving, carpentry, tailoring, baking and poultry.

Uses Prohibited:

- Those uses not included in the above list.

(ii) GREEN BELT:

This zone is the non-residential part of the periphery to be devoted to massive agriculture. The following proposals are made for it.

(i) The boundary between this zone and other parts of the periphery should be defined.

(ii) Agriculture is the ultimate priority for the green belt. Emphasis should be the cultivation of food crops and vegetables.

(iii) For maximum results, agricultural practice can be zoned in the periphery in response to varying local conditions.

(iv) There should be regulations prohibiting unauthorised felling of trees or other types of misuse of resources on the land.

(v) Various government incentives and technical aid should be provided for the farmers in this belt.

(vi) Clear peripheral control laws should be made to avoid loopholes which may result in the distortion of things. Some of the possible regulations are suggested below:

Uses Permitted:

- Agriculture, forestry and Horticulture.
- Poultry and crop farming.
- Farm houses on plots of land no less in size than 0.25 hectares.
- Warehousing storage and depots for non-perishable commodities.

Uses Permissible if approved by the OCDA.

- Preliminary processing and sale of farm products on the property where produced.
- Public utilities and buildings.

Uses prohibited:

- All the uses not specifically permitted in the two sections earlier defined.

(e) PERSPECTIVE ISSUES.

It should be realised that the success of the proposals and proper maintenance of the periphery will depend on full scale reduction of the overall pressure on land there. Therefore:

(i) The implementation of the Twin-City Master Plan should be speed up. The public and private should be involved especially in the area of housing which can attract many intinerant commuters into the city and in this way reduce population density in peripheral settlements.

(ii) Based on experience in other parts of the world the following considerations are necessary.

- Dispersal policy of employment and other population generating functions to other smaller towns in the state, particularly the newly created township. This was done successfully in Tokyo.
- Planning in advance for future road links and open space needs in the spatial growth of the settlements in the periphery. This is the basic policy in the advance plan strategy of the Ruhr Basin Megalopolis.
- Consciously preserving useful agricultural lands near the city in spite of any pressure and also need to devote areas of doubtful agricultural value or landscape attraction for physical developments first. Both the Randstad Holland and London Green Belts were based on this approach.

(iii) Since the problem of proper development of the periphery requires close surveillance to find out what is happening in different rural settlements as well as agricultural

lands surrounding the city, it is of paramount importance to establish adequate supervision and control machinery in the administration of issues relating to the periphery.

7.7 FUTURE GROWTH OF CITY AND POLICIES FOR AFFECTED VILLAGES.

Some policy guidelines in the Bichi Master Plan[5] with respect to villages that could be swallowed in the process of spatial urban growth, are very relevant in this context. It is obvious that land recommended for or currently being used for agricultural activity could be engulfed by future spatial growth of the city. Thus, there may be compelling need to consider the relocation of part of or even a whole village. In such a circumstance and with respect to the close locational pattern of existing settlements within Owerri area, relocation to distant places is ruled out. Instead, a survey should be conducted to assess the willingness of the villagers affected to opt for any of the following alternatives:-

(a) Relocation to a place far away from the area of direct influence of the city and to allow continued pursuance of agriculture as the primary occupation.

5. Bichi Master Plan prepared by: Dept. of Urban and Regional Planning, A.B.U., Zaria for Kano State UDB, Kano Nigeria, pp.87-88.

(b) Relocation of villagers on the periphery of the urban area and pursuance of agriculture (mostly cash crops) as the primary occupation.

(c) Remain within the urban area, merge with it in future and change the primary occupation from agriculture to a secondary and or terriary occupation like working in Industries, Government Offices, Commerce, Trade, Transport, Construction, etc.

Those opting for the first possibility may be resettled in a village far away from urban influence. These desirous to go for the second alternative may be resettled on the periphery of the urban centre along major roads leading to the city but at least one kilometre away from the road. The people should mainly be engaged in agricultural activities related to the city requirements like, vegetables and other cash crops.

For those who opt for the third possibility, compensation for farmland acquired for urban purposes may be paid Buildings if already located in group and situated within proposed residential areas may remain as they are and during the course of

implementation urban infrastructure may be provided to these areas also. In case these villages fall within a non-residential area, they may be regrouped on a residential site. These people will serve the urban centre and be primarily engaged in non-agricultural activities.

The above policy proposals are vindicated by event in some past resetllement schemes in the country, where people after receiving compensation and land at new sites, were known to have gone back to the urban centre to live there. In many cases, they had to squat on public land or live in sub-standard housing areas and thereby add to the dimensions of urban problems. Thus, as a general policy, it is proposed that, as far as possible, villages should be accommodated within the urban expansion during the course of zoning for development plan, and so avoid creating situations where relocation of villages become inevitable. The classical examples examined earlier also show that strategies like the containment technique and guided development approach, which proved successfull in poly centric urban regions of Holland and Germany, were based on this policy.

CHAPTER EIGHT.

PLAN IMPLEMENTATION.

8.0 NEED FOR IMPLEMENTATION PROPOSALS:

The end product of all plans is its implementation. Walinsky (1963)[1] argued that the implementation is more important than the planning process because progress can be achieved without planning; but planning alone will not achieve progress. Moreover, he believes that planning without execution is meaningless, even a frustrating experience.

Also emphasizing the importance of implementation proposals in any plan, Vagale (1977)[2] observed that the value of a plan lies in the extent to which it is implemented. He therefore recommends that the tools for the realisation of the plan be built into the plan itself as integral components of the process of planning, rather than being considered as an after-thought.

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1. Walinsky, Louis J.k "The Planning and Execution of Economic Development", New York, McGrawn-Hill, 1963, pp. 63-64.

2. Vagale, L.R., Integration of Socio-Economic and Environmental Planning. An Institutional Framework for Nigeria, peper presented at the NITP 8th Annual Conference, Oct. 1977, p. 5.

This chapter will briefly examine the possibilities and problems of implementing some of the proposals made in this study.

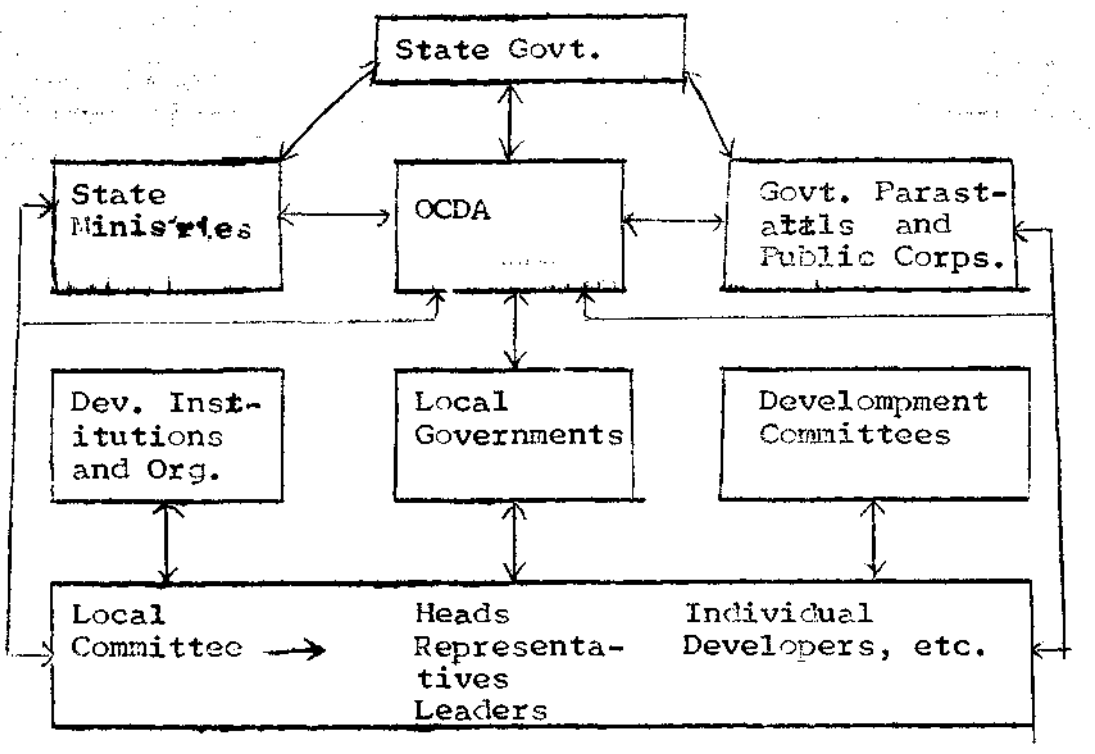
8.1 INSTITUTIONAL FRAMEWORK:

The task of planning and developing the periphery of Owerri in an orderly manner falls on the OCDA which is set up to plan the growth and devlopment of the territory, (CF Fig.7.02) within which the settlements are located. However, in carrying out this function, it will inevitably have many overlapping administrative influences and functions with different ministries, government parastatals and public corporations as well as private groups and individuals. Consequently, the most difficult task envisaged may be that of proper coordination between the different participating agencies in order to avoid the occurrence of gaps which could furstrate the attainment of plan implementation.

One way of approaching the task is to define actions of any participating body at the on-set of a project so that when action falls short of projected results, the cause or origin of the shortage can easily be identified. The OCDA occupies

a central position in this exercise and forms an essential link between all participating bodies. Accordingly, a framework of relationships (Fig. 8.01) is proposed between all participants in the development of Owerri periphery.

OCDA: EXTERNAL RELATIONSHIP.



Fig, 8.01.

Source: Author's Concept.

An essential feautre of the framework is that all participating institutions (apart from development committees which may be formed on ad-hoc basis) will remain on permanent basis. Thus, whatever programmes of action initiated by present insitutions can be continued by succeeding bodies. The OCDA as the central institution is independent yet directly related to all the other agents of development. It thus plays the coordinative role with little encumberances.

Three institutions namely, Development institution (Banks and Cooperatives), Local Government and Development Committees seem to be unrelated. Actually their relationship occurs through representatives of the first named two in the third institution. As co-members of the development committee (in which there are also representatives from the State Government, the OCDA, Ministries, Public Corporations and affected local communities) they contribute jointly in all issues relating to current development programmes at the periphery.

8.2 PROPOSED ORGANISATIONAL FRAMEWORK:

As soon as the OCDA was set up, the chief executive proposed its organisational framework (Fig. 8.02(a) on a preliminary basis. However,

considering the complexity of its functions and need for less complex internal organisation of the authority, some suggestions for restructing the framework are proposed (Fig. 8.02(b)

(a) MODIFICATIONS: IN EXISTING FRAMEWORK:

When both proposals are examined closely, it can be observed that the following modifications are made on the original proposal.

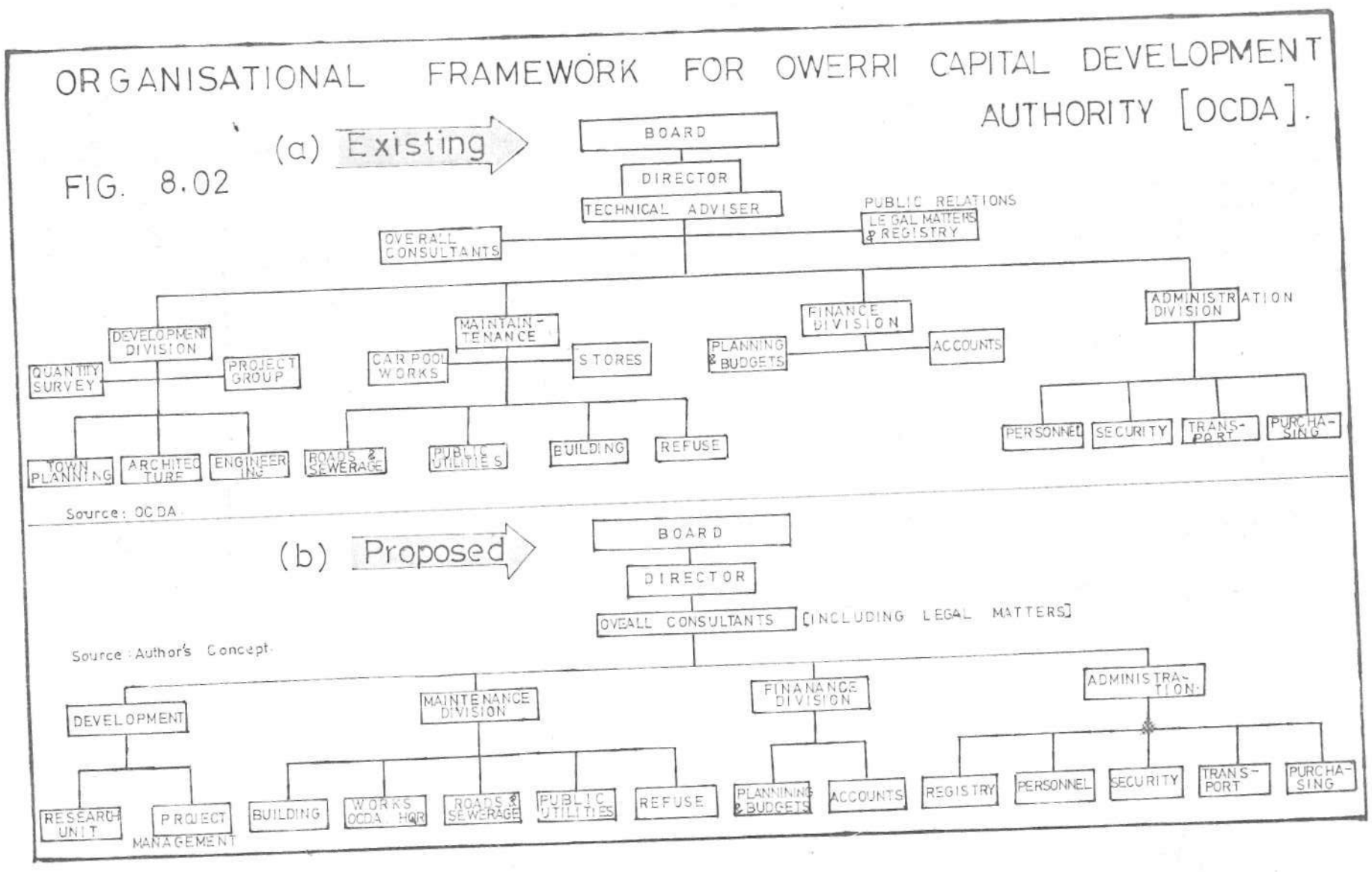
i. Unification of Board, Director, Technical Adviser, Legal Matters and Overall Consultants into a single constultancy department.

ii. Removal of the Registry from the Public Relations Section to a sub-unit in administration.

iii. Unification of Quantity Survey and all the other professions (Town Planning, Architecture, Engineering) into the project implementation section. Undoubtedly this section, which may have internal professionally organised subsections, is of key importance in plan formulation, modifications and implementation. It will require greater office accommodation, design equipment, studies and drawing rooms. No efforts should be spared in equipping it.

ORGANISATIONAL FRAMEWORK FOR OWERRI CAPITAL DEVELOPMENT AUTHORITY [OCDA].

FIG. 8.02



(iv) Creation of a Research and Public Relations Unit in the Development Division, from which different professions are periodically assigned field survey which relate to their areas of specialisation.

(v) Unification of car pool works and stores sections into a unit called General Works (Headquarters).

(b) RESEARCH AND PUBLIC RELATIONS UNIT:

Apparently, the only new proposal made in the existing framework is the establishment of a Research Unit to which is attached Public Relations function. The importance of such a unit on a continuing basis, charged with the function of collecting, synthesizing, analysing and reporting findings should not be overlooked in all planning exercises which have physical dimensions on the landscape.

(i) The unit should be headed by a professional staff, preferably a Town Planner, with a good background knowledge in the social sciences and research methods. He should in consultation with the head of the project management and implementation division assign appropriate research studies to all professional

staff in the division. The findings, and recommendations of such studies should be reported on a regular schedule to the Director for consideration.

(ii) The unit should study past, present and future trends, problems and prospects of development activities at the city and its periphery, and report regularly to the director.

(iii) It should monitor the progress in development exercises, in order to ensure strict compliance to stipulations, controls and requirements.

(iv) Provides a regular link between all participating bodies in development projects.

(v) It could prepare an OCDA periodic bulletin which must receive the Director's approval before publication.

(vi) The research unit could also organise (with the authorisation of the director) public lectures, symposia, worksh ops, and other forms of public enlightement on current development exercises so as to enlist mass support for the success of such programmes.

(c) STAFF STRENGTH:

The capacity of the OCDA to achieve the visualised ideal, depends on the availability of the right calibre of staff. Below is a table of the present staff situation of the authority.

TABLE 8.01 (a)

OCDA - STAFF REQUIREMENT: APRIL 1979.

Serial No.	Designation	No. Req.	Existing	Present need	Department
1	General Manager	1	1	-	Directorate
2	Secretary	1	1	-	Administration
3.	Personal Sec.	1	1	-	Administration
4	Conf. Secretary	1	1	-	Administration
5	Senier Acct.	1	1	-	Accounts
6	S.E.O.(Gen)	1	-	1	Admin.
7.	H.E.O.(Gen)	1	1	-	Admin.
8	E.O. Acct.	1	1	-	Accounts
9	A.E.O (Acct)	1	1	-	Accounts
10	Sen. Clerical Office	1	1	-	Admin.
11	Clerical Off.	13	13	-	Admin.
12	Typies All Grades	7	7	-	Admin.
13	Snr. Planning Officer	1	-	1	Development

cont'd.

Serial	Designation	No, Req	Existing	Present	Department
14	Public Rel. Officer	1	-	1	Development
15	State Council	1	-	1	Consultancy
16	Statistics Off.	1	-	1	Development
17	Stores Officer	1	-	1	Maintenance
18	Transport Off.	1	-	1	Admin.
19	Security Officer	1	-	1	Admin.
20	Purchasing Off.	1	1	-	Admin.
21	Driver	7	5	2	Admin.
22	Messenger	9	9	-	Admin.
23	Watcmen	7	5	2	Admin.
24	Caretakers	15	15	-	Maintenance
25	Snr. Health Supt.	1 ?	-	1	Consultancy
26	Higher Health Supt.	1	1	-	Consultancy
27	Health Supt.	1 ?	-	1	Consultancy
28	Snr. Town Planning Off.	1 ?	-	1	Development
29	Town Planning Officer	3 ?	-	3	Development
30	Architect	2 ?	-	2	Development
31	Tech. Staff All Grades	17	-	17	Development
32	Others	3	-	3	Unknown
	TOTAL	104	65	39	

? Areas where requirements could be more than estimated present need.?

Source: O.C.D.A.

The table shows that only 62.5% of the present staff requirements of OCDA has been satisfied leaving a shortage of 37.5%. The area of greatest shortage of staff is the area that controls the bulk of the project management and implementation. This section had earlier in this study been identified as of key importance (8.2, a iii) in the overall funftions of the authority.

Working on the conservative estimates of the present need (not minding possible future requirements) it can be seen that out of more than 27 (100%) such professional staff needed, only three officer in the Accounts Division (11%) has been employed. This reflects a very serious staff shortage of 89%.

Again when looked at from the general organisational point of view (Table 8.01b) it can be seen that one division, perhaps the most important executive division, has not yet set off.

TABLE 8.02 (b) OCDA. DEPARTMENTAL STAFF NEED - APRIL 1979.

	Development Div.			Maintenance			Finance Div.			Administration Div.		
	Req.	Exi.	Need	Req.	Exi	Need	Req.	Exi.	Need	Rec.	Exi.	Need
Situation	26	-	26	16	15	1	3	3		52	45	7
Perfomance		0%			94%			100%			86%	

8.3 FINANCING THE DEVELOPMENT.

Soon after the approval of the comprehensive master plan of Owerri, Imo State Capital, Galantay (1978)[3] estimated that its implementation will require capital cost outlays in the amount of ₦1,700 million and argued that new town building being a front loaded operation, an initial annual cash-flow of about ₦108 million will be needed in order to accomplish the task. This estimate compares very unfavourably with the sum of ₦3.1 million allocated to the OCDA during the last (1979/80) budget. Even when other highlights[4] of the budget, as they relate to Town and Country Planning (development of urban roads and bridges) which will not be restricted to developments within the capital area alone, only an extra sum of ₦21.3 million is added to the initial allocation. In all, less than ₦24 million is allocated to urban development. This would be about 22% of Galantay's estimated annual need for the planning of Owerri Capital area to set off.

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3. Galantay, Ervin Y.: "The Planning of Owerri - A New Capital for Imo State Nigeria". Town Planning Review, vol. 49, No. 3, July 1978, p. 384.

4. Owerri: Imo State of Nigeria, 1979/80 Budget, Government Printer, Monday 9 April, 1979, p. 11.

What the analysis reveals so far is that if the implementation of the master plan plus the proposals for the periphery are to be achieved, the OCDA needs far larger financial allocation than was the case in the budget referred to. Without adequate staff and finance the authority will prove ineffective in performing the task for which it was established.

A realisation like the above is timely now since the last budget 1979/80 marks the end of the Third National Development Plan period. There is ample opportunity now for priority considerations to be given to the capital and its peripheral development in the next development plan.

Meanwhile, considering the urgency of the situation at Owerri periphery, the consequences of further delay and the expected benefits from immediate action, it is necessary for the OCDA to explore the possibilities of attracting finance from sources outside to the state government. Quasi-government investment institutions and local governments come readily to mind. Others which can be induced to participate are cooperative movements and private investors. Since the concept of city management system originated from the federal government, it is not unlikely that federal grants and aid can also be attracted.

CHAPTER NINE.

SUMMARY OF FINDINGS.

9.1 MAIN FINDINGS:

The study has revealed that there is an intimate relationship between a city and its hinterland; that the fortunes and fate of the city is not only shared by but to some extent determines those of its periphery. The case of Owerri and its periphery has demonstrated that the observed disorderly developments at the periphery resulted from the changed status and function of Owerri township after the creation of states in 1976. That event led to unusual increase in the population of the city and its periphery and to a spontaneous search for accommodation at the periphery hence the resultant disorderly arrangements on the landscape.

Participation in the urban pressures, stresses and other shadow effects is virtually uniform at the periphery of Owerri as proved by correlation tests and significance of variation in the observed phenomena. The intensity of physical deterioration, however, fades

out with increaing distance in the location of any settlement from Owerri, except where availability of certain urban amenities like pipe borne water or electricity introduce distortion. Consequently physical development sometimes shows ribbon characteristics along the main roads from Owerri to the settlements.

Apparently, two distince areas are found at Owerri periphery. The first group are areas that are heavily effected by urban pressures and which are now neither urban nor rural in physical appearance, and socio-economic life of its inhabitants. The second group are areas which have not yet shared from the phenomena of disorder and have retained their rural characteristics. Nevertheless, since the pattern of rural settlement in the area is nucleated and located in close proximity, changes in the physical phenomena of one can easily spread to the other unless proper control measures are taken.

Apart from the creation of states and increase in the population of Owerri and its periphery, other factors contributed to the disorder at the periphery. These include speculative investments where the cost of land was relatively cheaper

than in the city, historical antecedent of neglect of the periphery by both government and earlier planning activities and poverty of the indigenous population whose education and concept of environmental quality are generally low. Disorder is manifest in the arrangement of buildings, their various uses, irregular and inefficient circulation pattern, poor sanitation and inadequate amenities.

The main planning problems associated with the observed situation are improper orientation in the suitable function of the periphery and absence of peripheral control to provide development direction. Others are the problems of non-inclusion of the most affected settlements in the master plan proposals for the city hence the problem of how to integrate them with the city for balanced development.

In spite of the misguided competition engaged in by the immediate periphery with the city in trying to perform urban roles rather than engage in functions that are complementary to the urban needs; and in spite of the structural shift in the occupation of the inhabitants of the periphery, rural chararacteristics still predominate in the environment. All that the uncontrolled development

has achieved is some degree of physical disorder and the tendency to loss of identity for the settlements, plus the associated degradation of the environment and health hazards.

To propose solutions for the observed problems, reference is made to various attempts to control lateral growth in cities elsewhere in the world. Findings show that strategies adopted in some cities vary from trying to halt the growth by force to efforts in directing the growth to other area or sometimes in accommodating it. In all cases, however, the use of extensive green belts appeared essential as a tool for peripheral planning. A glance at the Owerri Master Plan revealed the absence of this technique, common to all the cities examined.

Nevertheless, further examination of the situation in Owerri and its periphery reveals that prospects exist for improvement, both from the institutional recognition of need to plan cities and their peripheries, as well as from the inherent trait of the people who show spontenous response to development proposals. Moreover, both the landuse decree and existing locational pattern of major employment centres and institutions as well as the proposed ones, show great prospects for easy integration between Owerri and its immediate peripheral settlements.

9.2 MAJOR RECOMMENDATIONS:

After considering the national goals and objectives for rural development and the local needs of Owerri and its periphery in the light of selected possible functions of a city's periphery, agricultural development is expected to provide necessary complementary function of the periphery to those of secondary and tertiary activities in the city. Similarly, from amongst four alternative approaches for developing the periphery namely by resettlement, making them self-contained neighbours of the city, developing them as counter magnets to the city and lastly improving and integrating them with the city; the last was chosen. To achieve it, the following proposals were made.

(i) The whole settlements of Amakohia, Egbu, Naze and Irete plus parts of Orji and Nekede should be fully incorporated as parts of the city.

(ii) The rest of the settlemtns within five kilometres of the city boundary or as defined by the boundary of OCDA, should be developed as a Green Belt with proper peripheral control laws enforced by the OCDA.

(iii) Agricultrue based on production of food crops should be developed on a priority level at the periphery while existing settlements in the periphery should be cordoned off as a prelude to limiting unnecessary spatial expansion and density in them.

(iv) Subsidiary occupations like rural small scale industrial activities, which should not have more than five workers per unit of organisation, can be developed with the expressed perimission of OCDA.

(v) Efforts should be made for perspective Planning to remove promoting factors of urban overspill in Owerri. This involves dispersal policy of employment and other population generating activities to the newly established townshsips near Owerri like Aboh Mbaise, Oguta and Orlu.

(vi) Considering the pattern of rural settlement in the area, resettlements should be discouraged but where this proves inevitable in the face of future city growth, the affected villagers should be given the oppotunity to choose from three alternatives - to be located far from from the city, near to the city or in the city itself.

(vi) Considering the magnitude of implementing and enforcing peripheral control regulations a research unit should be established on a permanent basis in the OCDA to study and report on all events relating to the periphery. It should also strengthen the link between all parties interested in the development of the periphery of Owerri.

9.3 POLICY GUIDELINES FOR DEVELOPMENT OF SETTLEMENTS AT CITY PERIPHERIES.

1. Successful planning of a city cannot be divorce from the city's regional context. The case of Owerri has revealed that urban hinterlands may be sourrounded by a ring of rural settlements whese welfare depend directly on the city. City planning should therefore aim at solving not only the problems of the city but those of its immediate periphery.

2. Spatial growth of cities is a process whose end cannot be visualised in the foreseeable future. Rural settlements at the periphery of cities, which will inevitably be engulfed in the process of such growth

should not always be subjected to resettlememt programmes. Foresighted plans to guarantee orderly development should be made as city growth advances towards them.

3. City-periphery planning should be given equal attention which comprehensive master plans of cities have recently received in Nigeria. It should be a policy of governments in Nigeria to reject comprehensive master plan of cities which make no specific recommendations for the future development of the peripheries of the planned cities.

4. Peripheral control laws should be made for cities to prevent any neglect that may adversely affect the present urban fringes as well as jeopardize their orderly growth in future.

5. Whereas the provision of extensive Green Belts are essential for the proper preservation and orderly development of cities, it should be of prime policy consideration that projects or developments at the periphery of cities should be complementary to the functions of the city.

APPENDIX 1

NEAREST NEIGHBOUR STATISTIC AS A MEASURE OF SPATIAL DISTRIBUTION.

In calculating the nearest neighbour statistic (R) for some rural settlements around Owerri township, the following table was used with reference to Fig. 2.04 on page 21.

Settlements (S)	Identification Numbers(N)	Nearest Neighbours (NN)	Distance from NN in km.(D)
1. Ororonjo	1	4	0.5
2. Amawom	2	1	0.6
3. Umuodu	3	1	0.5
4. Umuonyeche	4	1	0.5
5. Umuoyima	5	3	0.7
6. Amakohia	6	2	1.6
7. Orji	7	6	2.7
8. Akabo	8	8	2.4
9. Owelu	9	10	0.8
10 Owala	10	9	0.8
11 Umunahu	11	15	0.5
12 Oeatta	12	15	1.4
13 Egbu	13	14	1.6
14 AWAKa	14	16	1.2
15 Ihite	15	11	0.5
16.Emekuku	16	14	1.2
17 Emmi	17	16	1.5
18 Naze	18	20	2.3
19 Agbala	19	17	1.9
20 Nekede	20	23	1.6
21 Amaeze	21	22	1.0
22 Amaorie	22	21	1.0
23 Umuoina	23	20	1.6
24 Ihiagwa	24	23	2.0
25 Obinze	25	26	1.0
26 Obokwu	26	27	0.5
27 Umujem	27	28	0.4
28 Umuocha	28	27	0.4
29 Avu	29	28	0.5
30 Umuguma	30	29	2.0
31 Ndegwu	31	32	2.1
32 Irete	32	31	2.1
33 Orogwe	33	32	2.0

Source: Field Survey, July - September 1978.

Note: D is the smallest distance apart from one settlement to another. It is measured as the crow flies over an area of 804.57 sq. km.

(b) PATTERN OF DISTRIBUTION.

Using the given table the following calculations were made.

Area 804.57 sq. km

No. of settlements 33

Density $\frac{33}{804.57} = .041$

Mean distances apart FA = $\frac{41.4}{33} = 1.25$

Mean expected distances apart if the distrinution is random $\bar{r}E = \frac{1}{2\sqrt{.041}} = 2.469$

Pattern of distribution $N = \frac{\bar{r}A}{\bar{r}E} = \frac{1.25}{2.469} = 0.5$

(c) Z TEST

A hypothetical random distribution in this case $FH = 0.5p - \frac{1}{2}$

where p = density

hence 0.5 x .041 = 0205

$= \sqrt{\frac{1}{0.0205}}$

= 6.984

But Standard Error in a randmoly distributed population of the same density $OrE = \frac{0.26136}{\sqrt{NP}}$ = .22469

$\therefore$ HO: $\bar{r}H = \bar{r}A$

H1 $\bar{r}H \neq \bar{r}A$

$Z = \frac{\bar{r}A - \bar{r}E}{O\bar{r}E} = \frac{1.25 - 2.469}{.22469} = 5.425$

Since $\bar{r}H \neq \bar{r}A$

We reject Ho

APPENDIX 2.

QUESTIONNAIRE ADDRESSED TO HOUSEHOLD HEADS

A SURVEY FOR AN ORDARLY DEVELOPMENT OF OWERRI PERIPHERY.

INTRODUCTION: I am a graduate student from the Department of Urban and Regional Planning, Ahmadu Bello University, Zaria. I am undertaking a survey of the settlements at the periphery of Owerri. I should be grateful if you would answer these questions:

Case No. .....

Village .....

		Codes	
1.	Sex	/__/	1. Male 2. Female
2.	Age	/__/	1. Below 30 years
			2. 30-45 years
			3. 46-60 years
			4. Above 60 years
3.	Marital Status	/__/	1. Married
			2. Single
			3. Separated
			4. Widowed
4.	Education	/__/	1. Primary School
			2. Secondary School
			3. Technical of Professional
			4. University
			5. None
5.	Occupation	/__/	1. Agriculture
			2. Industry
			3. Commerce
			4. Administration
			5. Army
			6. Construction
			7. Unemployed
			8. Others

6. Employment ☐ 1. Public
   2. Semi Public
   3. Private
   4. Others (Specify) _____

7. Place of Work. Now _____
   3 years ago _____

8. If changed why ☐ 1. Transferred
   2. Lost former job
   3. Better Opportunity
   4. Desire to come home
   5. Other reason specify

   _____

9. By what means do you to work?

   ☐ 1 Walking
   2. By bicycle
   3. By motor cylce or personal car
   4. By Bus/Taxi

10. How many times do you change the rype of transport before you reach your workplace

   ☐ 1. Once
   2. Twice
   3. Thrice
   4. Never

11. Is the mode of transport

   ☐ 1. Regular
   2. Occasionally Regular
   3. Irregular
   4. Very Irregular

12. Why do you choose to live in this village?

/__/ 1. It is my home
2. Accommodation is cheap here
3. Near to my workplace
4. No accommodation at Owerri town.

13. Income per month /__/ 1. ₦1 - ₦99
2. ₦200 - ₦199
3. ₦200 - ₦299
4. Above ₦300

14. What is your ethnic relation to this village
/__/ Native 2. Stranger.

15. When did you start to live here?
/__/ 1. Between Jan 1977-date
2. Between Jan. 1975 to Dec. 1976.
3. Between Jan. 1972 to Dec. 1974
4. Earlier than Jan. 1972.

ENVIRONMENTAL CHARACTERISTICS.

16. Type of house lived in
/__/ 1. Traditional (mud and thatch)
2. Modern (concrete and zinc)
3. Mixed

17. Age of house
1. Built between Jan. 1977 to date
2. Built between Jan. 1975 to Dec. 1976
3. Built between Jan. 1972 to Dec. 1974
4. Built earlier than January 1972.

18. Structure/Use of House
1. Permanent
2. Temporary

19. Do you own the the house in which you live?
1. Owner
2. Rented

20. History of plot on which house is built
1. Owner inherited
2. Leased to owner
3. Don't know.

21. What facilities do you have in the house?

22.
1. Electricty only
2. Tap water only
3. Both
4. None

22. Type of Toilet use
1. Bush
2. Pit latrines
3. Water Closet.

SANITATION.

23. What do you think about the surrounding of your house?

/__/1. Clean
2. Dirty
3. Congested
4. Attractive
5. Unattractive

24. How far from your house do you dispose the house refuse?

/__/1. 10 metres
2. 20 metres
3. 30 metres
4. Over 30 metres

25. What happens to it when you dump it there?

/__/1. It is carried away by Sanitary workers
2. It is left there to decay

26. If carried away, how often does such take place?

/__/1. Weekly
2. Forthnightly
3. Tri-weekly
4. Monthly

27. Recreation facilities in the village

/__/1. Large children' playground
2. Public entertainment places. Specify by name _____
3. Parks
4. Others specify ____
5. None

28. The nearest open space to your house is about

/ 1. 1-29 metres away
2. 30-59 metres away
3. Above 60 metres from here
4. None at all

OTHER ISSUES.

29. Community Self-Help Project

Types by name

/ 1. Already Executed
2. Being Executed
3. Proposed

30. How often do you visit Owerri each week?

/ 1. 1-2 times
2. 3-4 times
3. 5-6 times
4. Daily
5. Never

31. What usually comples you to make such visits?

/ 1. To buy my needs
2. To visit people
3. For recreation
4. Other spcify _____

32. How often a week do you stay with your next door neighbour for non-official chat?

/ 1. 1-2 times
2. 3-4 times
3. 5-6 times
4. Daily
5. Never.

APPENDIX 3.

QUESTIONNAIRE ADDRESSED TO SOME LANDLORDS IN OWERRI AND ITS PERIPHERY.

(i) Usual Introduction.

(ii) Case No. _____

(iii) Village or Residence of Respondence _____

1. What problems did you experience while developing your property?

2. What type of aid would you like government to give to property developers in and around Owerri?

3. Apart from this house, what other place in Owerri do you own a house?

4. Which of the villages at the periphery of Owerri would you like to own or develop landed property? Give your reasons.

5. State your order of preference for the following six villages Amakohia, Orji, Egbu, Naze, Nekede and Irete for owning such property.

6. Why do you think many people like to build in these villages rather than in Owerri town?

7. What are your expectations about our capital city of Owerri in future?

8. What about these villages? Comment on each.

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