PLANNING AND PROGRAMME OF DEVELOPMENT FOR THE FEDERAL CAPITAL REGION OF N I G E R I A

M„Sc (U.R.P.) THESIS

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C E R T I F I C A T E

This is to certify that this Thesis has been submitted by S.O. Awoniyi in partial fulfilment of the requirements for the award of Master of Science Degree (M.Sc), Urban and Regional Planning.

A P P R O V E D

DR S.K.KULSHRESTHA
HEAD OF DEPARTMENT

To the memory of my dear Father

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(STEVEN O. AWONIYI)

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CHAPTER 1.

1.00 INTRODUCTION

1.01 The Background

Resulting from 'Aguda Commission's Report' on the relocation of the Federal Capital for Nigeria, the Former Military Government promulgated a Decree No.6 of 1976 establishing the Federal Capital Territory (FCT) and Federal Capital Development Authority (FCDA). The Military Government decided that the Federal Capital be relocated away from Lagos to a Central part of Nigeria in the vicinity of Abuja. According to the Government White Paper, "a Centrally located Federal Capital in a spacious area within easy access to all parts of the Federation would help in generating a new sence of national unity".

The Federal Capital Territory refers to all that land located between Latitude $8^{O}25'$ and $9^{O}25'$ North of the Equator and Longitude $6^{O}45'$ and $7^{O}45'$ East of Greenwich. It has an area of about 8,000 Sq.km., located South of Suleja in the heart of the Country. The area has regular boundaries on the three sides and has V shaped cut into it on the Northern Sector, apparently to leave Suleja Township out of the earmarked area.

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1. Federal Ministry of Information: White Paper Panel on the Location of the Federal Capital, P.7

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Fig. 1·1 FEDERAL CAPITAL TERRITORY :- NATIONAL CONTEXT

Source : Abuja Master Plan IPA (1979)

The Federal Capital Territory is surrounded by Kaduna, Niger, Plateau and Kwara States (See Fig. 1.2)

Among the objectives for the establishment of the Federal Capital Territory are:-

- To relieve urban pressures being experienced in Lagos.
- To provide a base for urban and rural development in Central Nigeria.
- To symbilize Nigeria's aspirations for unity and greatness.
- To create a political, commercial and financial centre for Africa.

The Federal Capital Development Authority was set up to see through the comprehensive planning and development of the new Federal Capital City at Abuja.

In June 1977, the Federal Capital Development Authority of Nigeria Comissioned 'International Planning Associates' to produce a Master Plan for the New Federal Capital City and its regional grid. According to the terms of reference, the Master Planning Process was to include a review of relevant data, the selection of a Capital City Site, the preparation of Regional and City Plans and an accompanying design and development Standards manual.

The Master Plan for the Federal Capital City and Regional Plan for the Federal Capital Territory was completed and approved in 1979.

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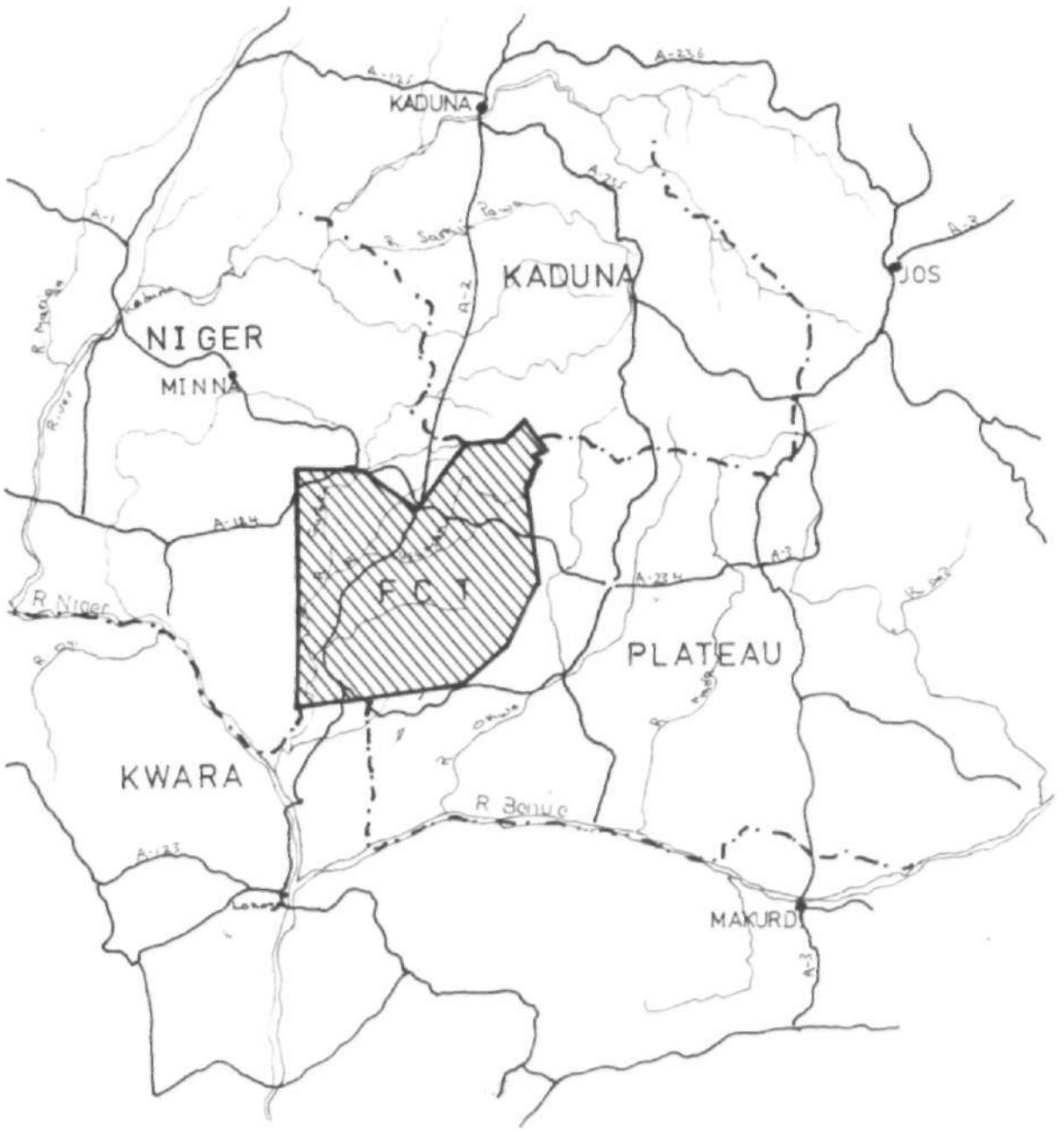


Fig 1·2 FEDERAL CAPITAL TERRITORY :- REGIONAL CONTEXT

Source Abuja Master Plan IPA [1979]

This marks the begining of the development of a new National Capital which is a bold and challenging undertaking symbolizing Nigeria's Commitment to National Development and Unity.

1.20 Justification of Research Project

The need for Coordinating Planning and administration between the New Federal Capital City (FCC) Abuja and the surrounding areas arises from the recognition of the following:-

- Development in the Federal Capital City (FCC) and the Federal Capital Territory (FCT) will be of scale and form that will undoubtedly have a strong impact upon the surrouding areas.
- The FCT boundaries as arbitarily defined by the Aguda Commission will clearly not stop expansion and overspill of development into the surrounding areas, since Political boundaries tend to be ignored as is readily apparent in almost all modern metropolitan areas of the World, even where land development is highly controlled by public policy.
- Such overspill effect are likely to occur in areas well connected with the Federal Capital City through the existing and proposed transportation networks.

For these, the need arises for the identification of the Federal Capital Region (FCR) that will handle the planning programmes and

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administration between the Federal Capital City and the influence areas.

The areas proposed by the 'Master Plan for Abuja' as "FCT-States Joint Planning Districts" needs a review. While one agrees with the basic principles determing the need for the creation of the Joint Planning Districts, there is reservation regarding the location, size and extent of these districts as proposed by the Master Plan. Such reservations are only natural considering that the Master Plan deals primarily with the design of the Federal Capital City, while the Regional Planning and Programme will be a much more thorough study of the regional aspects and implications of the Creation of Capital City and related developments.

It is therefore necessary for the definition of a wider area of influence for the Federal Capital City, Abuja, which will extend beyound the administrative bounderies of the Federal Capital Territory, due to the very nature of the new Capital to-be and the whole of the FCT, which will be the major urban concentration in the midst of a relatively undeveloped and not well serviced region of Nigeria. Consequently, in addition to its role as the National administrative Centre, the new Capital

will assume the dominat role as the economic, social and administrative regional centre. This role will surely extend to the entire Middle Belt of the Country.

Also the practical meaning of the definition of the Federal Capital Region (FCR) becomes apparent because the FCT boundaries, although very important from the point of view of administration, may not specify directly the Settlement Patterns, Regional Transportation Network, Employment areas and other Economic Interractions of the population that will be attracted by the new Capital City. Therefore there is the danger that if stringent land-use and development controls are only limited to the area covered by the FCT boundaries, without imposition of similar measures and implementation of proper plans and programmes to the areas immediately surrounding the FCT, the problem of unwanted development is envisaged.

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2. International Planning Associates: (1979). The Master Plan for Abuja, the New Federal Capital of Nigeria. P. 259.

1.30 Aims and Objectives

Aims:

This study aims at proposing a Planning Programme that will make the Federal Capital Region of Nigeria an eminent and exalted developed part of the Country, adequate to its function.

Objectives:

To achieve this aim, the following Objectives will be pursued:-

(a) To delineate the Federal Capital Region based on the potential interraction expected between the Federal Capital City and its surrounding Settlements.

(b) To develop a systematic coordinated Settlement pattern in the region.

(c) To provide the region with a well balanced system of transportation network.

(d) To establish a unified and effective administration for the region.

(e) To give recommendations and policy guidelines for implementation of the proposed regional development plan.

1.40 Scope and Limitations

The study generally covers all the areas of the FCT and its adjoining States from where the Federal Capital Region (FCR) will be delineated. Broad

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regional plan proposal will cover the entire FCR while detail plan proposals will be limited one Micro-region within the region.

This study does not lay claim to great depths of the area under the study because of the obvious difficulties caused by data paucity and limited resources in terms of funds, time and manpower.

1.50 Methodology

Data used in this study were obtained from two main sources.

(a) Primary Source:
- Recognaisance Survey of selected settlement within the Federal Capital Territory and the adjoining States.
- Traffic eard within the FCT to determine the existing catchment areas of the on-going projects in the FCT.
- Formal and informal interviews held with officials of FCDA,FCTA and adjoining State Governments.

(b) Secondary data:
- Population Court of the settlements within the FCT, Conducted by the University of Ibadan Consultancy Services in 1980 for Presidential Ad-Hoc Committee on Resettlement.
- The 1963 Census figures of selected settlements in the adjoining States.

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- Reports of Various Surveys carried out in the Federal Capital Territory.
- Master Plans of Towns in FCT and adjoining States.
- Regional Plans for FCT, Niger Plateau and Kwara States.
- The 4th N.D.P (National Development Plan) of Nigeria as it relates to the Federal Capital Territory and its adjoining States.

Data Analysis

Delineation the Federal Capital Region (FCR)

Two methods are employed in delineating the Federal Capital Region (FCR). This first is the use of Isochromes to delineate the existing Catchment areas of the On-going Projects in the FCT. The variables considered for analysis is the count conducted within the FCT and the travelling time survey between the Federal City Site and the surrounding urban centres. Then the Isochrome lines are plotted.

The second technique used in delineating the FCR is the Gravity Model. The models employed are for the most part, variation of gravity model or Interraction model, which estimates in a rational manner, the streams of communication or interraction between points and areas.

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The variables considered for analysis includes:- the projected population of the Fderal Capital City (FCC) Abuja and major urban Centres in the States surrounding the Federal Capital Territory for the plan period i.e. 2 010. Distances by road from the Federal Capital City site through the existing road transport network to the adjoining urban Centres are also used. The assumption of this model is that the inhabitants of one population centre will interact with those of another centre, based on their respective massess (population) and the distance between them(3)

Another Technique employed in the study is the Inverse Wighting Chart which is a sim le Matrix Technique that seeks to relate inversely the weight of each variable of Central functions to a number of settlements which pocess that particular function. The method assumes that "funtions present in a few centres are of a higher order than the more common ones(4). This method is used to identify the 2nd (second) order settlement within the overall Federal Capital Region, assuming the Federal Capital City, Abuja will be the 1st (first) order settlements. 3rd (third) or 4th (fourth) order settlements are only identified in the selected Planning District of the FCR.

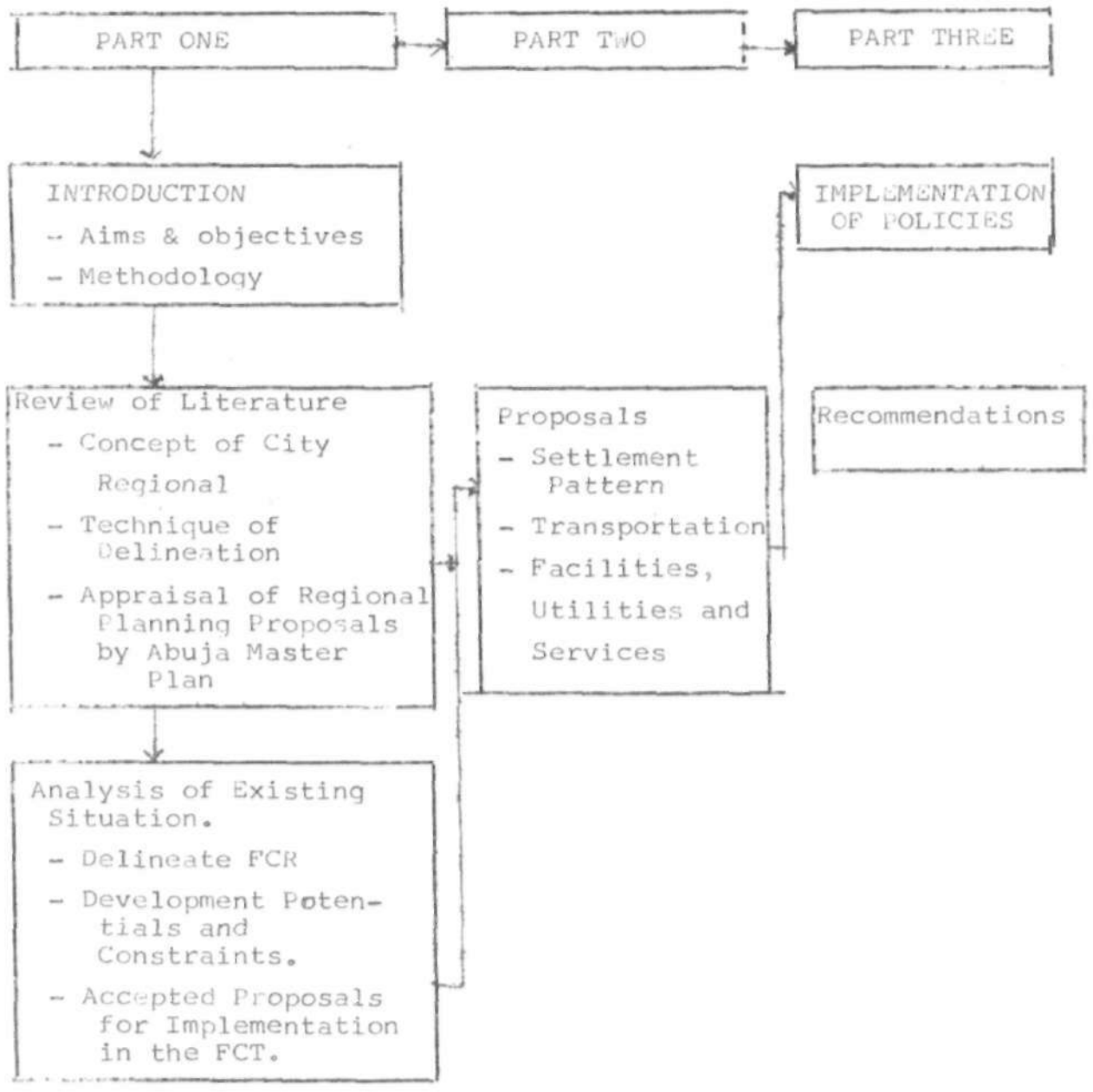
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The variables considered for analysis includes: the population size; Admnistrative function; Commercial activities (Market); Educational facilities; Health Services; Road Network, and other services facilities.

1.60 Structure of the Thesis:

3. Garnier J.B. and Cabrt G. (1971): Urban Geography P.150
4. Grove D. and Huszar L. (1966). The Towns of Ghana; the role of Service Centres in Regional Planning P.49

Thesis Structure Chart.



CHAPTER 2

2. 00 REVIEW OF LITERATURE

2.10 The Concept of Central City Region in Regional Planning

The Concept of the City-region, like all concepts is a mental construct. It is not, as some Planners seem to think, as an area which can be presented on a platter to suit their general needs. The extent of the area they need will depend on the specific purpose for which it is required. The concept of the city region can then be made specific and definable, as a geographical entity by reference to the precise areal extend of particular associations with the City. Many determinantsof such associations are transport facilities and the density and movements of the population, on which meanigful meaning of the City-regions could be based.

Dickinson, argure that the Capital City may be viewed as the primate centre of the region, and as such exerts social economic and administrative influence on areas marginal to Centre itself. The influence of a Central City will be exerted in areas beyond the confines of the Central City, it will be extended to Outlying areas with a rural population as well as the lower order urban

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Centres of smaller size and lower population densities.

In other words the influence of a Central City is experienced, not only in the City itself, but in areas adjacent to it. Legal and administrative boundaries to not deter the diffusion of this influence areas.

Senior in setting out his ideas for Local Government reform, believed that the right approach to reform was to analys functional and democratic needs in relation to the patterns of settlement, activity and Community Structure in which the modern age Society Organises itself. He argued that people look for services to the nearest large urban Centre, and thus the best unit for providing Services, Planning them and rallying Local involvement is a City region. 'Senior" saw this City as a "a marriage between the built up Core and its Socially and economically dependent areas".

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1. Dickinson R.E. (1966):- City and Regions:- A Geographical Interpretation, P.227

2. Glasson J. (1978):- An Introduction to Regional Planning. P.311

2.20 Delineation of City Region

The earliest method used to delimit sphere of influence of a City is the 'Isochrones: This is defined as line joining places that can be reached from a particular settlement at a given time(3). In those days, when the level of transport technology was very low, a distance of about 8 - 10 kilometer, which can be covered in about two hours by foot is regarded as optical sphere of influence. This method is used in the study to assess the Catchment area of the on-going project in the Federal Capital City, based on the present level of transport technology in the Country.

Professor Vagele in his writing on the City of Chandigarp and its environs wrote inter-alie that, "The delineation of City cartered region is a complex task and it involves several factors such as retail and wholesale, Catchment area for education and health facilities etc. All these factor must be mapped and superimposed to determine the Common boundary"(4). In another Contribution on the impact of Bhilai Steel Complex on its region, he identified nine variables which by interpolation

3. Garnier J.B. and Chabot. G. (1971). Op.Cit

5. Vagale L.R. (1964). The Impact of Ohilai Steel Complex on its influence region.

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with respect to a datum, Positive and negative values are determined.(5) We marked eight cardinal axis with Bhilai as the Centre and plotted the variable by interpolation. These he later superimposed to find the Common area which was adjusted to the boundary of the nearest settlement. The limit thus determined was regarded as the end of the Sphere of influence of Bhilai.

Theoretical Models of regional delineation are also employed based, not on observed or determined linkeages between Social points and the influence area, but on theoretical models employed in regional delineation are for the most part variations of the gravity or interraction model, which estimates, in a rational manner, the streams of interraction between points or areas.

In simplified form, the gravity model is expressed(6).

$$I = \frac{P_1 P_2}{d}$$

where

I = Measures of relative interaction between places 1 and 2

P_1 = Population of the larger of two places

5. Vagale L.R. (1966): "Chandigarh and Environs in the Regional Setting." In Planning for Urban and Regional Development in Asia and Farzast Conference U.N.

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P_2 = Population of the Smaller of two places

d = distance (in kilometer) between the two places.

The gravity or interraction model is patterned after the law of gravitation. H.C. Carey was the earliest to formulate this model(7). The two key variables employ in the model that are said to influence man's spatial movement are:- the population (mass) and the distance. Extending this concept; the inhabitants of One population Centre will interact with those of another centre based on their respective population and the distance between them. This concept has been modified and applied several times for regional delimitation.

In 1931, W.J. Reilly adapted the interraction or gravity model to estimate how much of the retail sales volume of a City are located between two larger Cities with greater retail offerings would go to each of the compating Centres. "Reilly's law"(8). as it come to be known is expressed as

$$\frac{S_1}{S_2} = \frac{(P_1)}{(P_2)} \left(\frac{D_2}{D_1}\right)^2$$

where:-

$S_1 d_2$ = relative shares of sales in each of two Cities, made to residents of an intermediate town.

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P_1 & P_2 = Population for two competing trade centres

D_1 D_2 = Distance from each of two Cities (P_1 d P_2) to an intermediate town.

A major modification of 'Reilly law" was developed by P. Converse who advance the "Breaking point Concept"(9). The breaking point is the location that marks the division of two streams of movement, each directed to a different focal point.

The Concept is expressed as:-

$$B = \frac{d}{1 + \sqrt{\frac{P_1}{P_2}}}$$

where:

B = breaking point (in kms) from the smaller of of two adjacent centres.

d = distance (in kms) between the adjacent centres.

P_1 = Population of the larger of the two centres.

P_2 = Population of the smaller of the two centres.

One can note that both Reilly's and Converse's models incorporate the same variable as put forth by Carey, that is population and distance. The breaking point equation provides an estimate of the

7. Carnier J.B. and Chabot G. O. Cit P. 148

8. Ibid

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locations of an Outer margins of two adjoining influence areas. When the breaking point is established in all possible directions from a given centre and these points are connected together, then the influence area of the City in question has been approximated.

This breaking point model is applied to delimit the Federal Capital Region. Details will be discussed in the text.

2.30 Appraisal of Regional Plan Proposal of Abuja Master Plan

Following the promulgation of decree No. 6 of 1976, establishing the Federal Capital Territory (FCT) and Federal Capital Development Authority (FCDA) by the then Military Government of Nigeria, the FCDA of Nigeria Commissioned 'International Planning Associates (IPA) to prepare a Master Plan for the New Federal Capital City and its regional grid. The Master Planning process was to include a review of relevant data; the selection of a Regional and City plans. The Master Plan for Abuja including the Regional Plan for the FCT was completed and approved by the FCDA in 1979. (See figure 2.1

An attempt is made therefore to appraise the delimeated boundaries of the FCT by the Panel on the Relocation of the New Federal Capital and major Regional Plan Proposal by the (IPA).

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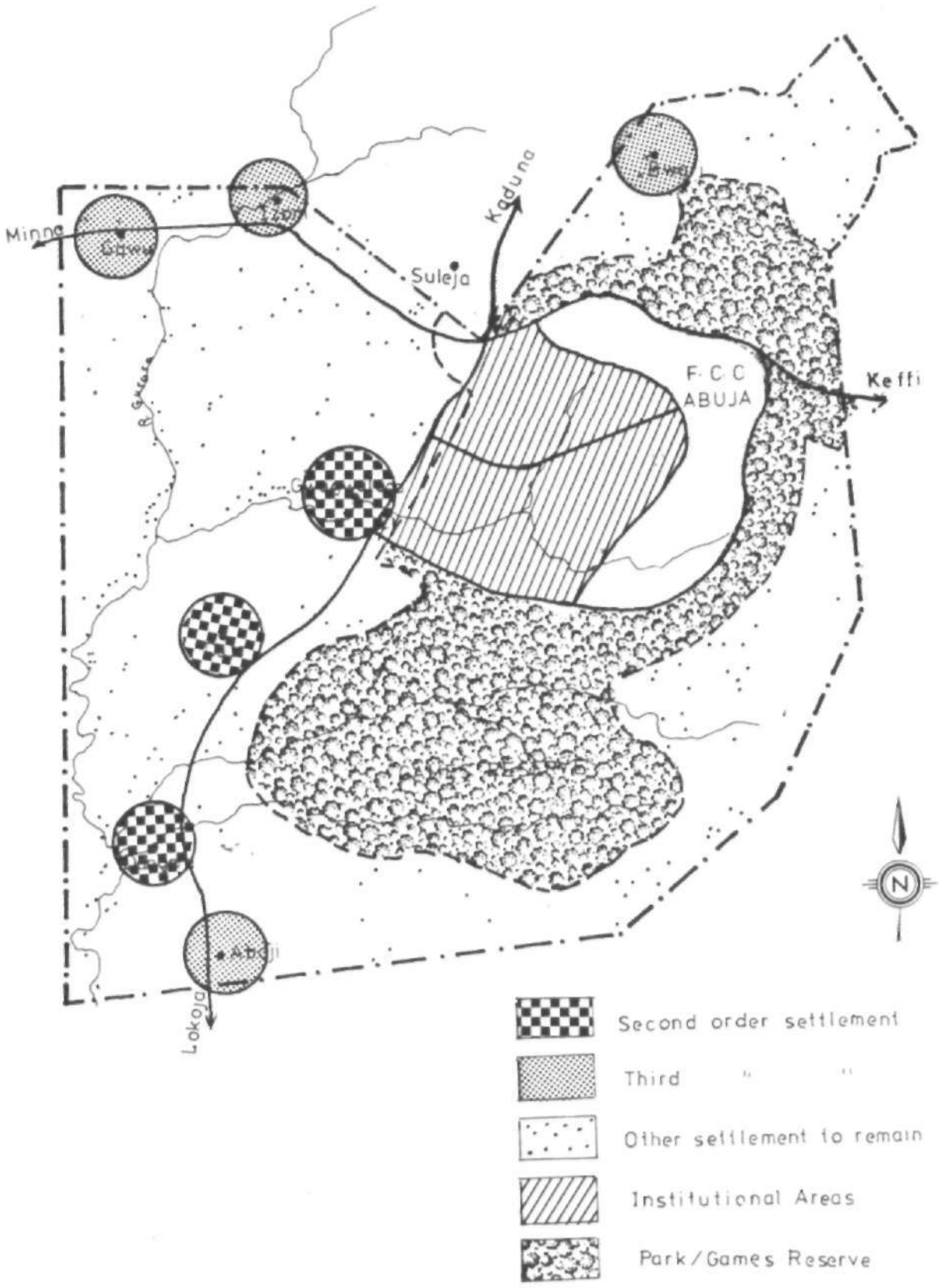


Fig 2 1 REGIONAL PLAN FOR FEDERAL CAPITAL TERRITORY

Source : Abuja Master Plan I.P.A. (1979)

FCT Boundaries

The Existing boundaries of the Federal Capital Territory as defined by the 'Aguda Commission' on the location of the new Federal Capital' needs a review[10]. The Panel must have been led by the grid lines on the map or the position of the towns as represented on the map to delineate the boundaries, thus making the boundaries arbitary. The following points should have been considered by the Panel:-

- Proposed development programme of the States from which the FCT is delineated.
- Settlement pattern and population distribution of the area.
- Administrative set-up of the states
- The existing transportation network.

It is the view of this study that a lot of time, money and social inconvinences would be spared if the above points were taken into consideration together with the use of the geographical features in the area selected such as Bwari-hills on the North-eastern side and River Gurara on the Western side of the Territory which will surely

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9. Ibid
10. Federal Ministry of Information. Op.C17 P. 7

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leave nobody in doubt as to the juridiction of the Federal Capital.

Regional Settlement Pattern and Relocation Programme in the FCT

From the analysis of the existing settlement pattern in the FCT based on the Surveys and mapping of the area, the 'IPA' based the future settlement patterns of the FCT on the following parameters:-

- Large areas of FCT, primarily in the Gurara River Basin and the South-eastern quarter of the Territory are presently inaccessible.
- Most Villages and settlements presently existing in the Territory are below the critical population mass needed to warrant the provision of fixed facilities.
- Relocation of settlements to Villages already having some basic Community facilities can significally improve the provision of services to the over-all population without the necessity of large investiment in rural road connections that would be required to provide fixed facilities.
- Certain existing Villages because of their size and location logically become centres of new employment in the FCT associated with Capital City Construction and orerations.

11. International Planning Associates. OP Cit.

- Based on the above parameters, the following proposals were made for the future settlement pattern within the Federal Capital Territory([11]). See fig. 2.1

The Villages of Gwagwalada, Dafa and Dangara to be reinforced as potential population Centres by the improvement and expansion of existing services and facilities. Those Villages may potentially serve as relocation Centres for people displaced by the development of the Federal Capital City. Gwagwalada, due to its Central location within the FCT was recommended as the major satellite for the new Capital City Abuja.

The settlement of Abaji, Gawu, Izom and Bwari, which already have some types of Community Facilities was recommended to remain. These settlements may become centres for small Commercial, Industrial and Agricultural activities. The plan further stated that serious effort should be given to the establishment of "Economic Development Belt" along the existing A-2 highway.

The Regional Plan recommended that settlements further than 10km away from Villages with Community facilities and those that occupy the remote and inaccessible areas of the FCT should be allowed to remain as they are and provision of services should be deferred until such a time an increased population

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or other development warrants them.

The Plan proposed the relocation of the settlements in the following areas:-

- Settlement within 5km of the Capital City in order to protect the periphery of the City from development encroachment.
- Settlement within 1 km of the water-shed of the proposed reservations in the Bwari-Aso Hill.
- Settlement in the FCT within 5 km of the intersection of the two major road corridors (A-2 & A-234) entering the Northern part of the Territory.
- Settlements within the area between the FCC site and the A-2 highway which is planned to include a number of institutions and service land-uses related to the Capital City, as well as the International Airport.

- Assuming that all the elements of the Regional Plan proposals were to be implemented, the total relocation effort migh invoved about 265 settlements of about 50,000 people.

'IPA' thus proposed Gwagwalada, Dafa and Dangara as the 2nd order settlements and Abaji, Gawu Izom and Bwari as the 3rd order regional centres. The criteria employed in their selection is the availability of some Community facilities and the development of a "Economic Development Belt" along the existing A-2 road.

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These regional Centres proposed will result in the concentration of the growth Centres along the existing highway in the Territory leaving most of the settlements in the remote parts of the Territory. The following problems are envisaged.

- Unwanted development along the road corridors as presently, evidence from the ugly development along the A-2 road especially between Suleja and Abaji.
- Development will not be evenly spread through out the Territory.
- Proposed relocation of settlement will be too expensive since people have to be moved over a long distance to the selected growith Centres.

In view of the above problems envisaged, more rationel means of population redistribution throughout the Territory will ensure efficient regional planning and development.

The proposed relo ation of about 264 settlements involving about 50,000 people within the Territory will have adverse effect on the ways of life of the people to be relocated. The lessons of Kanji are too fresh to be forgotten. Relocation of such a large number of settlements is in conflict with the reversed government policy statement on the resettlement of the inhabitants of the FCT(12).

12. Federal Republic of Nigeria (1981):- The Report of the Presidential Ad-hoc Committee on Resettlement of the FCT. P.6

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Transportation

The regional plan suggested that the appropriate strategy for linking the FCC to the national highway system is to connect it as directly as possible to the trunk-route system. The following routes were proposed for the FCT[13]. See fig. 2.1

- Route A-2 as the major north-south trunk access in the FCT.
- Boundary Road ground FCC;
- Route A-2 Connection to the FCC.
- Route A-124 as trunk road access between the FCC and the States West and East of the FCT.
- In addition to connections to the national road system for the accommodation of inter-regionaal travel, the regional plan also proposed local systems of roads to serve primarily intra-regional travel.

In view of the relationship of the Federal Capital Territory with all the State Capitals in the Country and the existing shortest routes connecting them to the Territory, one would have expected a radial road network of national and regional importance to emerge from the regional plan.

The regional plan have not taken into consideration road development proposals by the adjoining States so as to optimise their Connectivity to the territory while at the same time serving in

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the best possible manner their own links with the rest of the Country. There is no proper connection of the proposed regional Centres in the plan to the Capital City road system.

FCT-States Joint Planning District

- The proposal for a Joint FCT-States Planning Districts[14] by the Regional Plan is quite commendable since issues relating to the development of the surrounding region should be a point of concern as plans for the FCT and the Capital City begin to take form (See fig. 2.2)

However, while agreeing with the basic principles determining the need for the creation of the joint planning districts, has certain reservations regarding locations, size and extend of the areas proposed. Moreover, the regional plan did not spell out the role the Joint Planning District is expected to play in the control of unwanted development of the periphery of the FCT. Administrative machinery that is expected to manage the planning districts is also neglected.

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13. I.P.A. (1979) Op. Cit.
14. I.P.A. (1979) Op. Cit. P. 259

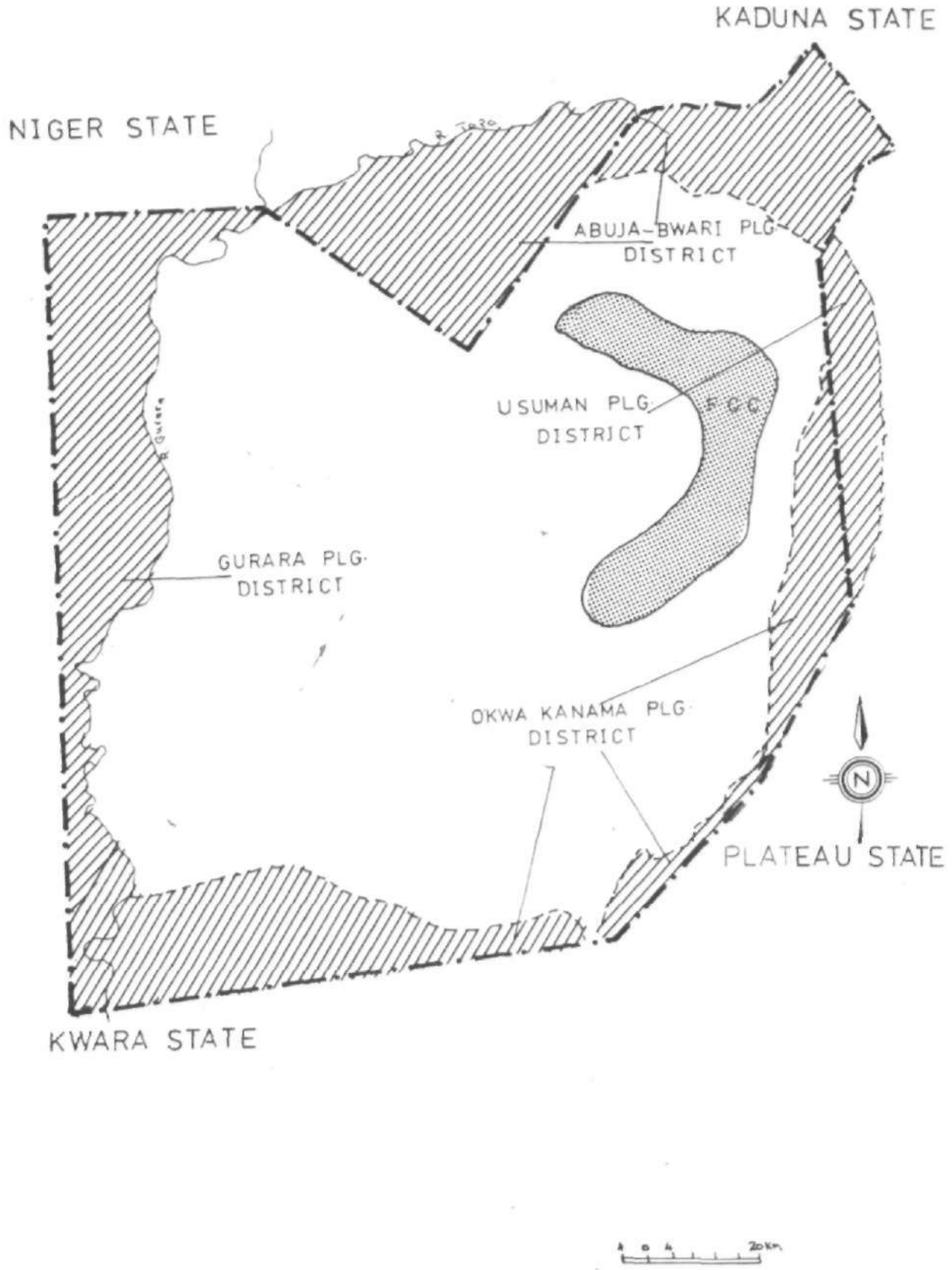


Fig 2·2 JOINT FCT-STATE PLANNING DISTRICTS

Source: Abuja Master Plan (IPA 1979)

CHAPTER 3

3.00 DELINEATION OF FCR AND ANALYSIS OF EXISTING SITUATION

3.10 Delineation of Federal Capital Region

In an attempt to delimit the present catchment area of the population movement into the Federal Capital City (FCC) construction sites, an isochrone network is drawn on the existing road-network from the FCC transportation centre. The isochrone network is based on the operation speed on each road category as follows:-

Primary roads - 80 km/h
Secondary roads - 50-60 km/h.
Other roads - 30-40 km/h.

The variation of the above operating speed depends on the driving quality of each road.

The present influence area of the FCC can then be defined as the area, where the vast majority of the more frequent trips to and from Abuja may take place. The major criteria thus for its definition is the distance in terms of time from the new FCC as defined by the isochrone of 3 hours created by the major arterias connecting the capital to the rest of the Country. This area covers the whole of the FCT and parts of the local government areas of the surrounding states. See Fig. 3-1.

1. Garnier J.B. and Cahot G. (1971):- Urban Geography

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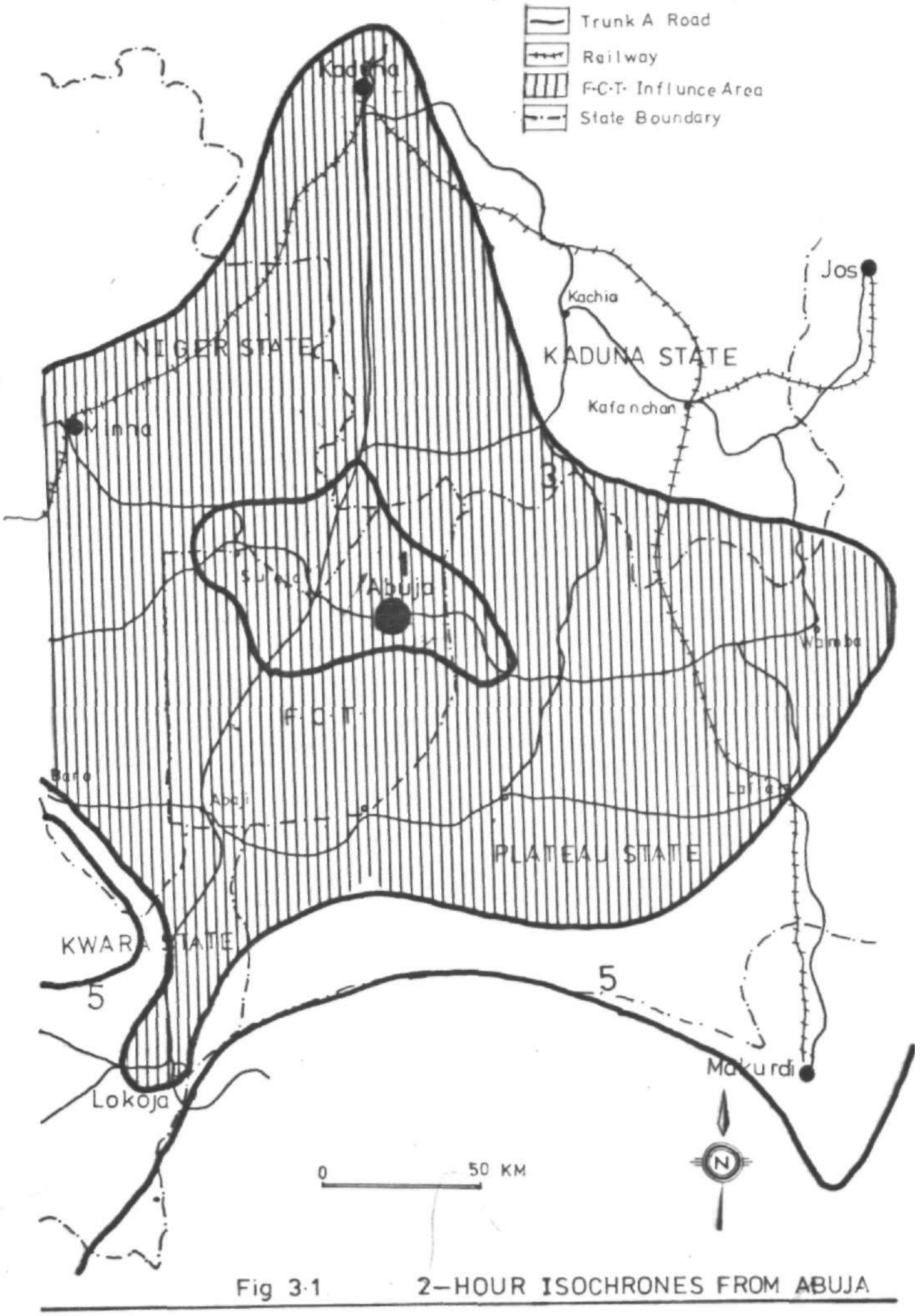


Fig 3·1 2–HOUR ISOCHRONES FROM ABUJA

The potential influence area of the Federal Capital City was determined by the use of P. Converse 'Breaking Point' model[2] which is the modification of the gravity model developed by H.C. Carey. The breaking point model is expressed as:-

$$B = \frac{d}{1 + \sqrt{\frac{P_1}{P_2}}}$$

where:

B = breaking point from the smaller of two adjacent centres in (kms)

d = distance between the adjacent centres

P_1 = Population of the larger of the two centres

P_2 = Population of the larger of the two centres.

The two variable used in the model are:- Population and distance in km. The population figure for the FCC Abuja is based on the projected population of the city by the year 2010[3], and the projected population of the major centres adjoining the Federal Capital City for the same plan period.

In computing the breaking points, the distance between Abuja and Kaduna is 190 Km., and the projected population is 1,600,000 and 1,804,000 respectively.

$$\therefore \quad B = \frac{d}{1 + \sqrt{\frac{P_1}{P_2}}} = \frac{190}{1.94} = 97.8\text{km} = 98\text{km}.$$

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2. Ibid.

3. I.P.A:- The Master Plan for Abuja, the new Federal Capital for Nigeria (P.60)

The potential influence area from Abuja will extend to kilometer 98 from Kaduna. The same technique was applied to all other major centres within the region. Table 3 - 1 shows the relative partions of the potential influence area of the FCC. See fig. 3.2.

Table 3 - 1

FROM	TO	POP=(1980)	PoP=(2010)	Distance from Abuja	B (Km)
ABUJA	Minna	91,800	243,600	145 Km.	40.3 Km
"	Jos	348,202	766,600	251 Km.	105 Km.
"	Lokoja	47,000	119,500	180 Km.	39 Km
"	Kaduna	387,000	1,804,000	190 Km.	98 Km.
"	Makurdi	112,400	266,400	260 Km.	74 Km.

3.20 The Regional Setting of the Federal Capital Region (FCR)

The Federal Capital Region (FCR) as delineated lies between latitude $8^{O}20'$ and $9^{O}30'$ N of the Equator and Longitude $6^{O}10'$ and $8^{O}50'$ E of Greenwich. It extends beyond the FCT boundaries:- to the east covering Keffi, Nassarawa, Akwanga and Lafia Local Government areas, Kwoi district to the north, Koton-Karfi in the south and extends to Paiko in the west. See fig. 3.3

3.21 Physical Characteristics

A. Relief and Physiographic Regions

The Federal Capital Region (FCR) is located within the Middle Belt region of the Country, at the southern extent of Jos Plateau. Just to the south of the region is the wide fluvial plains formed by the confluence of

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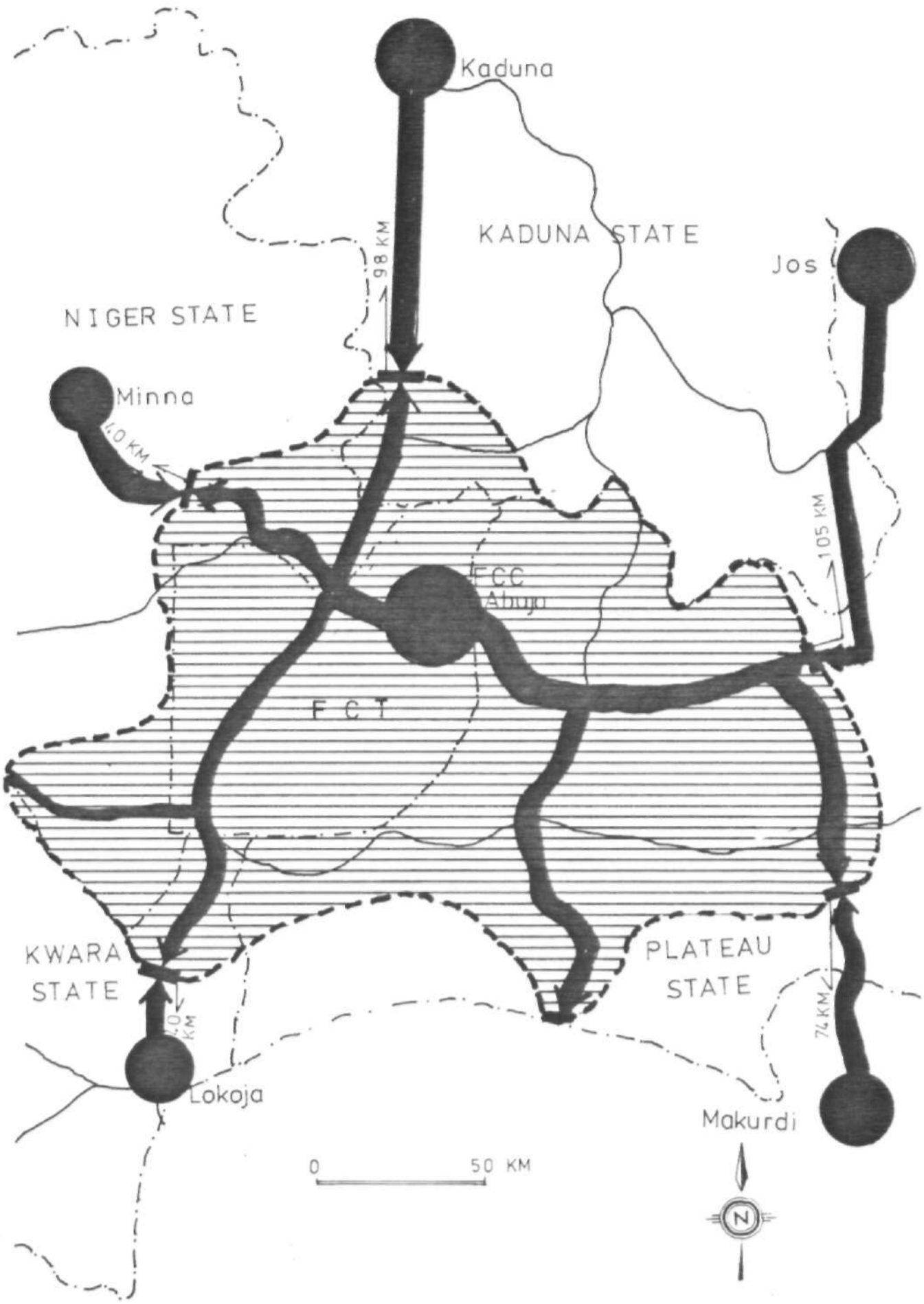


Fig 3·2 POTENTIAL INFLUENCE AREA OF FCC ABUJA

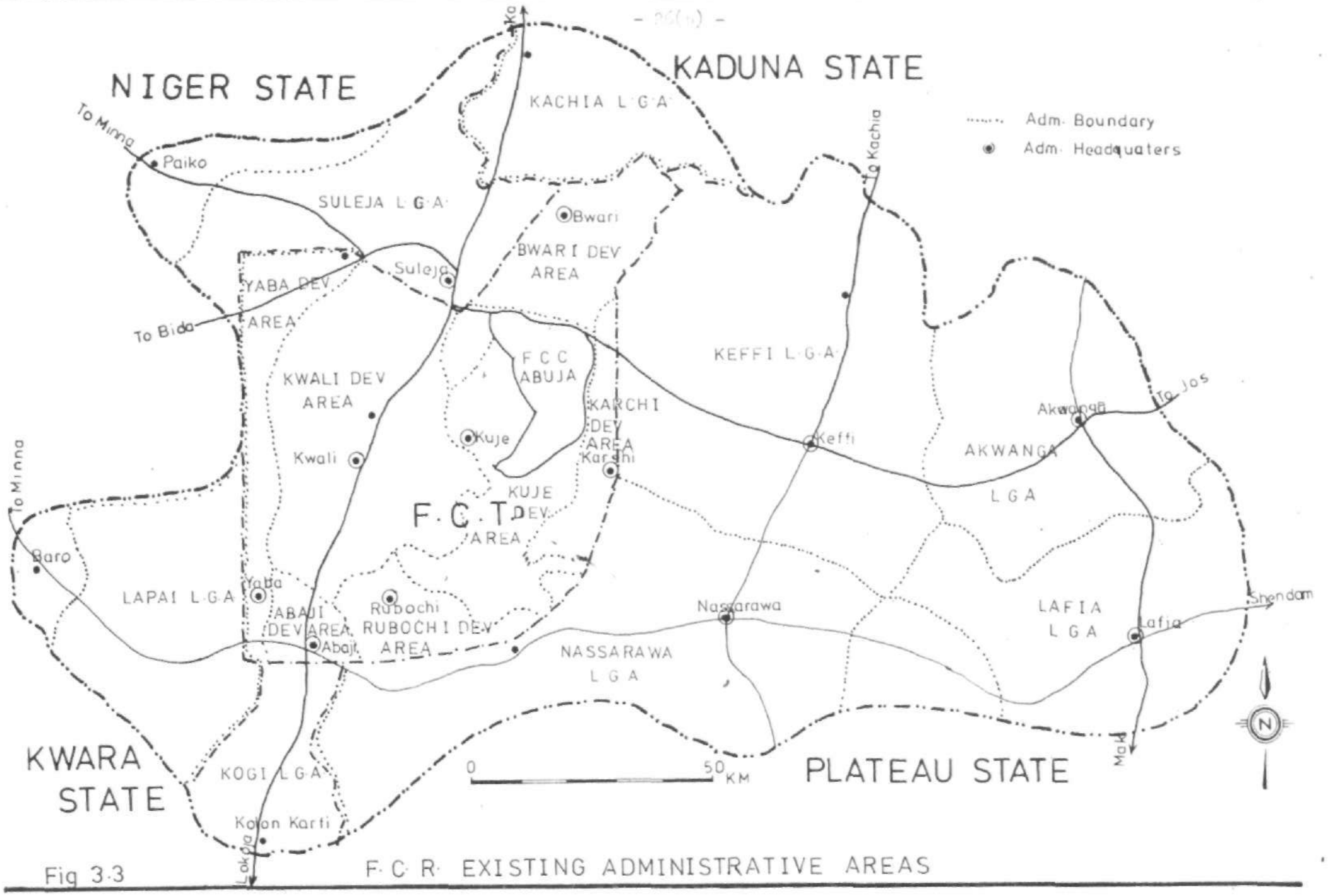


Fig 3.3 F.C.R. EXISTING ADMINISTRATIVE AREAS

the Niger and Benue Rivers. Elevation within the region rises at a relatively gentle gradient from about 60 meter in the southwest corner to about 760 meters at the northeast corner. Numerous hills, inselbergs and other smaller rock outcrops rises out of this plain and reach elevations of about 936 meters. See Fig. 3.4

The FCR can be divided into three general physiographic regions which are differentiated by unique assemblages of landforms, underlying geology and elevation, namely:- the upper Niger-Benue Valley along the western and south-eastern boundary; the Jema'a platform which occupies the central and eastern part of the area and the Kaduna plains in the north(4).

The major rivers that runs through the region are River Gurara in the west, River Okwa and Mada to the east.

B. Climate

The Climate of the FCR is determined by the alternating dominance of either the N.E dry continental air mass from the north of the south-west moist a marine air mass from the south. FCR is located on such a way that it undergoes roughtly equal periods of dominanace by each air mass.

The highest temperature occur during the months of the dry season (November - April during which maximum temperature range between 27.5°C and 37°C. During the rainy season (May - October, maximum temperature

4. LRD Central Nigeria Project Team: Land Resource Study. The Jema'a Platform Vi:.3A

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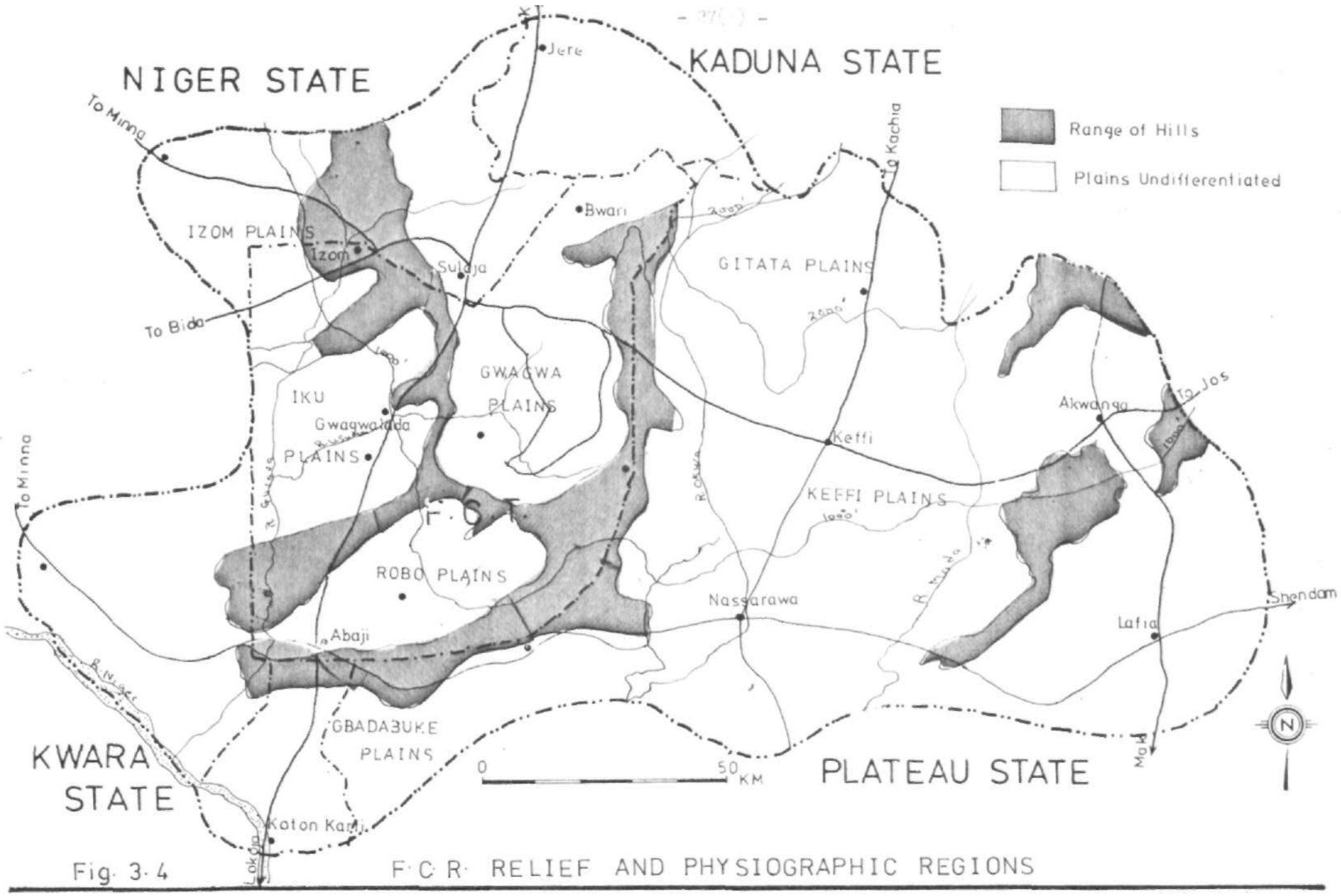


Fig. 3.4 F.C.R. RELIEF AND PHYSIOGRAPHIC REGIONS

range from 23°C to 36°F.

- Rainfall in the vicinity of the region is primarily influenced by the South-west marine winds and the Jos Plateau. It ranges between 1,146mm and 1,632mm. However extreme concentration of rainfall during the July through September are common. See Fig. 3.5

C. Geology

The Federal Capital Region is underlain primarly by igneous and metamosphic rocks referred to collectively as basement complex. In addition, there are isolated occurrences of granites in the northwest and souteast sedimentary formations in the southwest, and limited occurences of alluvial deposit within the major drainages. The basement complex underlies about 80% of the region mostly in the central and northeast sections. Sedimentary rocks called Nupe Sandstone, cover much of the south-south-west portion of the region(5).

D Vegetation

The vegetation in the FCR includes:- Rainforest, Savanah woodland and Park savanah. The location, development and curvent status of these plant communities reflect the different soil types and water availability conditions of the region, as well as the effect of various human activities. See. Fig. 3.6

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5. Ibid

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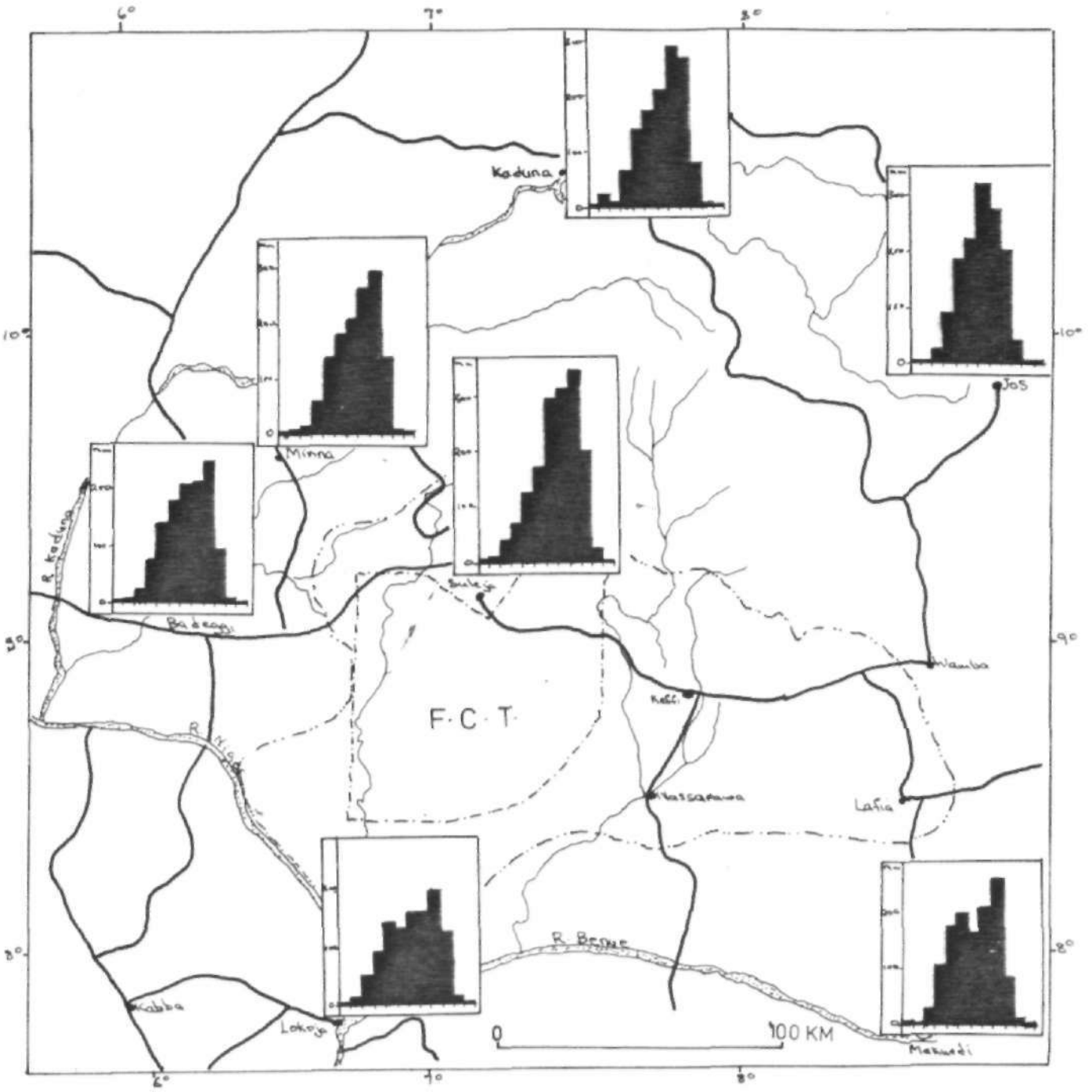


Fig. 3·5 F·C·R· ANNUAL RAINFALL DISTRIBUTION

Source:- Ecological Survey of F.C.T. Mabogunje (1978)

3.30 Analysis of Existing Situation

Population Distribution & Settlement Pattern

The Federal Capital Region falls within the Middle Belt of Nigeria which is an area of relative low population density. There is considerable controversy as to whther the low population density of the belt is a consequence of harsh, ecological conditions or the product of the social organization and political history of the region(6).

Based on the 1963 census, the largest of the four states adjoining the FCT in terms of both area and population in 1980 is Kaduna State. Niger State that gave FCT 79% of its total area(7), although fairly large in size is by far the smallest in terms of population and also in terms of average density and population rate it growth. See Table 3 - 2

Table 3.2

Population Size and Density (1980)

States	Population		Density		Rate of Growth 1963/80 (%)
	000	%	Area (km^2)	Person Km2	
Niger	1,772.7	12.7	64,187	28	2.3%
Plateau	3,238.0	23.1	57,900	56	2.7
Kwara	2,634.9	18.8	66,838	39	2.5
Kaduna	6,216.7	44.4	70,245	89	2.4
FCT	132.8	1.0	8,326	16	-
	13,995.1	100.0	267,496	52	2.6

Source:- Federal Office os Statistics - Lagos.

6. Mobogunje A.L. (1978):- Ecological Survey of the FCT (P.5)

7. U-I. Consultancy Services (1980) - Resettlement Survey of FCT (8.6)

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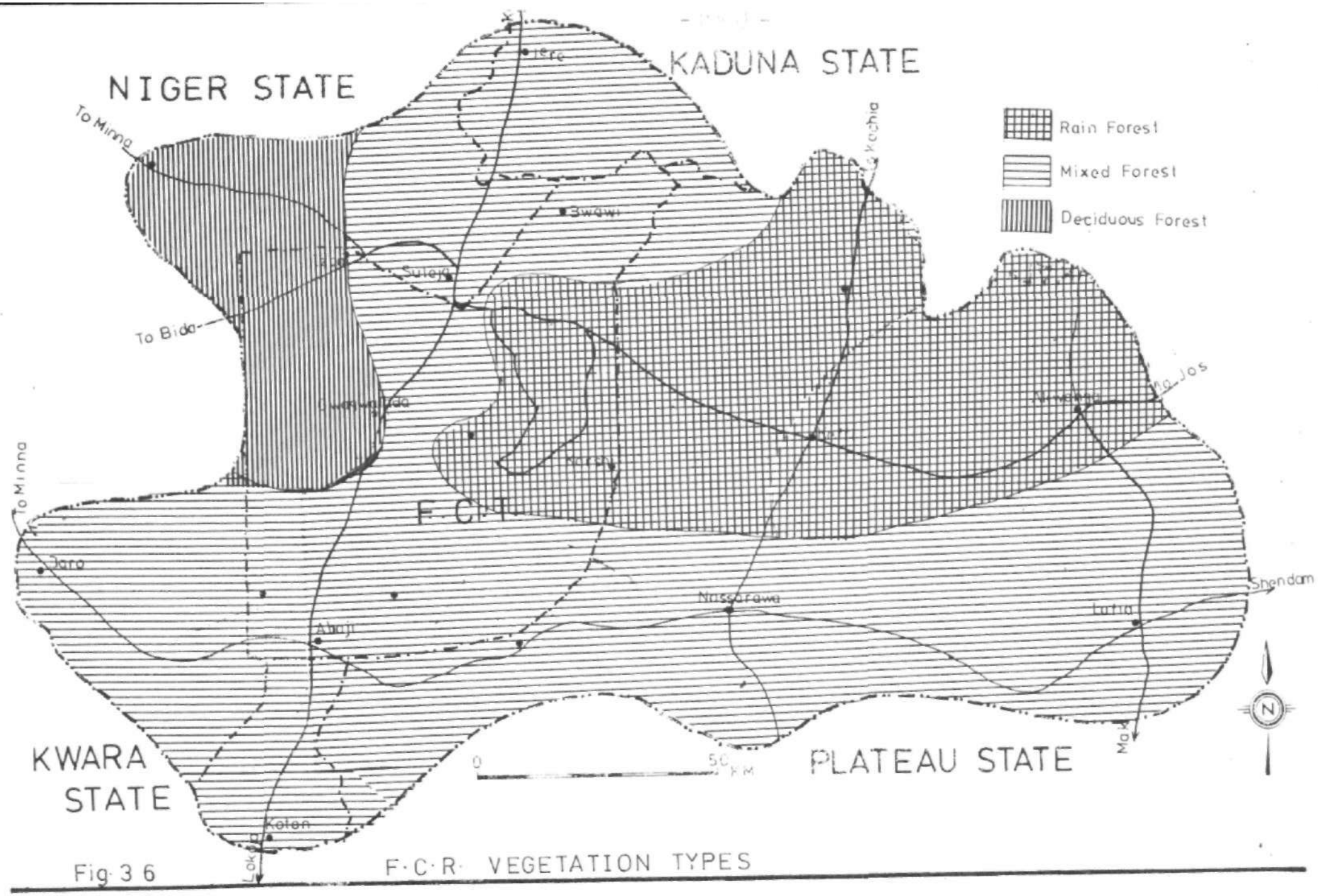


Fig 3 6 F·C·R· VEGETATION TYPES

From the population density map for the FCR in Fig. 3.7, the most density populated area is found in parts of Paiko district in Niger State; Lafia, Akwanga and Keffi Local Government Areas in Plateau State; followed by Kagaro and Koton-Karfi in Kaduna and Kwara State respectively. The FCT shows the smallest population density in 1980.

The overall picture of the settlement pattern in the region can be described as a network of settlements distributed evely to exploit available farmland and water throughout the region. There are very few large population concentration throughout the region. Lafia, the biggest town in the region has a population of 101,162; Keffi - 69,500, Suleja - 17,600; Akwanga - 10,936, Nassarawa - 12,916. Generally speaking, less than 20 of all the settlrment in the region have a population of up to 5,000. See Fig. 3.8.

It can be noted that the FCT is a rural area; this is indicated by the fact that there are only five settlement with population more than 2000, the largest of which is Karu with 4,384 inhabitants.

This information allows the drawing of some immediate conclusions regarding the potential functions of the New FCC and other settlements in the FCR within the regional context:- viz:-

The FCR is today a primarily rural area, in relative comparison to Nigeria as a whole. This is more pronouced in the Federal Capital Territory.

- None of the settlements in the region seems to be functioning today as a dominant regional

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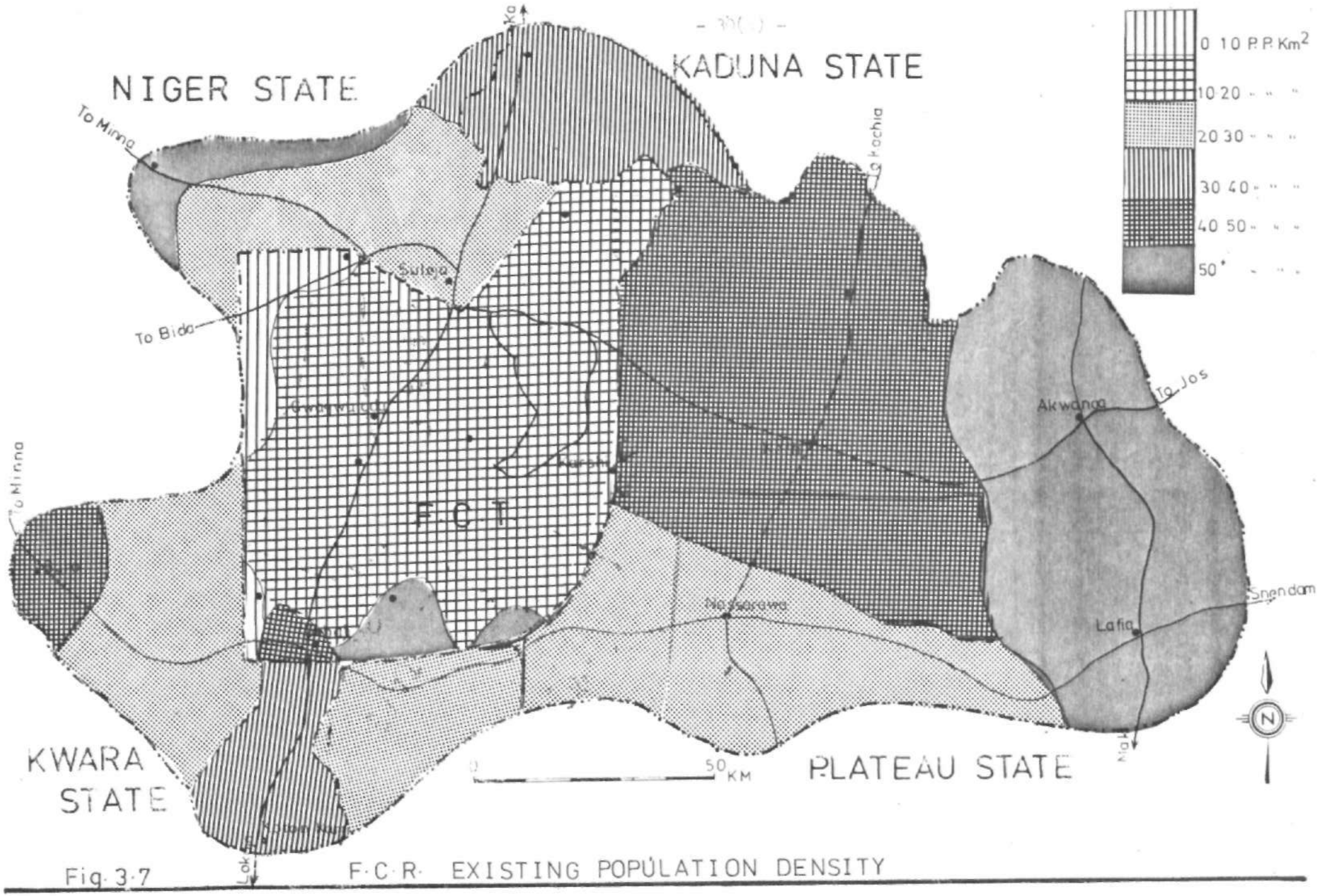


Fig. 3·7 F·C·R· EXISTING POPULATION DENSITY

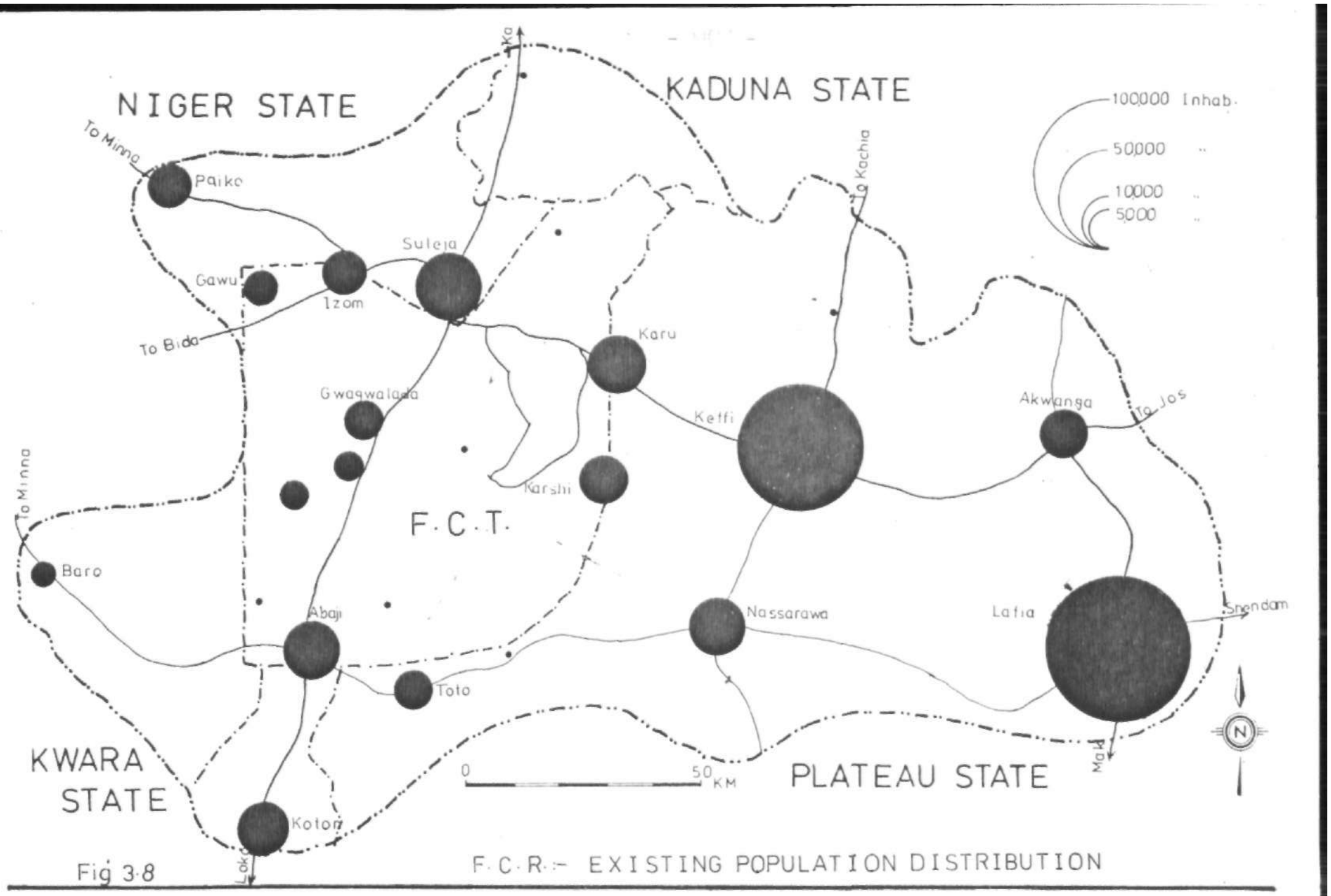


Fig 3.8 F.C.R.- EXISTING POPULATION DISTRIBUTION

centre for the Middle Belt of the Country. Furthermore, their numbers and population are fairly limited when compared with other regions of the Country, especially the Southern ones.

- Therefore there is the possibility that some settlements apart from the FCC will grow to substantial population sizes and assume functions of regional importance in future.

Transport Network.

The FCR falls in the Middle Belt zone of Nigeria which has long been identified with poor development of transportation networks. The few major roads and reilway line pass, through the area in a North-South direction. Sixty years of colonial rule worsened rather than improve this situation. The reason for this was largely economic, since the British colonial interest in Nigeria was largely exploitative in terms of developing only those areas where it can achieve exportable supluses. By contrast to the north and south of the country, the inability of this area to produce any major exportable crops meant that the whole area received minimal developmental attention during the colonial period. Apart from the reilway line that traverses the belt, infrastructural development was very limited.

Unfortunately, these policies continued unbatted long after independence until early 1970's, when the welcoming change in the deplorable situation come in the new Warri-Kaduna Highway which passes through the region.

Fig. 3.9 shows the existing transport network in the region.

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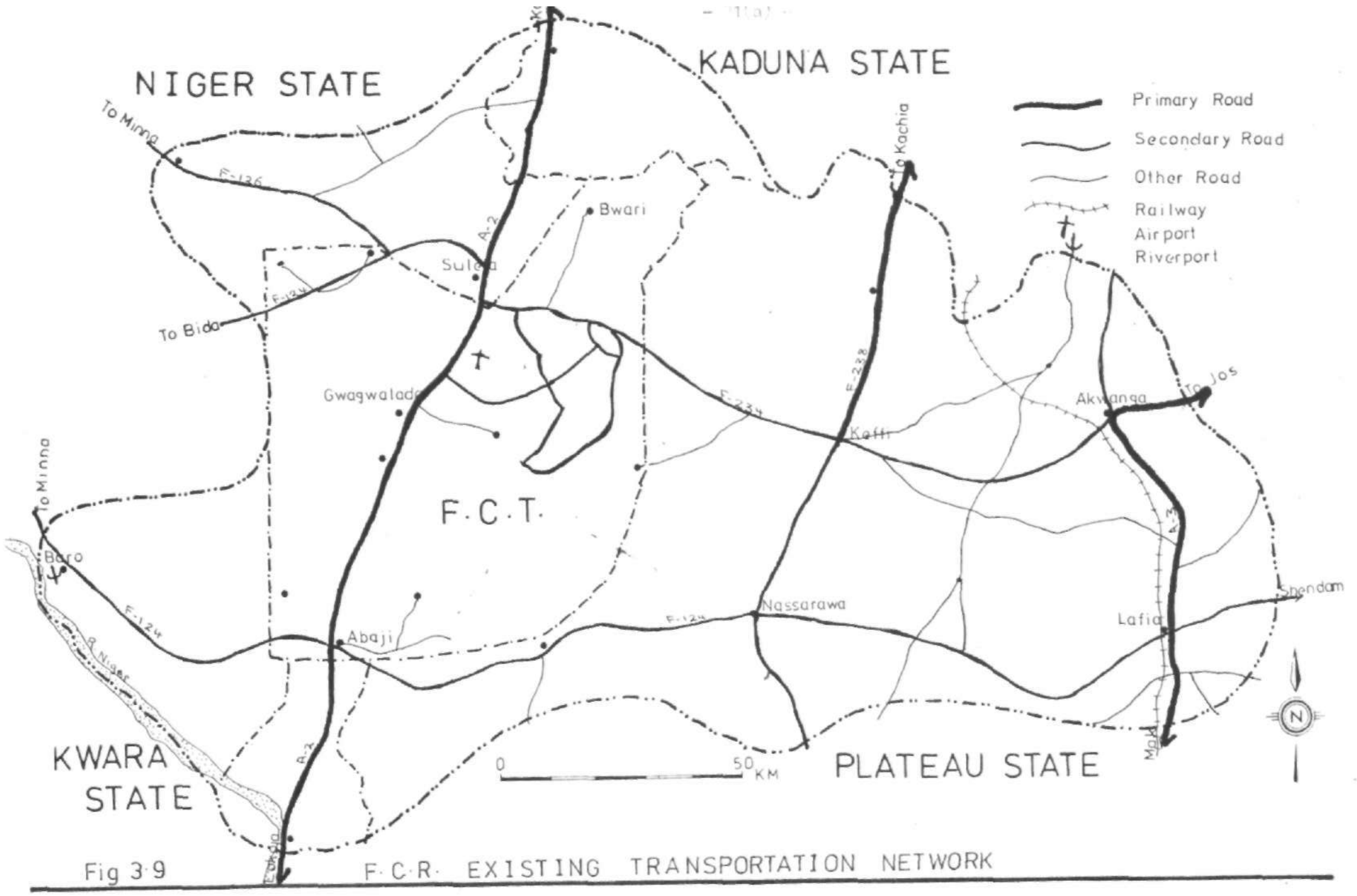


Fig 3·9 F·C·R· EXISTING TRANSPORTATION NETWORK

In general terms and considering both the accessibility of the region in performing its national, regional and local role, now and in the future, it is evidence that transportation needs in the FCR are far from being satisfactorily met with the existing infrastructure.

The main road connection in the region are A-2 primary road that runs North-south through the region, A-234 running to the east and west of the region. This section of this A-234 road passing through the proposed FCC will be realigned forming the north boundary of the city as the order-Northern expressway.

Secondary roads in the region includes: F-124 that runs from Baro, through Abaji to Lafia.

Railway.

The only single railway line that passess through the FCR is the east line (Port-harcourt - Maiduguri) passing through the Plateau State. It crosses the region through Markudi - Lafia - Akwanga to Kafanchan. It is about 70 kms east of the FCC Abuja. The west line (Lagos to Nguru) passes through Minna in Niger State, located some 50 kms west of the FCT.

River Transportation

The only riverport that falls within the FCR is at Baro on river Niger which is about 130 km direct distance from FCC Abuja. Two others close to the region are Lokoja and Makurdi. The Baro river-port is very important to the region for it is connected by rail with Minna,

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and located along F-124 Federal road. A railway connection of Baro with the FCC and the improvement of the road connection (F-124) with Abaji show that Baro can be a major transportation centre serving mainly the demand of the region.

Air Transportation

The FCR is at present served by a rudimentary air-field located near Gwagwalada in the FCT and in Keffi A new International Airport is under construction in order to serve the FCC (Abuja) air traffic demand along its development.

The Economy

Primary Activity:

One of the factors that will determine the extent, nature and the importance of primary activities in the Federal Capital Region is the degree of development of similar activities in the four states from where the FCR is delineated. In review the existing conditions concerning primary sector in these states, sources of information are based on the approved regional plans recently prepared for these states including FCT.

Plateau State is primarily an agricultural region and 2/3 of its labour force in engaged in some form of agriculture. The pattern of agriculture in the state determined three district agricultural regions; viz:- Jos Plateau, Jema'a platform and Benue Valley.

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Main food crops produced are Sorghum, Maize and Yam. There is an 'Agricultural Development project going on in Lafia. The project is expected to increase agricultural and livestock production that will benefit 60,000 farming families. The area covered by the project is 9,400km^2.

In Niger State, agriculture is subsistence, despite the fact that more than 80% of the labour force is directly involved with primary activity. The State is the major producer os rice. Other crops include corn, cotton and sugar. Bida Rural Integrated Agric. Development project going on in the State is expected to cover about 54,000 hectare taking care of 60,000 farming families.

Kwara State belongs to the middle belt of the Country, which is a mixed crop zone with principal products being grains, yams, rice and some livestock.

The Kaduna State has important primary activities. These stem from the fact that it belongs both in the Northern and Middle geographical belts of the Country. It produces both grain and root crops. Funtua Agric. Development project is the most important on-going project in the State. It extends over an area of 7,500 km^2 and will benefit some 88,000 farming families.

Secondary Sector

The majority of the manufacturing Industries and relates activities are found in a few large urban centres

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and ports in the Country. The concentration of various industrial activities is obviously biased towards the southern belt of the country. In the northern belt, only the states of Kano and Kaduna have some important manufacturing units and activities, while the middle belt in which the FCR lies appear to have the lest developed industry.

The absence of a centre with fair-size population and adequate transportation infrastructure not only within the region but also with the rest of the country inhibited so far the establishment of any important industrial activity in the Federal Capital Region.

As the construction activity gains momentum and more workers move into the FCT, Small Scale Manufacturing activities are begining to increase in a rather unplanned way in the FCT in order to meet the arising needs.

Tertiary:

The bad condition of the eixsting roads and lack of efficient transportation infrastructure couped with absence of settlement large enough to serve as a local growth pole in the region has prevented the creation of any main market centre where exchange of the various locally produced and imported products could take place, not even in the urban centres of Keffi and Lafia. As a result, trade and other service activities were developed in a purely local basis in order to serve the main settlement of each Sub-area and its satellite settlements.

Trading is now becoming a booming activity

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especially near the construction site.

Labour Force and Employment Characteristics

The only source of comprehensive information regarding labour force and employment characteristics in the FCR is the 1963 Census.

Out of all persons (15 years and above), about half were in the labour force in the FCR. This proportion is lower than the corresponding proportion for whole country which is 57.7%(8). Unemployment was very low by national standard, 0.8% as compared to 1.9% for all areas of Nigeria, 1.6% for its rural areas and 3.0% for urban areas(9).

Compared to Nigeria as a whole, the FCR in 1963 appeared to be specialised in primary employment. Fig. 3.10 shows the employment. Characteristics of major settlements within the FCR. The data were obtained from various States Regional Plans and the Master Plans of some of these towns.

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8. U.N. (1978):- The United Nations Year Book on Labour Stedistics

9. Fed. Rep. of Nigeria:- 1963 (Census)

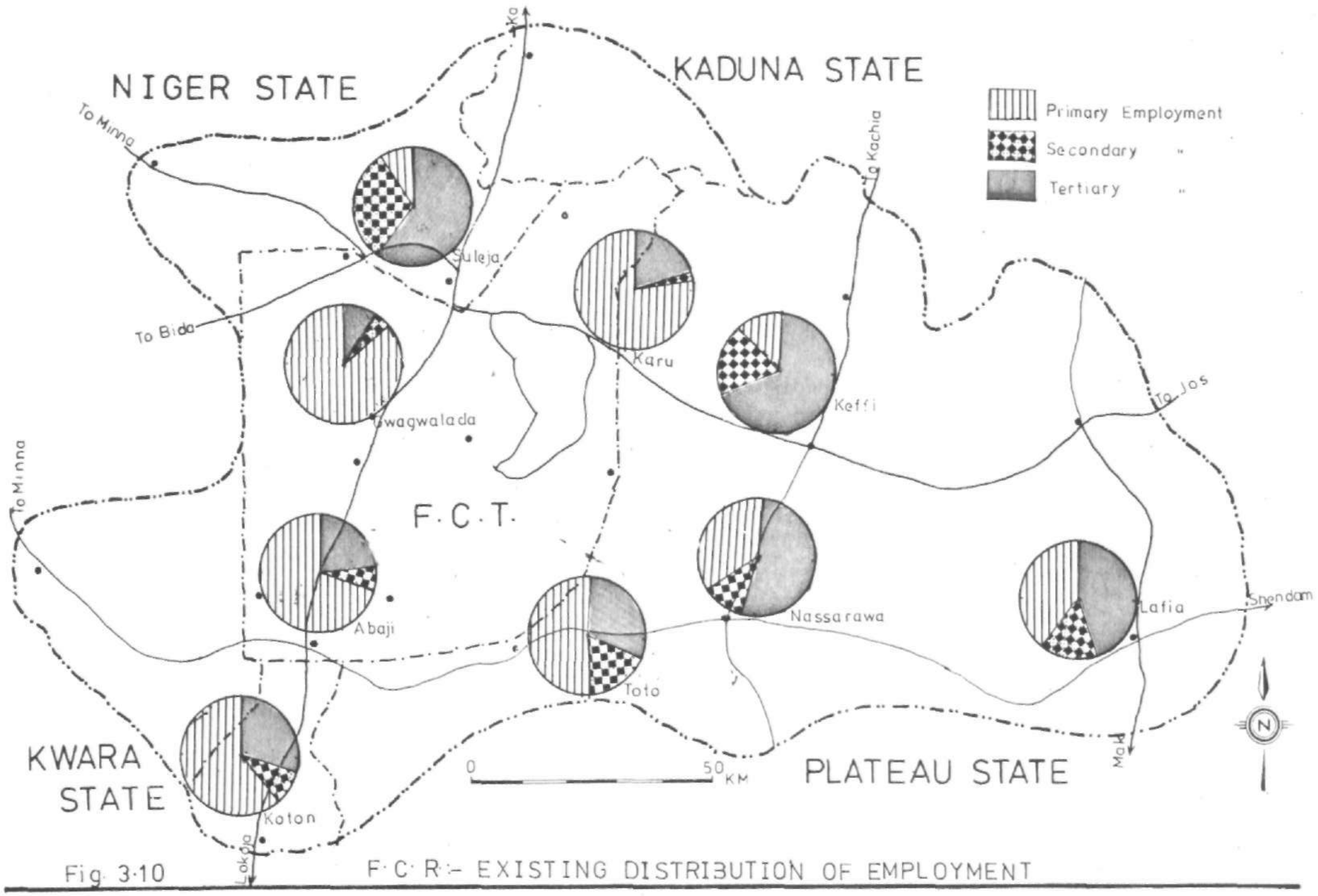


Fig. 3·10 F·C·R:- EXISTING DISTRIBUTION OF EMPLOYMENT

Social Infrastructure

There is a broad lack of modern social amentities in the FCR. There are several reasons for this. Before the selection of this area as the New Capital of the Nation, it was truly remote and undeveloped and large parts of it were totally inaccessible from the outside. Consequently, its needs are two massive to be met in a short time.

- Throughout the region, very few centres such as Suleja, Keffi, Lafia and Nassarawa which are local Government Administrative headquarter are served with electricity, pipe borne water, health services and other few essential facilities. See . Fig. 3.11.

3.4 Development as Proposed by Abuja Master Plan and accepted for Implementation in the FCT

There are three district planning and development systems and respective plan implementation practices being followed in the FCT. The first is applied for the realisation of the new Federal Capital City of Abuja. The second is applied in all the envisaged future major settlements of the Territory including Gwagwalada, Karu, Karshi, Abuji and Sheda, and very recentlly, Zuba where Master Plan studies are in progress. The third is followed in the development of the remaining centres of the newly created (Sever) development areas headquarters:- Ruborchi, Kuje, Kwali Bwari and Yaba for residential layout schemes are under preparation today in order to meet the urgent requirements for shelter and social

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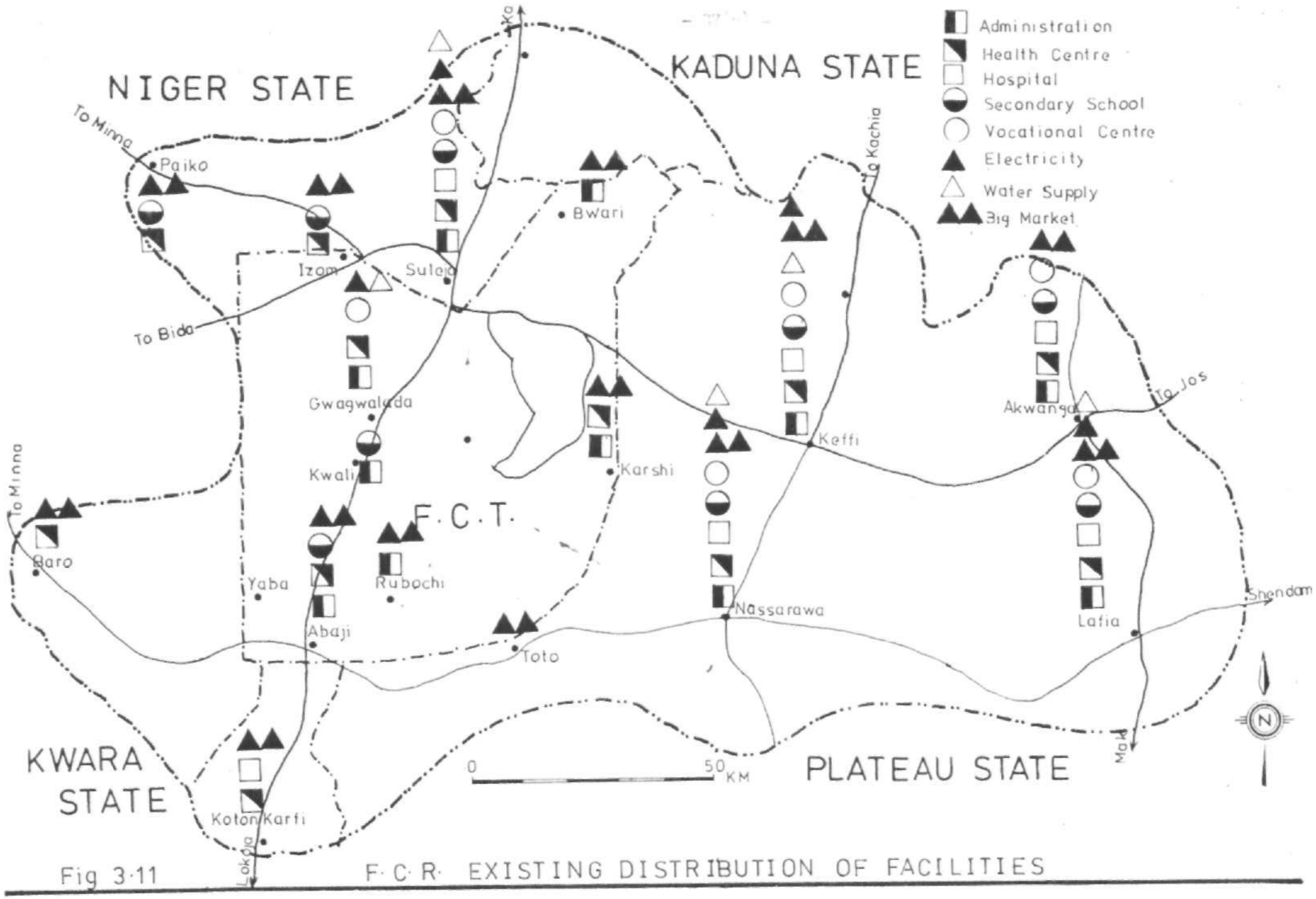


Fig 3·11 F·C·R· EXISTING DISTRIBUTION OF FACILITIES

amenities of the rapidly growing population.

The building of the Capital City has been planned according to the Master-Plan in Phases. The first phase which include Government Offices and Residential areas is to accomodate a population of 200,000 - 250,000 by 1986. The City as a whole is expected to accomodate about 1.6 million population by the year 2000. The main function of the city is mainly administrative and other services centre. (See Table 3 - 4)

According to the existing frame work of decisions taking for the future role of the main settlement within the territory, Gwagwalada town will be developed to be the administrative headquarters of the FCT and the Ministry for the FCT. In addition it will serve as the main industrial centre of the FCT where heavy industries will be located. The phase I of the Secretariat headquarters has been completed and over one hundred Senior Staff quarters are ready for occupation. The town is planned to accommodate 150,000 people.

Other settlements of the FCT undergoing Master Planning studies are:- Abaji - Target population of 150,000, Karu - 30,000 porulation, Karsi and Zuba population not yet specified.

- In other development headquarters of Rubochi, Yaba, Kuje, Kwali and Bwari, action area planning is presently be undertaken with the provision of essential amentities and services.

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Table 3.3

PROGRAMME OF DEVELOPMENT OF THE FEDERAL CAPITAL CITY AND ASSOCIATED PROJECTS

S/No.	Projects	Completion of Development	Time of Movement
1	Phase 1 Area	1983	Mostly completed
2	Industrial Areas 1 & 4	1982	1981
3	Internation Airport	1982	1981
4	Northern Outer Expressway		
5	Airport Expressway	1982	1981
6	Jabi Dam Site	1981	1981
7	Lower Usman Dam	1982	1981
8	Liquid & Solid Waste Disposal	1982	1981
9	NEPA Sub-stations		
10	Armed Forces Zone	1982	1981
11	Phase 2 Area	1984	1983
12	Phase 3 Area	As required by demands	As required
13	Phase 4 Area	"	"
14	Phase 5 Area	"	"
15	Phase 6 Area	"	"

Sources: Report on Administration prepared by the Presidential Ad-Hoc Committee 1979

3.50 Development proposed and accepted for Implementation by the Adjoining States of the FCT

Plateau State

In the agricultural development programme, the State regional plan identified Keffi and Nassarawa as area suitable for the promotion of integrated rural development packages. In addtion to the above plan is the main ongoing agricultural development project in Lafia, which is partly prepared and financed by the World Bank. Other important programmes included in the 4th National Development Plan (1981-85) are:- the Accelerated Agricultural Development Project, modelled after the "Lafia Project to be located in 5-7 local Government Areas of the State; Agricultural School to be established in Lafia; Agro-service centres in all the Lafia Local Government Areas and the creation of large Mechnized Farms in the State.

The main industrial project as proposed by the state includes:- Production of Serials and Textile, to be sited in Nassarawa and soft drinks factory to be located in Keffi.

Niger State

The regional Plan for Niger State proposes the increase of cultivated land from 3,700 km^2 in 1979 to 7,300 km^2 in the year 2000. The State is expected to become a national supplier of grains and root crops. Other major projects as described in the 4th National Development Plan and incorporated in the Regional Plans

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are:- The on-going Bida Rural Integrated Agric. Development Project; Niger River Basin Development Authority.

Suleja is proposed as one of the new Town Development in the State.

Kwara State

According to the 4th National Development Plan, the Agric. Development Project at Ilorin is the most important on-going project in the State. Several agro-industries will be established in the local Government areas of the State. Brewery factory to be sited at Lokoja. Another important on-going project which is very essential to the building of the new Federal Capital at Abuja is the Steel complex at Ajaokuta being undertaken by the Federal Government.

Kaduna State

The most important on-going project in the State is the Funtua Agric. Development project. Other projects in the 4th NDP are:- The Integrated Rural Development Programme to be located in four agricultural zones of the State; the creation of several agro-industries in locations not yet specified, and the establishment of 13 modern intensive Commercially variable agricultural project all over the State.

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CHAPTER 4

4.00 PLANNING PROPOSAL FOR THE FEDERAL CAPITAL REGION

4.10 Proposed Micro-Regions

The newly delineated influence area of the Federal Capital City, termed Federal Capital Region (FCR) covers the whole of the Federal Capital Territory and parts of Local Government Areas and Centres Districts of the adjoining States of Niger, Plateau, Kwara and Kaduna. The total area of the region is about 25,000 km^2. This demarcated area seems too large to be managed under a single authority, therefore for efficient coordination of planning activities throughout the region, the need arises for the Sub-division of the area of FCR into smaller units. (Micro-regions).

The proposed Sub-division is based on Criteria of homogencity, continuity of space, anticipated movement of people and goods, systems of urban-rural settlement and balanced development.

In the proposed Micro-region the FCT which is presently divided into 7 Development Areas is being divided into 5 Planning Districts: namely. Iku-Gurara; Kau; Karu; Bobo and Kubochi Planning Districts and the Abuja Urban Area. Other Local Government Areas and Census Districts of the surrounding States is divided into 7 Planning Districts: giving a total of 12 Micro-region (Fig. 4-1)

4.20 Settlement Pattern

Proposed Policy Objectives

To develop the total settlements within the Federal Capital Region (FCR) into a hierarctical balanced system

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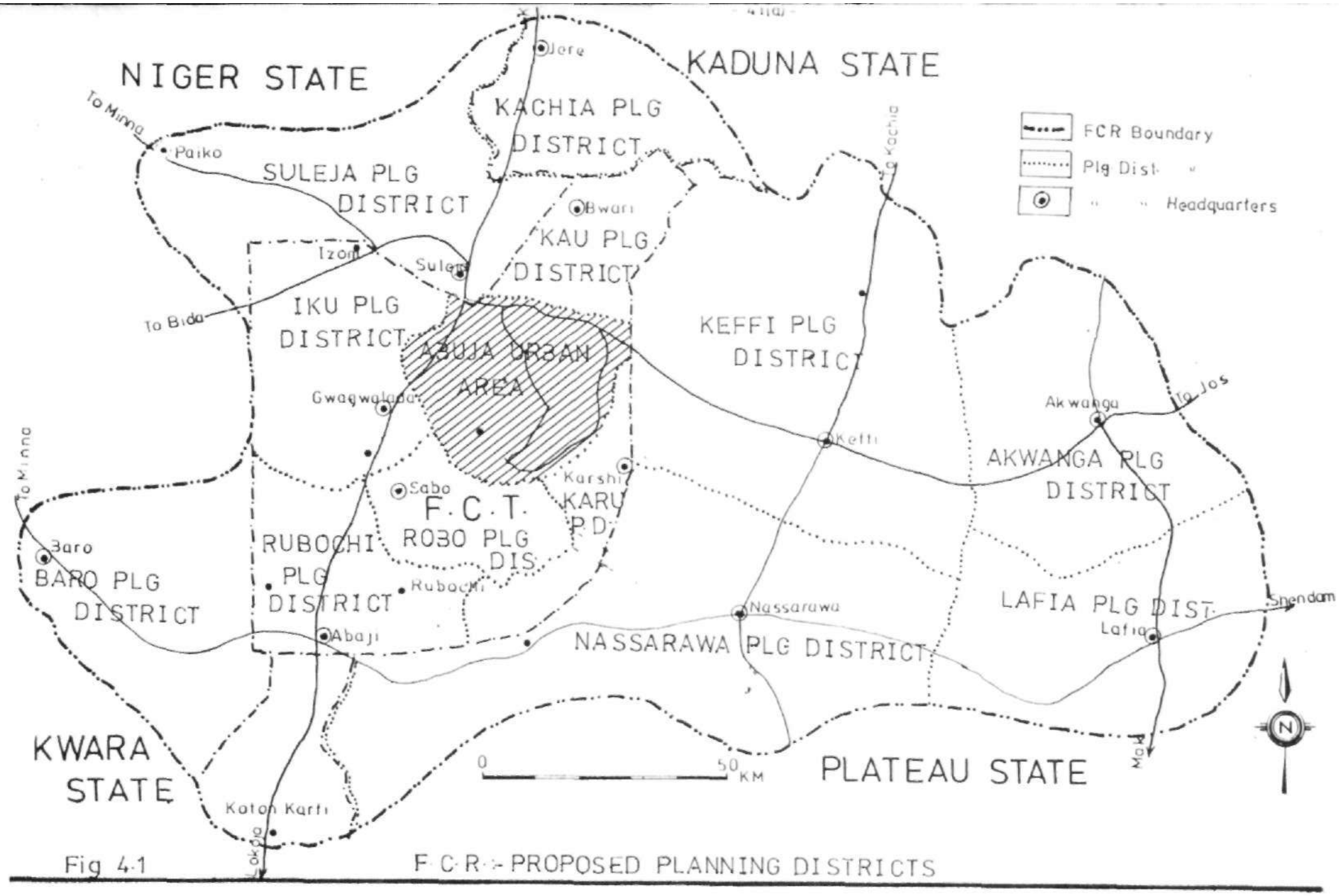


Fig 4.1 F.C.R. - PROPOSED PLANNING DISTRICTS

of settlement in a proper relation with the total national system of settlement.

- The New Capital City is expected to grow and develop in a way which satisfies the national needs and also its role as an international, national and regional centre without negative repercussions on the FCR system of settlements.
- The proposed regional centres within the FCR should become part of the broader regional system of urban settlement.
- The rural settlements within the region is to ensure for their inhabitants conditions of life and opportunities similar to the ones provided to the urban dwellers. This can be achieved through the inclusion of the rural settlements in the daily urban system and through the provision of the necessary infrastructure to each of them.

In fulfulling the above objectives, the criteria for the proposed hierarchy of settlement in the region is based on its existing physical characteristics; the present and future potentials; the existing infrastructural services, facilities and utilities and their distribution is considered. Other factors considered are: eixsting committed amentities and their locations and the population of each settlement at the present and future projections; the socio-economic activities of the settlements and the expected changes in occupational characteristics; the proposed distribution of infrastructural facilities and services; and proposals for regional

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centres by the Master Plan for Abuja and the adjoining States of Plateau, Niger and Kwara States regional Plans.

Expected population Development on the FCR by the year 2010.

- The estimates of the population of the four states surrounding the FCT in the year 2010 are presented in Table 4.1

State	Population		Density		Population rate of growth 1980-2010
	000	%	Area Km²	Per/Km²	
Niger	3,258.4	13.9	64,187	51	3.09
Plateau	5,628.6	24	57,900	97	2.90
Kwara	4,287.8	18.3	66,838	64	2.46
Kaduna	10,249.5	43.8	70,245	146	2.53
Total	23,424.5	100	259,170	90	2.65

Source: - National Population Bureau - Lagos
- Niger, Plateau & Kwara Regional Plans.

The main condlusion from the above analysis is that the overall population of the four States surrounding the FCT is expected to grow at a higher than the national average in the period 1980 - 2000. Thus the share of the Federal Capital Region in the total population in Nigeria is exepcted to grow from 16.4% in 1980 to 16.7% in the year 2010. Also average density in the area will increase as a result of this population growth from 53 per/km^2 in 1980 to about 90 per/km^2 in the year 2010.

Table 4 - 2 show the projected population of major settlements in the FCR by the year 2010:.

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Table 4.2 Population Projection of Major Settlement in the FCR

Settlement	Population 2010	Rate (1980 - 2010)
FCC (Abuja)	1.6 Million	-
Suleja	100,000	9.07
Gwagwalada	150,000	Target
Bwari	20, 000	"
Abaji	150,000	"
Zuba	-	-
Karu	30,000	"
Sheda	30,000	"
Akwanga	21,000	"
Keffi	148,500	3.51
Lafia	215,900	3.87
Nassarawa	27,600	3.87
Toto	12,000	3.08
KotonKarfi	26,300	4.22
Lokoja	119,500	4.78
Jere	30,000	Target

In general, the population size of the FCC and the FCR in the year 2010 will be determined to a large extent by Policies to be followed at the national scale. If the Federal Government decides to go all out with the construction of the new Capital, allocating to it a very large share of the national budget - possibly paying less attention to the needs of other Centres and areas - there is high probability that the Federal Capital will acquire a large relative advantage over the rest of the country and will achieve high population magnitudes; again this depends on the capacity of the local and national economy to absorb large scale investments in terms of technical knowledge, available personel, and material. On the other hand, if the national budget is shared on some basis of equality among the various regions of the country and other urban centres grow at fast rates, the growth of the new FCC and FCR may be slower.

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On the basis of the above factors and population projections, two categories of settlement has been proposed for the FCR. See Fig. 4.2.

1st Order Settlement

- The proposed Federal Capital City with the estimated population of 1.6 million is proposed to be the first order settlement for the region. It is going to be the national and regional administrative centre where the highest order of fuctions is expected to be produced.

2nd Order Settlement

The administrative Headquarters of the proposed Micro-regions is proposed to be taken as the 2nd order settlement inrespective of their existing ponulation. This is expected to give an even development throughout the region in the line with the regional policy statement of the Federal Capital Develonment Authority. This selection is also based on the investiments committed to these regional centres by the FCTA and the adjoining State Governments. These second order settlement of the FCR are:- Keffi, Lafia, Akwanga, Rubochi, Bwari, Gwagwalada Jere, Nassarawa, Rubochi, Bwari and Kurshi.

This second hierarchy of settlekent are largely determined by the size of the area they serve; the existing and proposed availability of transport network; the prevailing and expected system of economic, social organization and the administrative set-up; the present and the projected population. (See Fig. 1.2).

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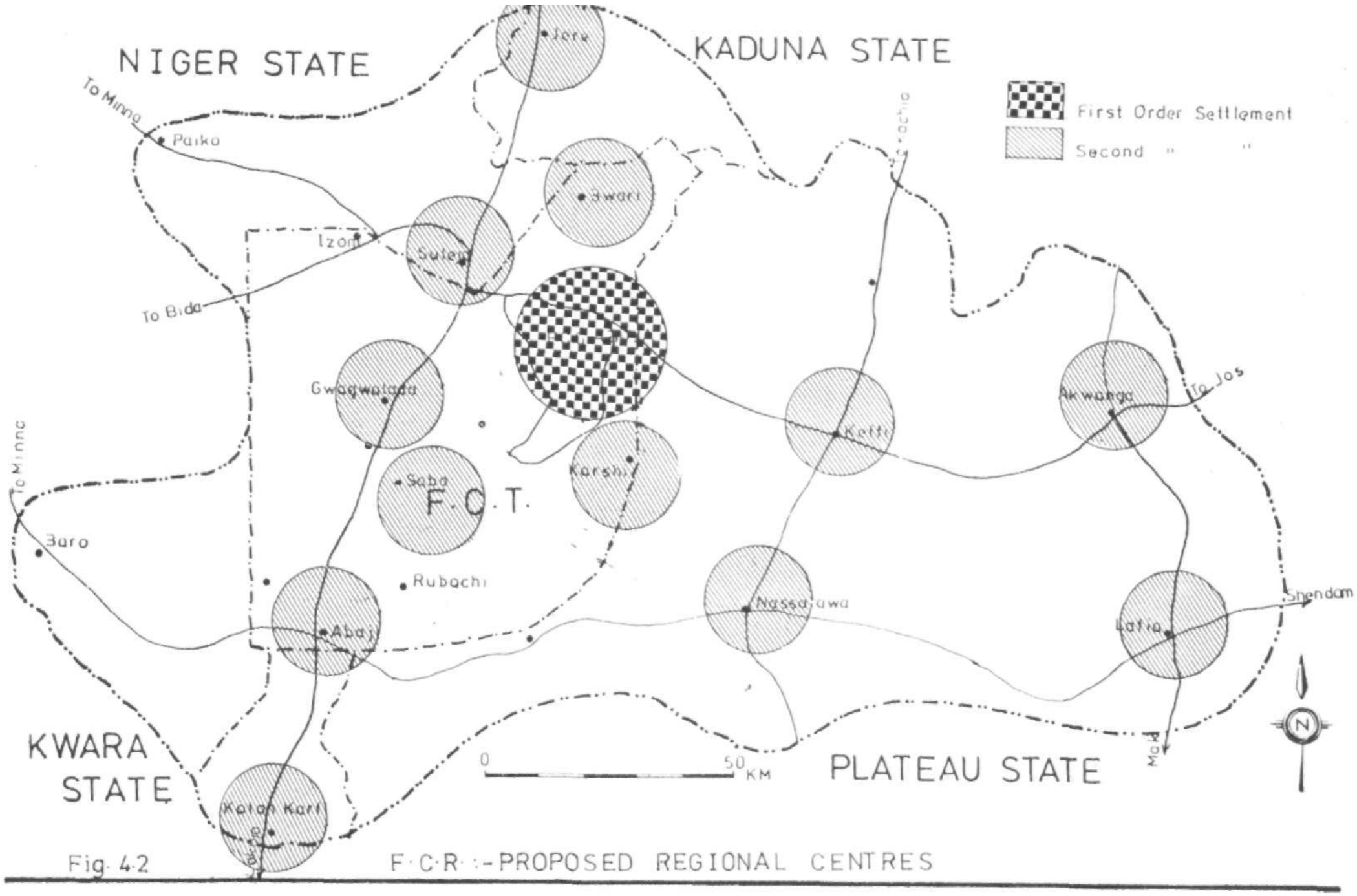


Fig. 4.2 F.C.R :- PROPOSED REGIONAL CENTRES

Functional Specialization of Settlement

Administration - FCC (Abuja), Gwagwalada
Industrial -- Keffi, Jere, Suleja and Abaji
Commercial - Nassarawa, Koto-Kerfi
Agriculture - Lafia, Akwanga, Abaji and Gwagwalada.
Educational/Research - Sheda, Karshi.

Administrative Centres:

The FCC Abuja and Gwagwalada are proposed to the major administrative centres of the region. The proposal is in line with the recommendation of the Master Plan for Abuja.

Industrial Centres

Keffi, Suleja, Abaji and Jere are proposed as the industrial centres of the FCR. This major proposal is based partly on the committed industrial establishment to be sited in these locations except Jere in Kaduna State which has just been proposed by this study to be developed as a new industrial town by the Kaduna State; by the FCT Regional Plan and the adjoining State Government; and secondly on this assumption that the surrounding States to the new Federal Capital City will no doubt like to maximise the economic advantage of the proximinity to the FCC especially from the investiment being made to provide infrastructure for the Federal Capital, However, the most important advantage so far as the adjoining States are concern will be the demand for goods and services that the Federal Capital is bound to generate. There will also be a demand for industrial consumer goods. It is the belief of this study that the proposed industrial towns have a special role to plan in

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the development of the Federal Capital.

Commercial Centres:

The selection of Nassarawa, Koton-Karfi and Suleja is based on the existing role these settlement are playing in the tertiary sector of the economy.

Agricultural Centres

Lafia, Akwanga and Gwagwalada are proposed to be the major agricultural centres in the FCR. The selection is base on the on-going large agricultural projects being executed in these centres and in conformity with the Regional Plan Proposals for the areas.

Educational/Research Centres:

Sheda and Karshi are proposed. Sheda is already a proposed planned-town by the FCT Regional Plan where several National Institutions doing research in Health, Agriculture and Social Sciences have been invited to locate. Federal University of Technology is proposed to be sited at Karshi.

4.30 Transportation Network Proposal

Transportation and Communication network has been one of the major bottlenecks to development due to inaccessibility of some areas in the FCR.

In determining future options of transportation development in the FCR, guidance has first to be given to the existing basis physical patterns- the spatial distribution of the proposed hierarchy of settlements

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and their linkages throughout the region. At present there are three distinguisable settlement factors: namely:-

- A strong north-south settlement belt along the A-2 road part of where 'Economic Development Belt' is proposed by the Abuja Master Plan:- Jere - Suleja - Gwagwalada - Abaji and Koto-karfi.
- East-west strong belt:- Minna, Suleja,- FCC (Abuja) - Keffi - Akwanga.
- Another East-west strong belt along F-124 road Baro - Abaji - Nassarawa - Lafia.

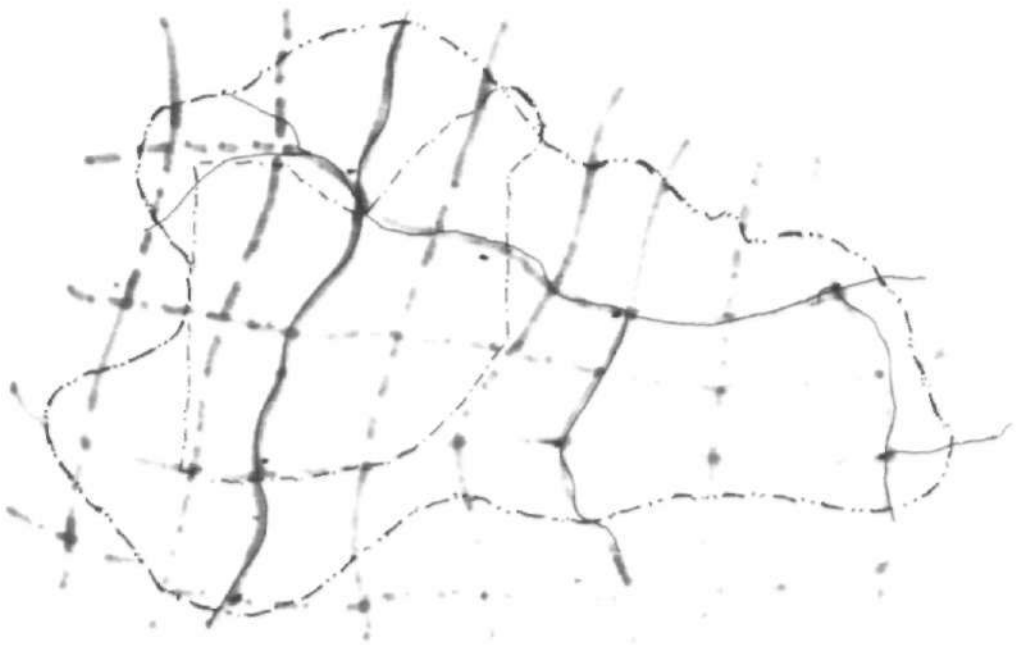
It is envisaged that demand are going to be placed on these settlement structure. People will need to relate to them in terms of development opportunities they offer. However, as the requirement for accessibility and linkages grow, so the pattern element becomes more recognisable and more important. The following alternative strategic options are proposed for the transportation development in the FCR.

(a) A Grid Pattern Development

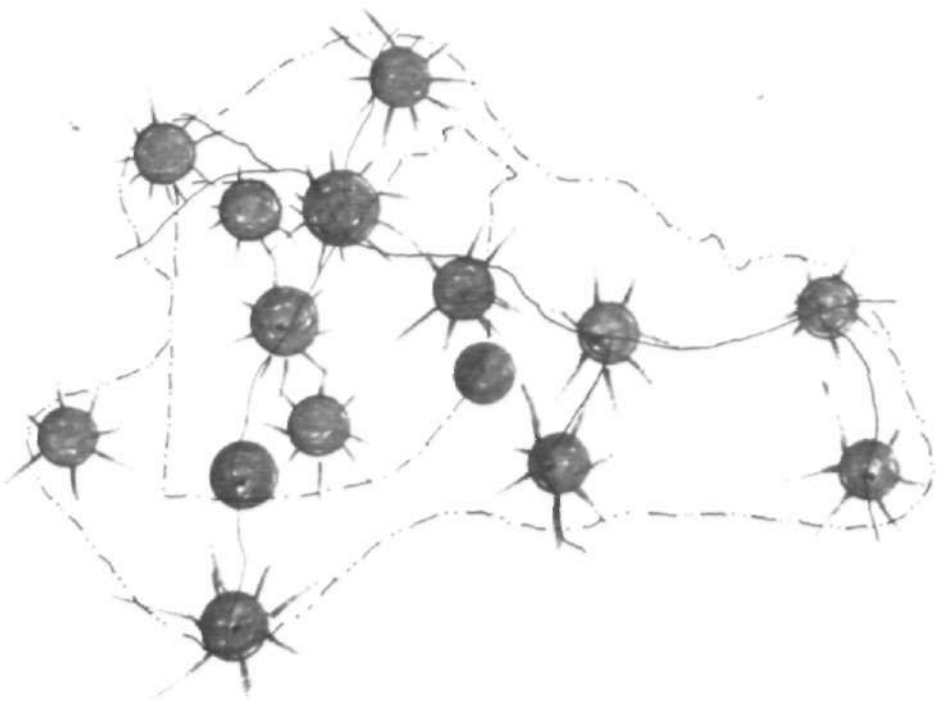
The pattern that has emerged from the existing linkages in the FCR is an incomplete grid. The grid pattern of transportation network development can then be strenghtened and extended. This option is expected to give an even spread of development through

the region. (Fig. 4.3(a)

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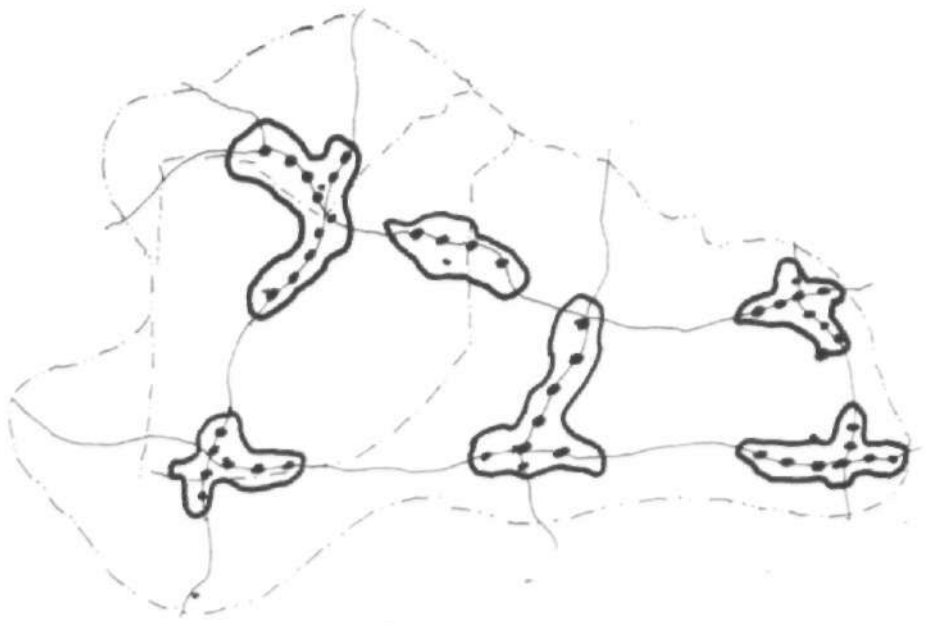


(a) A Grid Pattern of Development

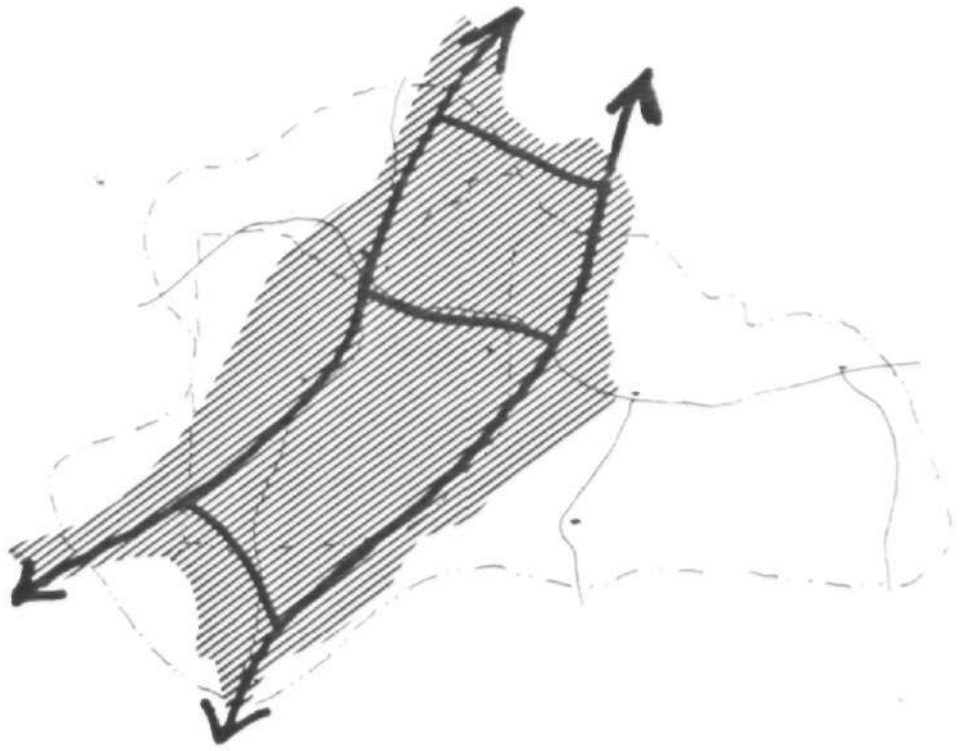


(b) A Star Burst Pattern of Development

Fig 4.3 F.C.R :- TRANSPORTATION OPTIONS



(c) Corridor Groups Development



(d) A Ladder Pattern of Development

Fig 4.3 F.C.R:- TRANSPORTATION OPTIONS

(b) A Star Burst Development

Each town as an individual unit can be seen more interms of its zone of influence where the rural -urban accessibility linkages is stressed. This is a classic form of development where roads radiate from the growth points to the periphery. This option will suite the development of the FCC (Abuja) and other Urban centres in the region Fig. 4.3(b)

(c) Corridor Groups Development

This is the natural form of grouping settlements in corridor zones. This concept has been a favourite of the New Town and other satellite towns development. They are methododically spread out along the linear corridor zone. However, it is strictly a planning concept of the Micro-region (Fig. 4.3(c)

(d) A Ladder Development

Inter-regional linkages will be very important to the development of the FCR since one major factor stimulating growth is the trade gained by access to a major road or the actual trade concerning traffic on the road itself (Fig. 4 - 3(d)

From the above strategic options for transport development in the FCR, the Grid Pattern is preferred. This is because the existing pattern is in form of an incomplete grid, therefore, by completing the grid will safe the resources and will also give aneven spread of development through out the region.

Policy for Location of Transportation Network

The development of transportation network should be examined in relation to the development of each portion of the FCR taking into consideration the need for mobility of people and goods now and in the future.

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Transport network should be closely interrelated to development policy so that it constitude the main means of attracting activities to the region in order to fulfill programme development.

The transport network should be developed to maximize opportunities offered by the existing network in the region in order to safe time and minimize effort.

To ensure the provision of adequate transportation links to the order-regional and national transportation network.

To improve the road safety.

The Criteria for transportation proposal is based on the principle that the key factor to the success of any development strategy focussing on regional development lies in the development of linkages between them and their hinterland. The following criteria are used:-

- The existing transport network-proper linkages be made between the 1st and 2nd order Settlements.
- The proposed raod network by the varieus authories in which the FCR lies.

Therefore, based on the existing and proposed network, the proposed settlement hierarchy, and the concept developed, the following transportation network are proposed for the region. (See Fig. 4.4)

Road Network

Primary Roads: The Primary access are those resulting from the National, State area setting and requirement,

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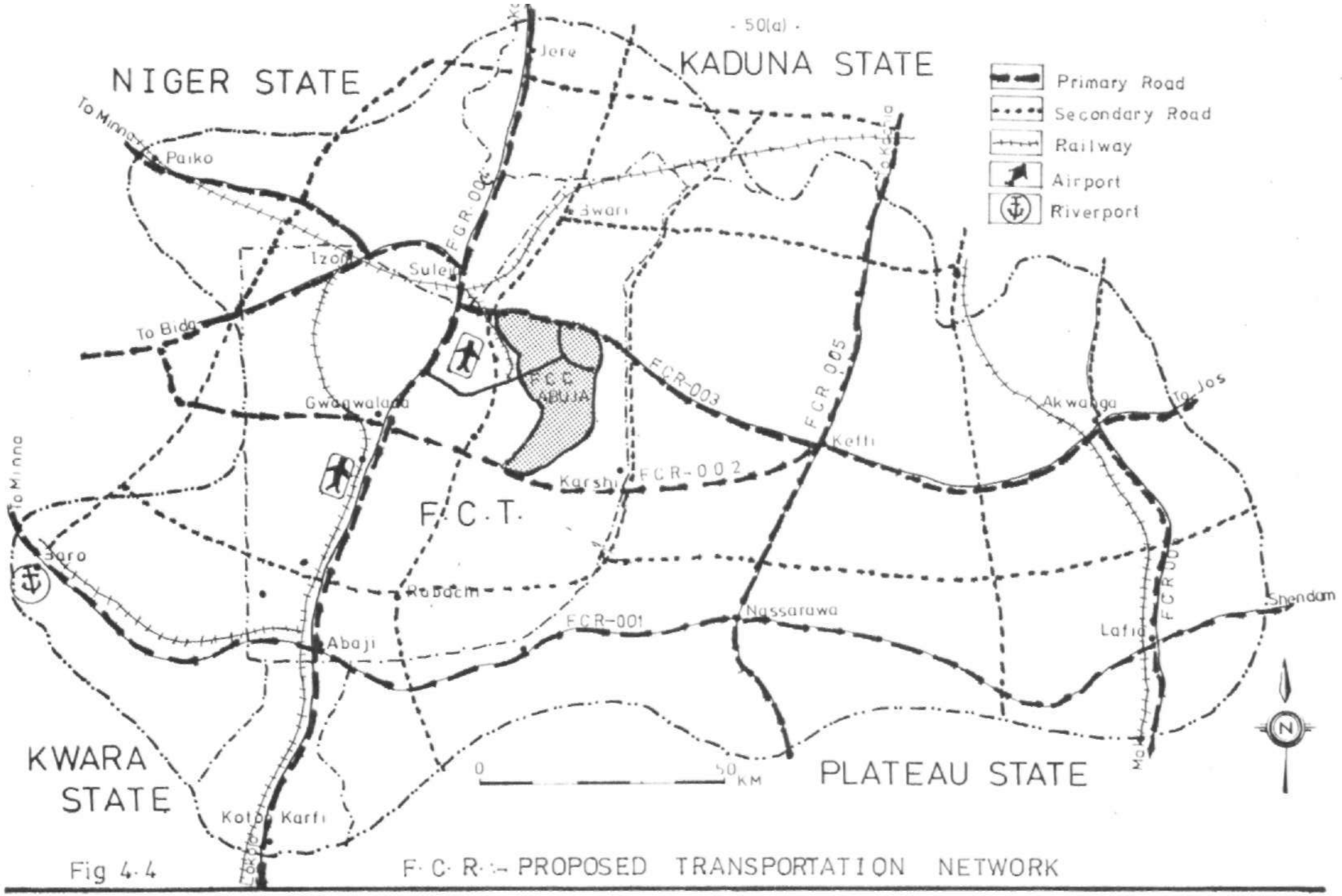


Fig 4.4 F.C.R.:- PROPOSED TRANSPORTATION NETWORK

as well as the committed road network of the FCC and its expansion. They are links of long length serving national and interstate movements. They form a rough grid pattern together with the secondary axes. They are:-

FCR-004 (A-2)-, FCR-005 (F-238); FCR-006 (A-3) all running North-south direction.

FCR-001 (F-124); FCR-002 - running East-west direction.

Secondary Roads: The secondary axes are those resulting from the accessibility requirement within the FCR and the development of major urban centres as well as the connection of these centres with each other and the FCC.

Railway:

The railway network is based on the connections proposed by the Nigerian Railway Corporation. The major network are:-

:- Kafanchan - Suleja - Izom - Minna
:- Izom - Gwagwalada - Lokoja - Okene - Ajaokuta
:- Izom - FCC (Abuja) Industrial Area
:- Kafanchan - Lafia - Makurdi.

River Ports

The only existing river port in the region is that of Baro on River Niger. This river port is proposed to become the main port serving the Federal Capital Region's demands for river transportation.

Airport

The Condition expected to prevail in air transportation and infrastructure within the FCR necessiate the

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development of a regional airport which can be used for domestic and international flights in addition to the FCC airport now under construction. The proposed site is in conformity with the Master Plan's proposal for the 2nd option site in the FCT.

4.40 Distribution of Facilities, Utilities and Services

Gross inadequacy of basic services, facilities and utilities is one of the major bottlenecks identified as characteristic of the FCC. Amenitities are essential in meeting the people's felt needs and the uplifting of the standard of living. The following needs were recongnised in the existing conditions of the FCR particularly in the 1st and 2nd order settlement of the regions-

- Increase availability of health, education and sanitary facilities.
- Provision of Socio-cultural and religious places of worship.
- Provision of basic services such as water supply and electricity which are basic for any form of development.

On the basis of these needs, the following levels of facilities, services and utilities have been proposed. (Fig. 4.5)

1st Order Settlement

FCC (Abuja) as proposed by the Abuja Master Plan and accepted for implementation by the FCDA.

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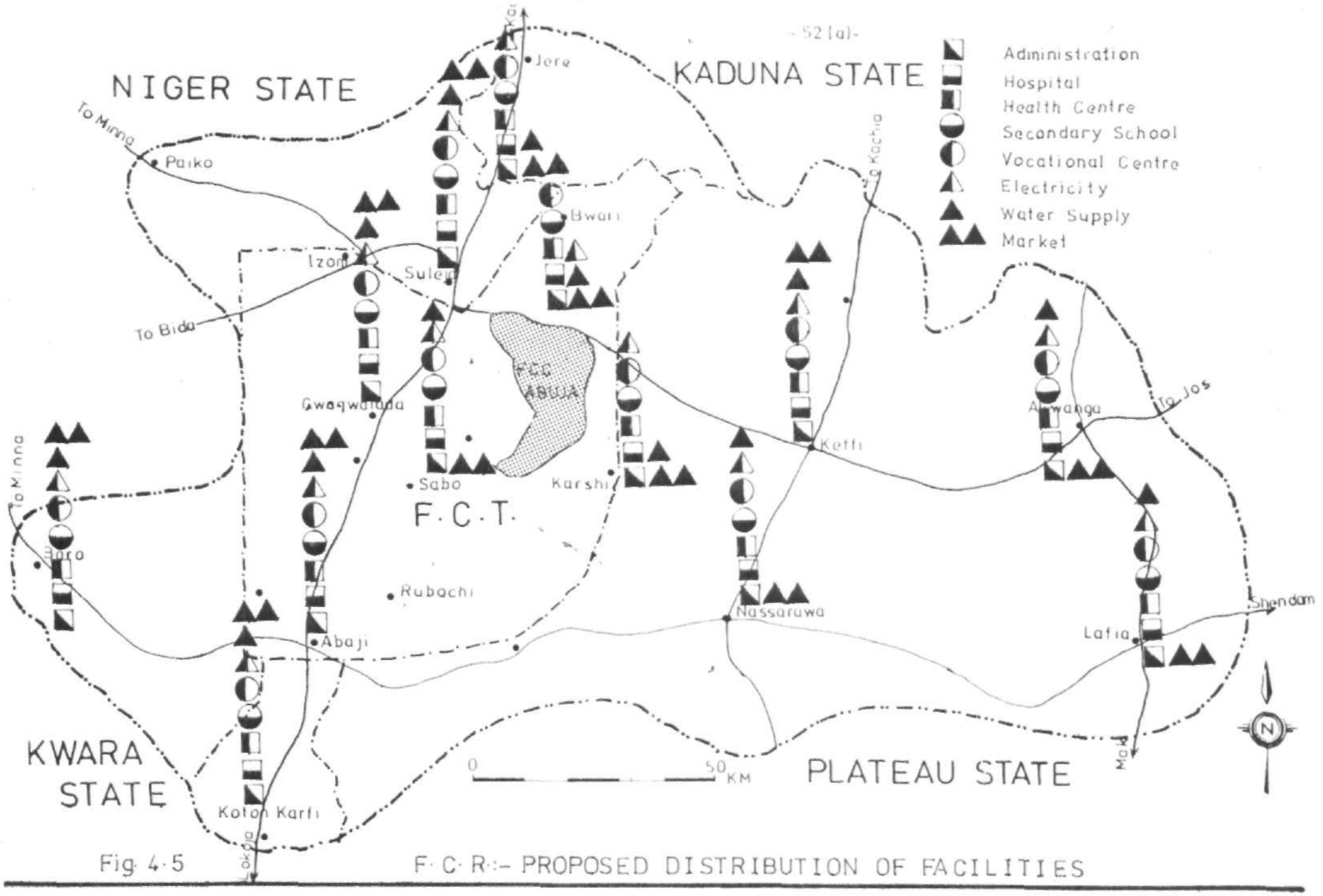


Fig. 4·5 F·C·R:- PROPOSED DISTRIBUTION OF FACILITIES

2nd Order Settlement

Administration

- Government Secretariat
- Court
- Government Treasury
- Police Station

Communication

- Telephone Exchange
- Post Office

Commerce

- Wholesale Outlet
- Banking
- Insurance

Social Services

- Health Services (General Hospital, Health Centre)
- Education (Secondary Schoo, Vocational Training Centre and Polytechnic)
- Public Library.

Industry and Power

- Manufacturing Industry
- Electricity
- Water Supply

.50 Planning Proposal for Kau-Planning District

Kau-Planning District is one of the Micro-regions proposed for the Federal Capital Region. It is situated within the Federal Capital Territory, north of the Federal Capital City. It has an area of about 24,000 hectares. (Fig. 4.5).

Choice of Area

This is one of the areas in the Federal region which has abundant farmland and a good balance of land for other

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uses such as animal husbandary and productive forestry which are now under populated because of lack of roads, water supply and other essencial amentities. This area is considered to have good development potential.

Most of the people to be dispalced due to the Federal Capital City Construction are in this district, therefore this advantage of nearness to the displaced zone will greatly reduce the resettlement cost.

This area meets adequately the evaluation criteria in term of proximity to the Federal Capital City and availability of road connection to the City.

Settlement Pattern

The whole of Kau Planning Districts has a population of about 66,134 (1980 Resettlement Count). Bwari, the largest settlement in the district is being proposed to be the headquarter of the district. Its present population is about 2,000 people. Bwari is one of the planned urban settlement of the FCT with a projected target population of 20,000.

According to the resettlement survey of the district, 82.6% of the existing population decided to remain within the territory while the rest opted to be located or resettled outside the territory.

The existing resettlement pattern in the district is purely rural and most of the inhabitants are famers. Therefore care must be taken on the size of the selected growth points. Agglomeration of around 1,000 but

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certainly not more 5,000 is recommended. This will ensure easy access to the farmlands whilst providing a fair size and viable rural community.

Fig. 4.6 show the proposed settlement hierarchy in the districts. While Bwari retains its 2nd order. Settlement herarchy within the regional settlement hierarchy, Maitama Sobo, Maitama Toolo, Datsen Bwari, Pebayi and Tokubo are selected as the 3rd order Settlement. The criteria used in the selection are: viz:- existing population, popular merging sites by the inhabitants and proximity to farmland and perenial source of water.

Fig. 4 -6 shows the proposed transportation network for the district. They are largely secondary roads that connect the 2nd and 3rd order settlement to each other and to other growth points both within and outside the Federal Capital Region.

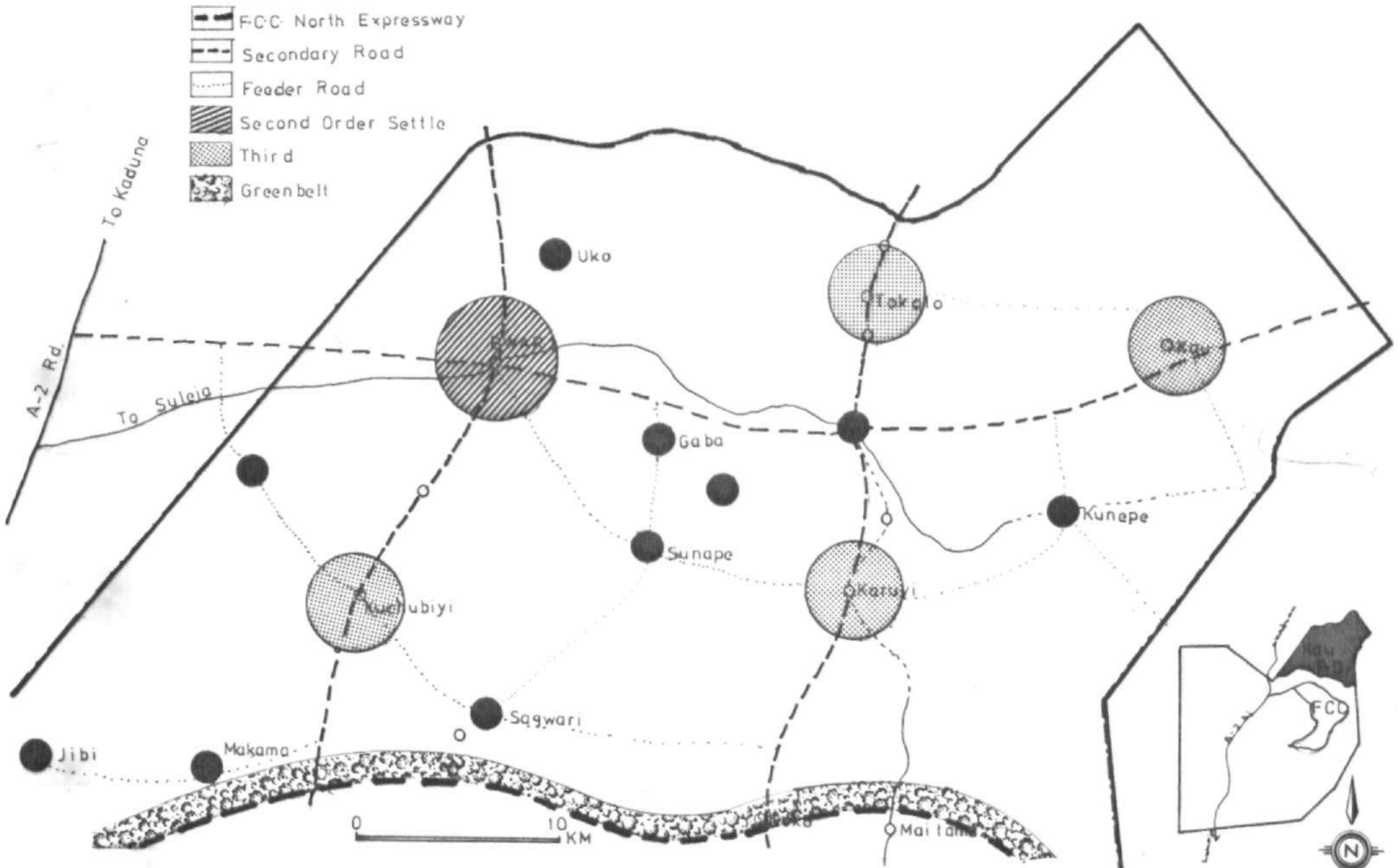


Fig.4.6 KAU-PLANNING DIST PROPOSED SETTLEMENTS & TRANSPORTATION NETWORK

CHAPTER 5

5.00 Plan Implementation

5.10 Administrative Set-up

This study, while agreeing with the basic principles determining the need for the creation of the 'Joint-Planning Districts, disagreed with the size, shape and extend of these districts as they are proposed by the Master-Plan for Abuja. (See Fig. 2.2) This disagreement is only natural, considering that the Master Plan deals primarily with the design of the Federal Capital City, while this study deals more with the regional aspects and implications of the creation of the Capital City with the related development.

The Federal Capital Regional Coordinating unit (FCRCU) is proposed as the second level administrative organization in the New Federal Capital. This is in fact a recognition of the joing Planning Coordination requirements proposed by the Capital City Master Plan, although the area of jurisdication is adjusted according to the findings of the analysis of this study.

The need for coordinating planning and administrative between the Federal Capital and the surrounding states is proposed from the recognition of the fact that development in the FCC and FCT will be of scale and form that will undoubtedly have strong impact upon the

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surrouding areas. Such overspill affects are more likely to occur in areas well connected with the Federal Capital City through the existing and proposed transportation network.

Characteristics of FCRCU

- Since the area of jurisdiction of FCRCU completely overlaps with the areas of jurisdiction of other authorities, namely:- the FCDA(FCC), FCTA and areas under the jurisdiction of the surrounding states, this unit is more a monitoring and coordinating body than a purely administrative one. It is directly responsible to the Federal Capital Development Authority (FCDA) - as its connecting link with the surrounding state governments - placing it at the same level with the Federal Capital Territory Administration (FCTA) so as to emphasize the importance of regional coordination for the proper implementation of any development plan in the Federal Capital Region (FCR)

The FCDA represent the region in the administration of matters of inter-states significance or of programme and projects undertaken in collaboration with affected State Ministries or Agencies.

There is no form of coordinating unit for the States-FCT inthe existing administrative structure of the FCDA. So far the need for coordination between the FCT and the adjoining states has been met with the establishment of high level Ad-hoc Committees to face special

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issues e.g. The Presidential Ad-Hoc Committee on Resettlement of the inhabitants of the Federal Capital Territory, set up by the Federal Government in 1979.

Composition of FCRCU

The nucleus of the new unit should consist of persons experienced in related matters concentrating on persons that have the best knowledge of the FCT and the surrounding states and local government areas that falls within the FCR.

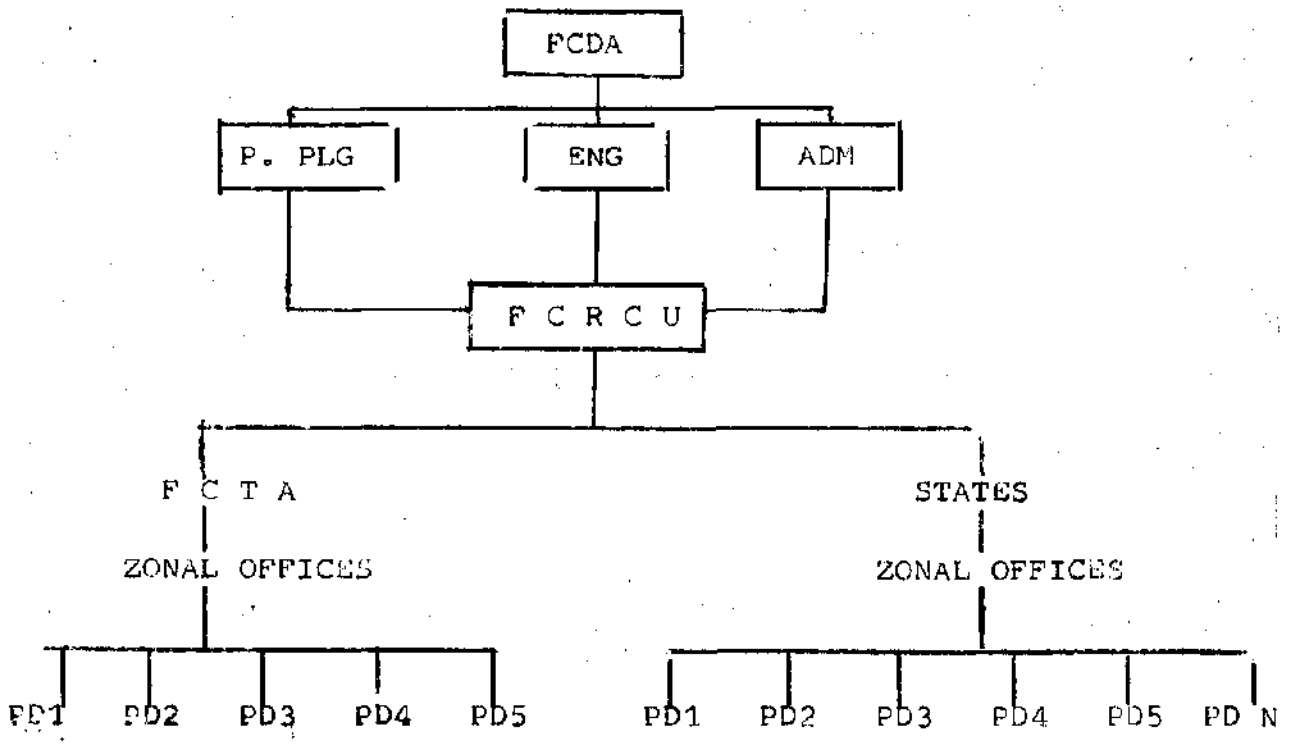
- The Minister for Federal Capital Territory to the Chairman or his representative (Director of Planning and Surveys).
- Representative from each of the Planning Districts of the region.

Management of the FCR..

The Coordination of development programmes in the FCR should be handled by the Regional Planning Division of the Department of Planning and Surveys of the FCD..

A regional Planning division is proposed to be created under the Department of Planning and Surveys with zonal or field offices at all the Planning districts of the region for proper coordination of regional planning programme. See the proposed administrative structure Chart for the FCRCU.

Fig. 5.1 The Proposed Administrative Structure Chart for Federal Capital Region



FCDA:- Federal Capital Development Authority
FCRCU:- Federal Capital Region Coordination Unit
FCTA:- Federal Capital Territory Administration
PPLG:- Physical Planning Department
PD:- Planning District.

6.20 Planning District Administration

From the analysis of the existing administrative set up in the FCT; the seven Development Areas of the FCT, which was established after the recommendations made by the Controller of the Department of Administration of the FCTA.

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This study has proposed the redivision of the existing seven Development Areas into five Planning Districts excluding the Federal Capital City based on a more rational criteria such as:- homogenity, continuity of space, anticipated movement of people and goods, systems of urban-rural settlements and balanced development. The main objective is to establish a local administrative system that will be capable of playing a positive role in identifying and successfully meeting the needs of the people.

- In the existing Development Areas of the Territory a committee was established in each of Development areas headed by a Development Secretary who represents the Minister in the area. The functions of the Committee includes: Development Control, Identification of needs in shelter and social amenities of the Communities and promotion of self-help roject. To these functions should be added, the cooperation and coordination with the adjoing states in areas of regional development.

In the existing administration of the Development Areas, Development area councils serve as the second after the FCTA tier of administration with FCT functioning and operating in all the field usually reserved for local governments in the federation. Accordingly, services department have been gradually established in the development ares covering the fields

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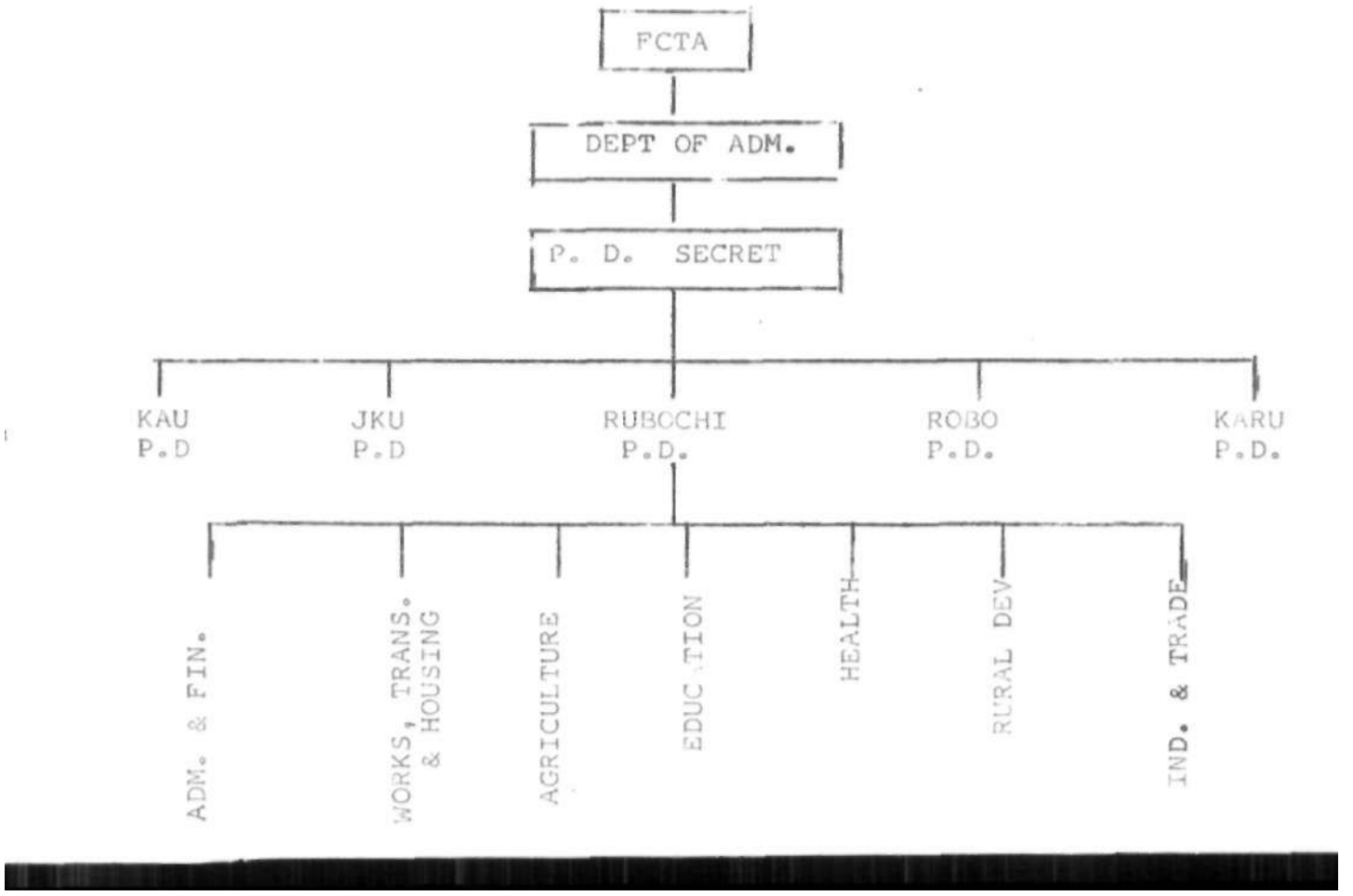
of administration, Finance; Works-land-Survey and Natural Resources; Education; Health and Social Welfare.

With the administration of the new Planning Districts as proposed by this study, the existing functions and administrative set up of the Development Areas should be maintained with the following addition.

Planning Districts, should have directly elected members to form the Planning District Council.

Advisory Council should be established with representative of the five District Heads in the Planning Districts.

A division of regional planning unit to be include in set-up responsible to the intra-planning and co-ordinating and inter-state coordination of planning activities. See the proposed administrative structure chart for the planning Districts.



6.30 Recommendations

There should be balance development of urban and rural settlement and functional interrelationship of these settlements within the Federal Capital Region and with the system of human settlement of the surrounding regions.

In additon to functional and site related factors in the FCC and other planned settlement in the FCR, the varied ways in which Nigerian Cities have evolved and related should be given a serious consideration. The indigenous patters of urban organisation and adaptation should be recognised and accomodated. i.e. The planned urban settlement in the region must preserve and build on that which is unique and valuable in Nigeria's urban tradition.

The new Capital and its region should be mainly administrative and not to be oriented to developing broad economic base characteristics of the other large cities of Nigeria or that would be a typical of a primate region in the national context.

There is need for a regional population policy that will distribute population to all the proposed regional growth centres. In checking population ceoncentration in the Capital City, the selected regional centres should be provided with facilities, employment opportunities and urban conditions near to those of the Capital City.

Considering the expected increase in population and the overall development in the FCR, transportation

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network should be provided to connect existing and new urban and rural settlement. This should be seen in terms of improving the rudimentary existing facilities and adding new network for better accessibility of all settlement within the region.

The proposed settlement hierarchy should be provided with necessary infrastructural facilities of each type at evey tier of organisation so that all inhabitant of the FCR will be able to travel the shortest possible distance and expend minimum effort to satisfy their needs for all types of facilities.

Since the proposed FCRCU has no precedent in the existing administrative structure of the new Federal Capital; it is recommended that the nucleus of this new unit consist of persons experience in related matters concentrating on persons that have the best knowledge of the surrounding states and Local Government Areas.

In the course of implementing the planning programme proposed for the FCR, monitoring and follow-up of the projects is of paramount importance. This aspect of planning implementation should be undertaken by the Federal Capital Development Authority in accordance to the guidelines to be formulated.

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