THE EFFECT OF CITY SIZE DISTRIBUTION ON REGIONAL DEVELOPMENT OF KANO STATE

BY

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A thesis submitted in partial fulfillment of the requirements for a Master Degree in the Department of Urban and Regional Planning, Ahmadu Bello University, Zaria - Nigeria.

January, 1990

DECLARATION

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

January, 1990

Na'Abba Sani Hassan.

CERTIFICATION

This thesis entitled "The Effect of City Size distribution on Regional Development of Kano State" by Hassan Sani Na'Abba meets the regulations governing the award of the Masters Degree of Science of Ahmadu Bello University, Department of Urban and Regional Planning and is approved for its contribution to knowledge and literary presentation.

Chairman, Supervisory Committee — 12/4/90 Date

Member, Supervisory Committee — 12th April '90 Date

Head of Department — 12th April, 1990 Date

Dean, Postgraduate School — 6-9-90 Date

DEDICATION

This work is dedicated to my

late parents

AHMAD SULE NA'ABBA,

YUHANASU SANI UNGOGO

and their entire children.

ACKNOWLEDGEMENT

I am grateful to Almighty Allah for giving me the strength to attend and complete this course successfully.

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ABSTRACT

The world is experiencing rapid rate of urbanization and consequent growth of cities. One fenture of this urbanisation process especially in third world countries is the increasing importance and domineering in many countries of few very large cities. This excessive concentration of urban population and urban activities in some few principal cities brings about irregular city size distribution in their respective regions, and this features along with a lot of regional problems. The major ones are disparities, excessive migration and lack of intergration within the region.

Nigeria has a well articulated ranking of settlements and city size distribution at the national level. The irregularities feature only at regional levels, with more pronouncing situations in Lagos State, Oyo, and Kano State. It is in view of these established facts that this study is undertaken in Kano State with the aim to assess the effect of the regular city size distribution on regional development of kano State and propose appropriate solutions that can be applicable to all regions with similar problems in the country.

The study has the following as its objectives:

1. To identify the pattern of city size distribution and its effect on regional development.
2. To study the problem associated with irregular city size distribution and their solution.

3. To study the pattern of city size hierarchy of Kano State and establish the dominance or otherwise of Kano metropolis in the urban system.

4. To suggest measures and make proposals that wi11 solve the problems.

5. To suggest appropriate recommendations and programme for implementation.

The study is divided into two parts. The first part involves empirical studies, here relevant literature was reviewed on the contribution of each of the two city size distribution to regional development and the general problems that might be caused by the irregular city size distribution and their solutions. The second part deals with analytical studies. Data was collected from Kano metropolis vis-a-vis the other twenty eight urban centres. A model was evolved for the hierarchical arrangement of the urban centres. In this model weight is aportioned to chosen variables as population, economic activities, utilities, facilities, services, political status and size of urban centres. Thereafter, the centres are ranked relative to the weight they carry.

Below are some of the findings of the research:

1. There is irregular city size distribution in Kano State.
2. Kano metropolis exhibits some elements of regional primacy.

3. There is absence of second order towns in the city size distribution.
4. The existing pattern is posing such problems as excessive migration to the metropolis, unemployment, congestion, disparities in development between the metropolis and other urban centres, stagnation of centres in the lower order, Retarding the spread of opportunities, social transformation and development of the region.

To help solve the problem the study suggests measures to be taken at the three tiers of government i.e. federal, state and local. The measures include evolving policy on urban development in the country, intergrating physical planning and economic planning, long term plan for the distribution of population, resource and economic activities in each state. The study furthermore suggests the decentralization of machinery for physical planning in the country. The machinery should be located at the grass root, local government level.

Proposal for Kano State (Region) include;

a. restructuring of the existing pattern of city size distribution in the state from one-first order, zero-second order, twenty one-third order and six-fourth order to a pattern of one-first order, four second order, eight third order and sixteen fourth order.

b. **redistribution of resource, investment, utilities, facilities and services throughout the state and lastly.**

c. **effective sub–regional linkages, involving different pattern and status of road net work linking the centres effectively.**

Chapter 1

1.10 INTRODUCTION

Regional studies in most countries has been dominated by economists who are pre-occupied with considerable emphasis on aggregate growth in the (G.D.P.) which has for long been turning down the spacial and physical dimension. In the history of Nigerian national planning effort, this problem was noted in the Second National Development Plan.[1] It was observed that only few industrial cities are growing and developing in the country, and that the impulses hardly reach other areas. Mabugunje[2] further pointed out that Nigeria is the most urbanised country in tropical Africa, but the spatial distribution of the towns is characterized by extreme uneveness in some areas. The intriguing situation exists in Lagos, Oyo and Kano States, which have millionaire cities attracting virtually most of the growth and development in the region they occupy, leaving the other subcentres depressed, and in some cases making the conditions very difficult for these other centres to develop.

Although disparities are inevitable in almost all aspects of human existence, however when the magnitude is so pronounced it can produce serious reciprocal

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1. Nigerian National Development Plan 1970
2. Mabogunje, 1977.

consequences on both the state as a region and on the nation as a whole. In a country like Nigeria, especially as one of the objectives of national development planning is to achieve the ultimate goal of Just and egalitarian society, Measures most be taken on how to reduce inequalities and promote balanced development among the various communities and, settlements in the different geographical areas in the country. This will go a long way in solving the problems of excessive rural-urban migration, over population and pressures on land, utilities, facilities, services and infrastructure. It is in line with these established research findings that this study intends to make an in depth study into one of the regions in the country i.e. the Kano region where the problem of regional disparities has established itself.

1.20 Statement of the Problem

Kano State is one of the few states in Nigeria that can be called a one-town-state, that is to say apart from the state metropolitan capital, there is no other centre or urban area that ranks immediately close in status. All kinds of development of the state are confined to the state capital, willingly or unwillingly.

The disparities between Kano metropolis and other urban centres in Kano State have been raising the status of the metropolis. These domineering functions of the metropolis have enhanced the influx of migrants to the

city. This has produced a viscious cycle of making Kano dominant and because of its dominance, it deprives other regions of the much needed growth potentials. This has considerably increased the magnitude of such problems as:

a. The increased magnitude of physical planning problems in the metropolis.

b. Rapid peripheral growth and existing of squatter settlements.

c. Over congestion of the metropolis, with pressures on land and other infrastructures.

Ascentuating the regional problems as:-

a. Imbalance in regional growth and development

b. Deceleration of development, opportunities and social transformation in the region.

1:30 Justification for the Study

The hypothesis is that there exists disparities between Kano and other sub-regional centres. For that reason there is a need to establish a hierarchy of urban centres to prove the existence of the disparities and to observe the magnitude.

Most of the studies of urban planning in the state have been over concentrated in the matropolis. Such studies as the work of Dayyabu Z. Gano (1983), Baffale (1986), Almustapha D. Inuwa (1983.

double referencing — see page 1

L.M. Tahir (1988), Hamza M. Tayyab (1985) and host of others. And yet, neither the planning problems of Kano metropolis nor those of its region have been effectively tackled. There is a need to have an additional regional study, that would highlight the picture of what is obtained in the other urban centres.

Kano State has other potential resource areas that need in-depth studies. Such centres if well expoilted would compliment some of the functions of the metropolis. Moreover the present number of centres designated as urban by the state government are so many for any meaningful development. There is therefore a need for a study of this nature to come out with proposal on a complimenting hierarchy of urban centres, to argument the existing definition since such definition has been dominantly based on administrative considerations.

1.40 Aim and Objectives

The aim of this research therefore is to access the effect of city size distribution on the regional development of Kano State, with a view to evolving physical planning remedies to solve the problems.

The aims will be achieved through the following objectives:

1. To identify the pattern of city size distribution and their effect on regional development.

2. To study the problems associated with irregular city size distribution and their solutions.
3. To study the pattern of city size hierarchy of Kano State and establish the dominance or otherwise of Kano metropolis in the urban system.
4. To suggest measures and make proposals that will solve the problems.
5. To suggest appropriate recommendations and programme for implementation.

1:50 Method of Data Collection

Both primary and secondary sources of data collection have been used.

Primary Source: A field survey in twenty eight urban centres vis-a-vis the metropolitan area was conducted to establish inter alia the following existing resources and activities.

a. Political Status
b. Natural endowment and other resources
c. Existing physical development
d. Industrial development
e. Commercial development
f. Facilities utilities and services
g. Communication

Secondary Source:- Official records from government institutions were reviewed for the purpose of assembling information on:

a. Land area coverage of the urban centres
b. Population distribution
c. Land uses and other proposals

The Intension is to proceed to :-

a Establish the hierarchy of urban centres
b Identify centres qualified to be regarded as urban.

1:60 Evolution of a Model for Hierarchical Arrangement of Urban Centres in Kano State

This model involves an attempt to give weight to chosen variables such as population, commercial, industrial activities, utilities, facilities services, political status and size of the urban centres. After this is done, the centres are ranked relative to the weight discovered.

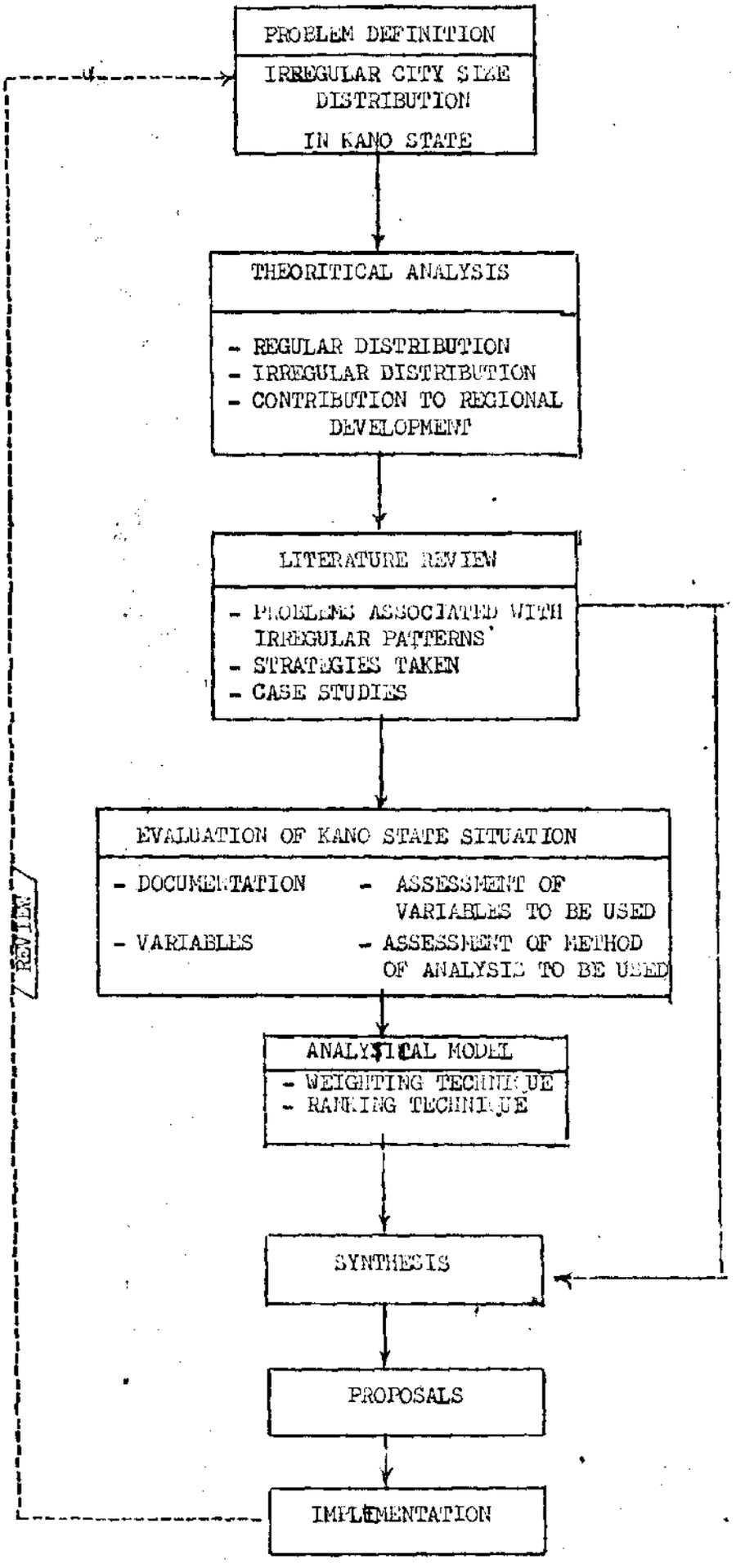
It is worth while to mention that, this technique is formative in approach and not exhaustive in content. The choice of variables and Ranking procedure is debatable and subject to differences of opinion, especially as it is likely to raise purely genuine research questions of authenticity and viability. However the attempt has been made at evolving a

simplified model which takes cognissance of the role each variable plays in building an urban area, vis-a-vis their contribution to growth and development within the study area.

1:70 Scope and Limitation

For more preciseness the study uses the district boundaries and not the designated ten kilometers radius, used by Kano State for assessment and analysis of data. General planning requirements and criteria for the hierarchy of settlement size, proposed sub-regional linkages and distribution of utilities, facilities and services are given to cover the region. However due to the wide nature of a study proposals are confined to local levels.

The study could have extended to cover other district centres, those not designated as urban. However this becomes very difficult and virtually impossible due to lack of data and sufficient information on them.


PROBLEM DEFINITION
IRREGULAR CITY SIZE DISTRIBUTION IN KANO STATE
THEORITICAL ANALYSIS
- REGULAR DISTRIBUTION
- IRREGULAR DISTRIBUTION
- CONTRIBUTION TO REGIONAL DEVELOPMENT
LITERATURE REVIEW
- PROBLEMS ASSOCIATED WITH IRREGULAR PATTERNS
- STRATEGIES TAKEN
- CASE STUDIES
EVALUATION OF KANO STATE SITUATION
- DOCUMENTATION
- VARIABLES
- ASSESSMENT OF VARIABLES TO BE USED
- ASSESSMENT OF METHOD OF ANALYSIS TO BE USED
ANALYTICAL MODEL
- WEIGHTING TECHNIQUE
- RANKING TECHNIQUE
SYNTHESIS
PROPOSALS
IMPLEMENTATION
REVIEW

Chapter 2

THEORETICAL ANALYSIS AND LITERATURE REVIEW

This chapter is divided into two parts. The first part deals with theoretical analysis on the two patterns of city size distribution and their contribution to regional development. While the second part reviews relevant literature on general problems and solutions associated with irregular city size distribution on regional development. And case studies of countries where irregular city size distribution has in one stage or the other been a problem.

2:10. City Size Distribution and Regional Development

A city is a town that has reached a certain status with regards to population and central functions.[3] Apart from mere size it has the head offices of businesses, and other independent institutions. The larger the city's agglomeration and greater the density of population in its environs, the more effective will be its impact on the surrounding areas and closer the integration of the city and its environs.[3]

Cities do not grow-up by themselves; country sides set them up to execute tasks that must be performed in the central places. On the basis of this, there emerges a hierarchy of centres graded according to the degree of concentration of centralized services, which to a considerable measure may be reflected in

the size of their population. Depending on the pattern the population and centralised services are concentrated, city size distribution may take the form of rank size or primate size.

2:11 Rank Size

It is a pattern according to which the distribution of cities by population size is lognormal.[3] It is a pattern in which there are many small towns, considerable number of medium size towns and relatively substantial number of large cities in a hierarchical order. In other words the pattern is postulating a hierarchical order of settlements with several grades of urban centres. The centres are also largely organised hierarchically in terms of definite area and status. The pattern is typical of more matured stage of development.

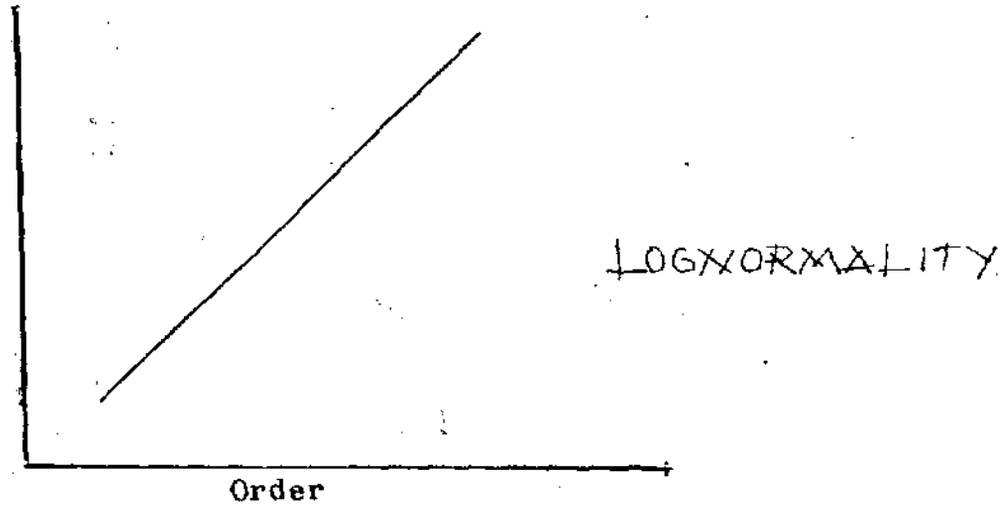


Fig. 2.1

3. Brain S.L. Berry (1964) Page 116-152 Regional development and planning edited by John Friedmann and W. Alonso. City size distribution and economic development.

2:12 Primate Size

A hierarchy whereby a stratum of small towns and cities are dominated by one very large city and there is a deficiency in number of cities of intermediate size. The pattern is typical of early developmental stage and is associated with super-imposed colonial economies in under developed countries.

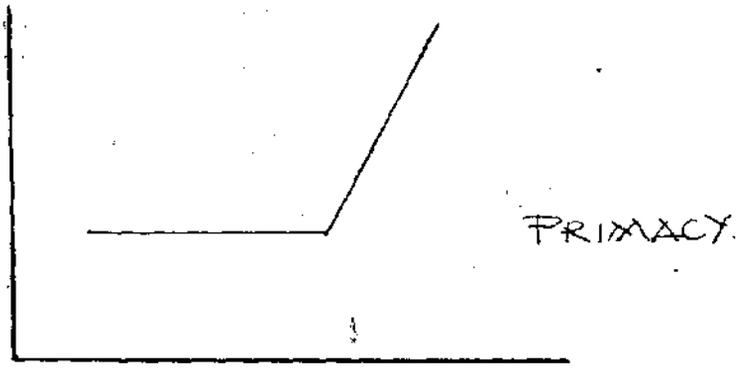


Fig. 2.2

As mensioned earlier it is quite true that depending on the pattern to which the centralized services are concentrated, city size distribution can take form of primate or rank size.

However the pattern to which the centralized services are concentrated or the pattern to which city size distribution would take is influenced greatly by the following factors.[4]

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4. UNCHS Habitat 1985 page 32. The role of small and intermediate settlement in national development plan.

1. Initial creation of a nation-wide administrative hierarchy. If it is centralized primate size would be obtained and if it is spread rank size would be obtained.

2. Concentration on one sector of the economy e.g. Industralization. When a country concentrates on one sector of the economy obviously it is only those towns that have such potentials, that would grow. So this would led to primate pattern while diversification would encourage rank size pattern.

3. Distribution of country's income; if it is concentrated in one area that area would be the main market for goods and services, indicating primate patterns. If it is spread there would be so many central areas thus rank size pattern would be obtained.

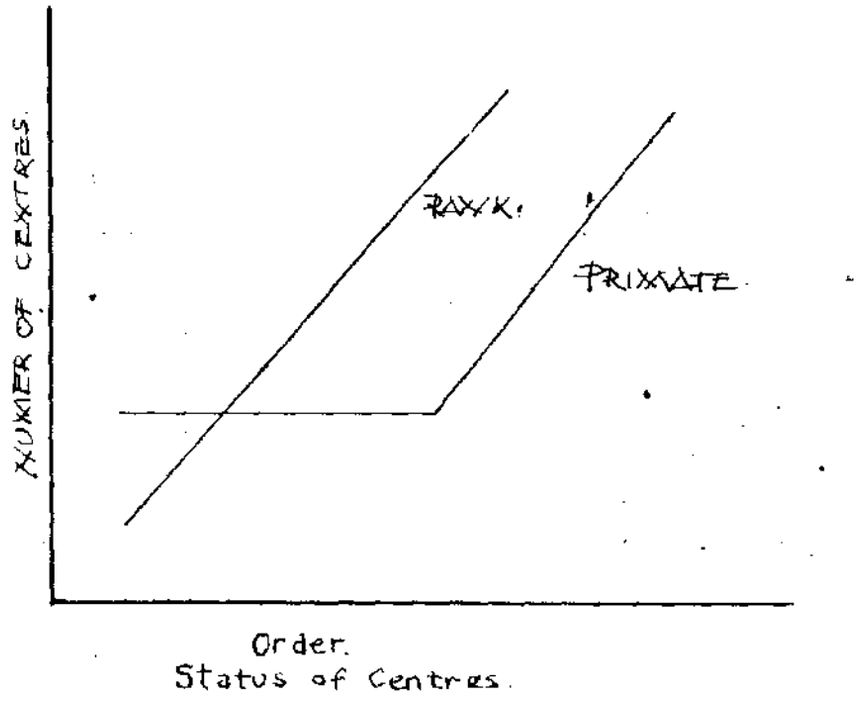
4. Micro-economic policies having net effect of subsidizing investments in large urban areas and subsidizing urban consumers would led to primate pattern.

5. Unwillingness on the part of cities, professionals and skilled labour to reside at small and intermediate centres would lead to their concentration on one big city thus encouraging the formation of primate pattern.

6. Investments in infrastructure favouring one city in the region would encourage primate patter, while wide spread investment on such infrastructures would encourage Rank size pattern.

7. High degree of integration with the world market would make those cities in the country that are directly involved more important than other cities by so doing encouraging primacy.

The pattern that is obtain in a region is not what matters. What matters well is, which of the pattern ascentuates regional and national development



2:13 Contribution to Regional Development

Cities are prime catalysts of change and development: They provide opportunities, stimulate the spread of innovation and social transformation within their immediate environments. However this function has some correlation with the type of cities and pattern of hierarchy of city

size existing. Hoselitz[5] introduce the concept of paratistic and genetic cities and argued that cities of heterogenetic transformation tend to generate economic growth and cultural changes in their region, whereas cities of orthogenetic transformation tend to limit and in some cases may fully impede these changes.

In the same way a region with regular pattern of city size distribution tends to stimulte and spread growth and development, because of the number of cities and order arrangement in their hierarchy - which facilitates the smooth trinckling down of development. Whereas the irregular pattern in most cases acts as a hinderance to development process. Here the primate city tends to dominate and attract almost all activities, resources and investment. Moreover the hierarchical arrangement of the cities make trinkling down of development very difficult. One advantage of this pattern over the other is that it encourages efficiency and maximizes returns on investments. And even this advantage is in the short run. In the long run the region stands a better chance of benefiting more by investing widely in the region.

2:20 Nigerian City size Distribution

Nigerian's settlement system like any other colonial country has been tremendously influenced by the rail line

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5. B. Hoselitz, The role of cities in the economic growth of underdevelop countries. The Journal of Political Economy Vol. 1.x 1 (1963) Page 198-209.

constructed between 1896 to 1923. Centres situated at disadvantageous location in relation to the raillines irrespective of their traditional size and importance, suffered from a weak urban economic base and a defective demographic structure. While those that were favoured by the location of the rail lines enjoyed a strong growing economy and expansion of all other sectors. The rail line was the initial factor that influenced the hierarchical pattern of Nigerian urban centres.

The state structure of administrative organization of 1967, also added to new dimension to the national urban System,it imposed and has continued to impose more urban and administrative functions on some towns and that has initiated a re-orientation and regrouping of functional linkages between settlement grouping.[6]

Mabojunge's work identified two traditional system of central places in Nigeria. One in the northern part i.e. Kano, Kaduna and Jos. The other in the western part i.e. Ibadan, Abeokuta and Lagos. Then later the eastern part emerged with Enugu, Onitsha, Aba and Port-harcourt, These are areas of greatest population concentration and increase, especially through immigration and of industrial and other urban economic development.

Within the national setting, the following grades of urban centres can be recognised. The first are those operating effectively up to the national level, they are the centres of highest order. They include, Lagos, Ibadan, Benin city,Onitsha, Port-harcourt, Aba, Kaduna,

6. Mabogonje (1968) Research into origin, size and distribution of Nigerian cities. National Institute for Policy and strategic studies Publication No. 3 Urban studies series The Nigerian City.

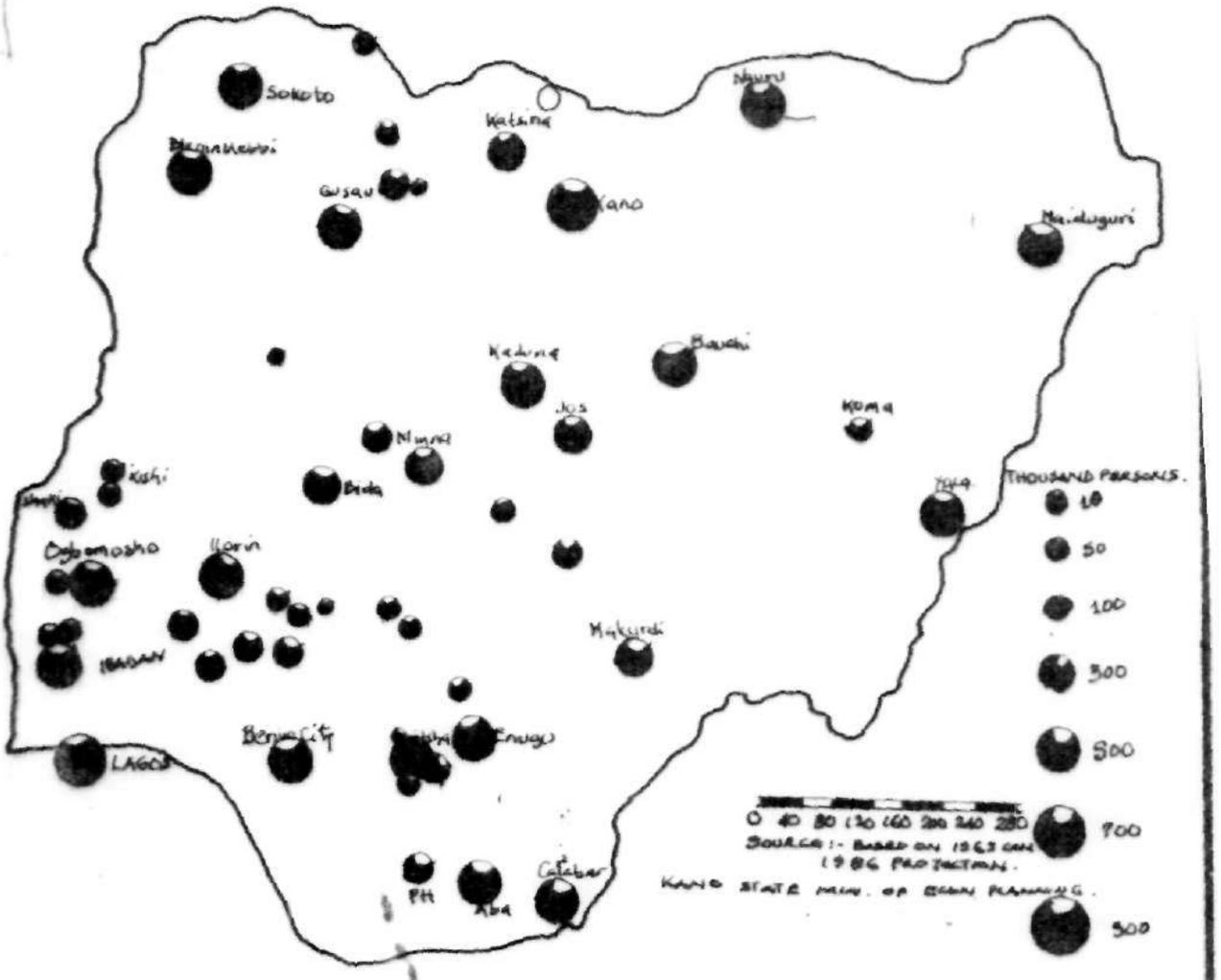
Kano, Zaria and Jos. The second order are those operating at a little lower level than the former found within inter-state on regional setting. They include Umuahia, Ogbomosho, Maiduguri, Sokoto, Calabar, Uyo, Asaba, Ilorin, Abeokuta, Minna, Bauchi, Bida, Ile-Ife and Warri. Third order includes those operating within states Nguru, Katsina, Daura Ijebu-Ode, Oyo, Oshogbo, Bukuru, Kafanchan, Okene, Mokwa, Epe, Ikorodu, Shagamu, Auchi and Sapele.

In a study conducted by Ukwu[7] he found out that the country has an order of nineteen capital cities now twenty one, five metropolitan thirteen regional centres and fifty-seven district centres.

Nigerian has a well articulated hierarchy of settlement (as seen in Dig. 2.3) with cities size well distributed. There is a smooth flow from the highest order towns to the lowest order towns. This regular pattern has helped a lot in enhancing national development in the country. However that does not mean regional inequalities do not exist. Regional inequalities do features within state levels in some areas. In such instances the state capital is several times larger than any other towns. Such situation emerges within Oyo State with Ibadan as the largest dominating town, Lagos State with Lagos as the largest town and Kano State with Kano as the largest town.

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7. Ukwu (1980) urban hierarchies in Nigeria. N.I.P.L.S.S. publication, No. 3.



NIGERIAN HIERARCHY OF CITIES

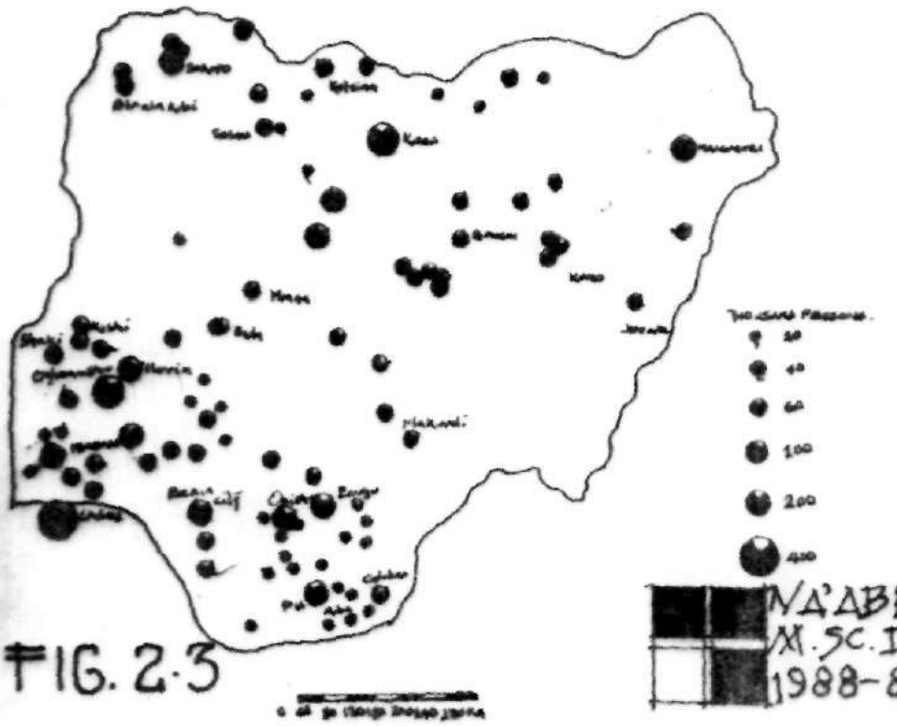


FIG. 2.3

NA'ABBA S. HASSAN
M.SC. II URP THESIS
1988-89 A.B.U ZARIA.

2:30 Problems Associated with Irregular City Size Distribution

2:31 Disparities: With the big city taking considerable number of regional resource, population investment, utilities, facilities, services and opportunities, large disparities prevails. And this would consequent to structural disimilarities and inequalities within the region.

Although in most cases regional specialization is inevitable and even desirable, as resources are limited and need efficient utilization, however for the purpose of equity and distributive justice, the depressed towns have to be considered .. moreso as the neglecting of these towns would have a serious implication in the development of the region.

2:32: Excessive Migration The repid development of the primate cities and the accompanying concentration of government services, industrial activities transportation, improving living conditions, employment opportunities and other urban infrastructure. This has attracted an increasing number of people from neighbouring towns and villages.

It has been estimated that due to high rate of industrialization and relative slower growth of Agricultural sector, Turkey will be about 66 million i.e. about 75% of the country's population by 1995 as a result of massive

influx of migrants.[8] J.A. Gana[9] revealed that 57% of the labour force of 16 industrial establishments of Kano are migrants workers. Moreover it was further established that Kano metropolis is draining at least 20,000 immigrants every year from it's hinterland extending hundred and sixty kilometers in all direction.[10]

2:33 Slower Spread of Development: It has been proved that frequency of interaction has a positive correlation with high potentials for inventions. And cities provide the most suitable avenue for this interaction because of agglomeration. Thus in a region that has more number of cities the more chances of development impulses spreading and vice-versa. However in a region with irregular city size distribution the number of cities and their sizes are always small due to the presence of the primate town which tends to attracts most of the regional resource and investment.

2:34 Congestion of the big city: Housing supply in most of these cities can not even cope with natural increase. Excessive influx of migrants adds to the problem. Pressures begin to build on lands, housing, utilities, facilities amenities, services and other infrastructures.

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8. Newthworth H.E. 1987 Taming megalopolis Vol. II

9. J.A. Gana 1986 Growth Centres and Rural Development Paper presented at 29th Annual conference on Nigeria Geography Association.

10. P.O. Sada, 1984, The Nigerian city, National Institute for policy and Statistic studies, Publication No. 3, Urban Studies.

These problems combine to ascentuate the formation of squatter settlements, slums and peripheral growth.

These cities are normally the zones of traffic congestion, air pollution, water pollution, noise pollution and many other problems associated with agglomeration and congestion.

2:35 Stagnation of Smaller Towns: The irregular pattern tends to create two extreme situations i.e. a highly developed city with concentration of population, opportunities, resources and investment, and highly under-developed towns with relatively less population, less opportunities, less resource and less investment. With such situation, these towns become stagnated, Both with respect to physical and economic development. In some cases these towns even go to the extent of shrinking especially when there is massive out migration to the big towns.

2:36 Slower Rate of Social Transformation It has been observed that big cities of heterogenous composition hasten literacy and awareness. In an irregular pattern such cities are very few. In most cases it is only the primate city that has such composition. And it is the only town that can hasten literacy level. The region's literacy level is lower when one relate it with regular pattern which has so many number of cities that can hasten the spread of literacy.

2:37 Retarding the spread of opportunities and lack of Integration in the Region

The dominance role of the big city in the irregular pattern, makes the town to continue enjoying more urban opportunities. Image of unlimited resource, image of constantly expanding opportunities, employment, business investment become so much attracted to the big city to enjoy agglomeration and economy of scale. This would on the other hand retard the spread of such opportunities to the other towns. Thus the other sub-regional centres would continue to have image of limited resource. Image of constantly limited urban opportunities. And the circle would continue making the region dependent on the big city.

With such problem, regional disintergration would feature both spatially and within the town. A clear cut difference would prevails between the big town and the other sub-regional centres. In some cases even within the ethnic groups residing at the two different areas. This problem has even led to ethnic rivalries in Uganda.[11]

2:40 Strategies used to solve the problems

During the late 1950's and around the 60's regional disparities were the central problem of most developing nations. The growth rate of most capital cities of these nations are impropertionate to the rate of rest of the cities of such countries. This situation poses a lot of problems That calls for a total restructuring of some

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11. Christopher J. Bakwesegha, 1974 Pattern, causes and consequence of bolarized development in Uganda. Urbanization, National development and Regional Planning in Africa, edited by Silabel-Shaktis and Robert Obudho, page 47-64.

regional and national development plans. Various regional planning policies were adopted with a view to solving the problems. Below is a review of some of the general strategies.

2:41 Decentralization Strategy

This implies the shedding of certain city activities such as industry, commerce or administrative and their dispersal to a district and separate town and that itself functions as an independent local and regional centre.

Decentralization of industrial activities is the most prominent. It receives attention over the years. In some cases incentives were given to firms that wanted to locate outside the agglomerated city. At the same time matching disincentives were applied to discourage the growth of the domineering city.

2:42 Optimal Size of City Strategy

The concept implies putting a limit to the size of city, by controlling the growth and development at certain threshold, using population and cost of providing urban services as variables. It refers to the size of population threshold that can be favoured by least cost of providing urban services.

2:43 Growth Pole Strategy

This involves the creation of another growth centre, centre of centrifugal and centripetal forces so as to have the effect of development throughout the region. Selected development foci are used to serve as initial measure. The foci are served with necessary incentives to become growth centres, which would later spread developmental impulses throughout the region.

2:44 Functional Towns Strategy

Towns are created with a specific function in mind, with a view to reducing congestion of the bigger cities. Such cities include institutional cities commercial cities and administrative cities i.e. new capital cities.

The most prominent among these is the new capital city, as the case of Abuja in Nigeria, Yamoussoukro in Cote d'ivoire, Islamabad in Pakistan, Washington in U.S.A. and host of others.

2:45: Strategy of Creating Regular Hierarchy In the urban system

This strategy emphasises the existence of regular hierarchical order in the distribution of cities. Here cities and towns of different size and status are arranged and distributed in a regular hierarchical order at different levels, performing different roles and offering particular central services. Such ordering of urban centres is both efficient and equitable. It is one

of the most appropriate means of attaining the goals of balance and regional development, and more equitable. Spatial pattern of economic and social well-being.

To establish the concepts, a regional survey is under taken. Where it is found there is a short fall in the number of cities in the hierarchy, incentives would be given to the next order city to grow up, and fill in the gap. Generally the concept has more in common with christler's central place theory and S.K. Kulshrestha's concept of polarised activity centre.[12]

2:50 Review of Selected Case Studies

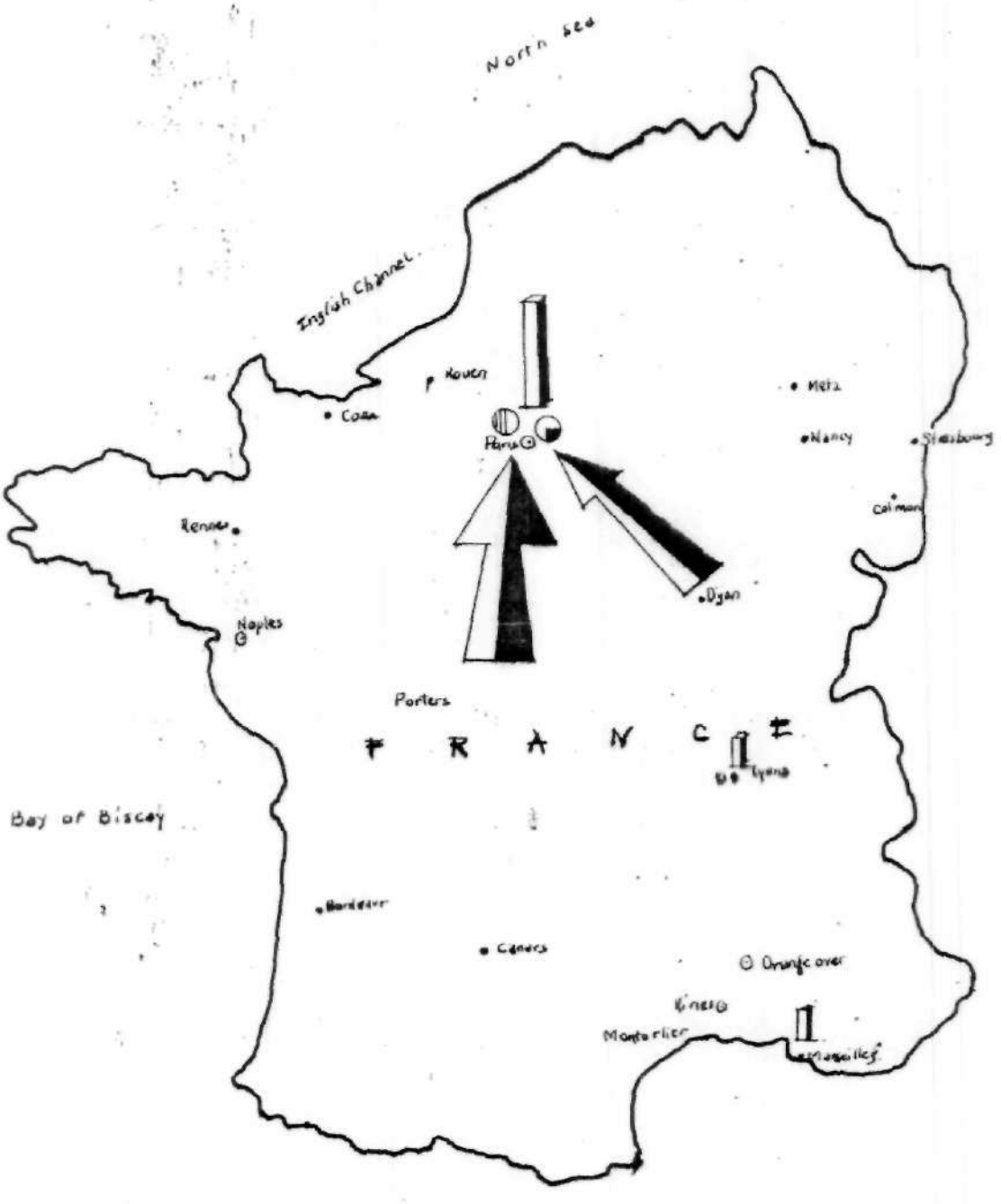
Regional disparities differ in pattern and magnitudes from country to country, and from region to region and like wise the approaches and strategies to solving them differs. It is in view of this, that this study intends to review case studies in different areas where disparities were once a problem to see how it has been solved.

2:51 France

It was during the middle 1950's that disparities between Paris, the capital, and the rest of the country assumed alarming proportions. This led to the restructuring of the France regional development plan.

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12. Kulshrestha S.K. (1980) A proposed concept of polarised activity centre for socio-economic development. Unpublished Ph.D. thesis U.R.P. ABU.



RATIO OF DEVELOPMENT

BUSINESS TURN OVER

% INDUSTRIAL WORKS

DIRECTION OF MIGRATION.

FRANCH REGIONAL PROBLEMS.

FIG. 2.4

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1988-89 A.B.U. ZARIA.

The ratio of development between Paris and next order towns Lyons and Marseilles was 8:1.[13] Paris took about 50% of the business turn over of the country, it also had 25% of the industrial workers of France. Excessive migration to Paris was from all direction massive unemployment and Regional peripheral growth was also recorded.

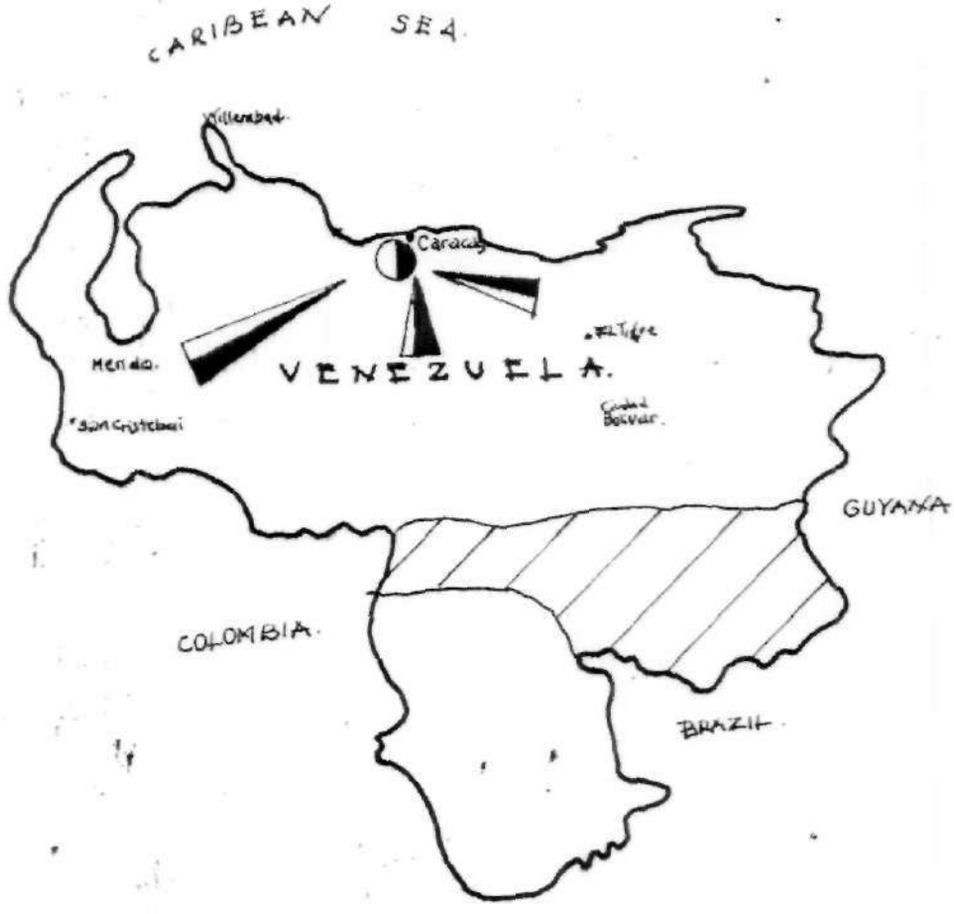
By 1965, the situation reached a stage that the French government had to control the development of Paris. Ninety regions were created in the country& each region was allowed to carry out its regional plan. A body was created to solve the problem of Paris. Another body was also created to prepare medium and long term plans for the country. Eight growth centres were identified and were given incentives to grow. Decentralization of industries was embarked upon from Paris to these new regions. Firms were given all forms of incentives and encouragement to locate at the new growth centres. (Fig. 2:24 shows the problem and position of Paris in the country.)

2:52 Venezuela

Before 1960 Caracas the capital city had 20% of Venezuala's population, 50% of the middle class population, it more over dominated the country's wealth and political powers.

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13. Eileen Turner, 1973. Anon Economist, 1973 Vol. 11X French Regions: Less Strick, more carrot.



VENEZUELA REGIONAL PROBLEMS AND POLICY STRATEGY TAKEN.

FIG. 2.5

NA'ABBA S. HASSAN.
M.SC. II U.R.P. THESIS.
1988-89 A.B.U. ZARIA.

To over come this problem a regional development plan CORDI PLAN was launched in 1958. A planning commission was appointed, and charged with responsibility of diversifying resources and decentralization of activities from Caracas to Guayana, Guayana was a region identified with a lot of resource potentials, Aluminium, petroleum and rivers that could generate Hydro electric power.

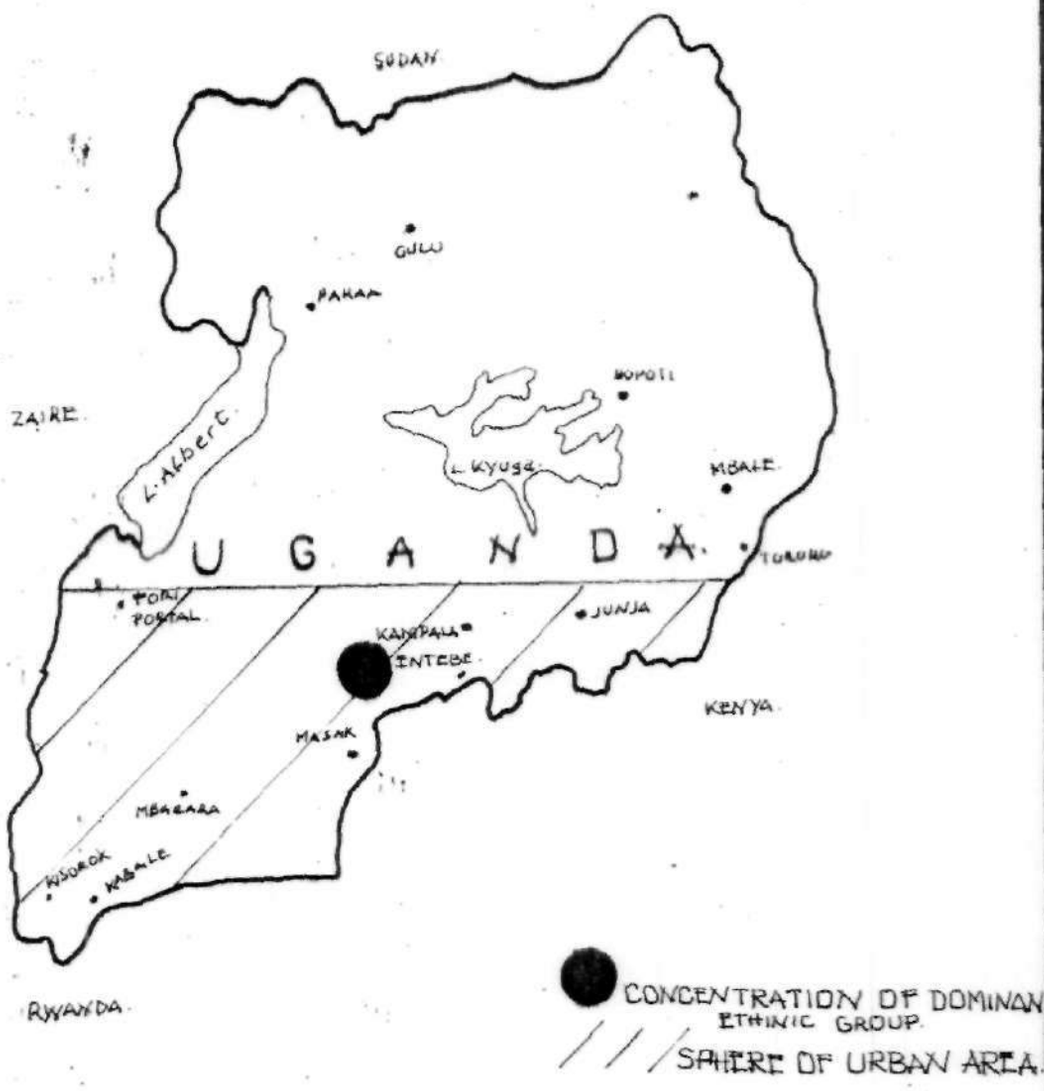
The CORDI PLAN was divided into two sections, the short term and long term. The short term plan was to embark on measures to reduce immigration. The long term measures were to identify the role which the newly identified region Guayana, was to play in the development of Venezuela economy. The plan was phased into periods 1963-66 and 1967-1975 with government financing 10% and private investors 90% of the total investment.[14]

2:53 Uganda

The problem in Uganda was not only spatial disparities. There was also dominance of one ethnic group over the others. Kampala the capital and the residence of the prominant ethnic group, Buganda had grown and developed much higher than the rest of the country. Moreover urbanization was limited and concentrated only in the southern part of the country. The rural areas that

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14. John Friedmann 1966, Page 126-150, Regional Development Policy, A case of Venezuela.



UGANDA. REGIONAL PROBLEMS.

FIG. 2.6

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1988-89 A.B.U ZARIA.

had 90% of the population were stagning. Ethnic rivalries were high and national integration was virtually absent.

The Ugandan government proposed some policies aimed at linking Uganda's central places with rural areas to strengthening the national intergration. A plan "The common man's character" was inaugurated to create a socialist ethos within Ugandan's rural society. Spatial integration of societies was encouraged giving more emphasis on people rather than geographic areas. A wide sharing of national culture and a greater recipecity of goods, services and ideas was practised. Rural development strategies were embarked upon giving more role to small central areas.

2:54 Ghana

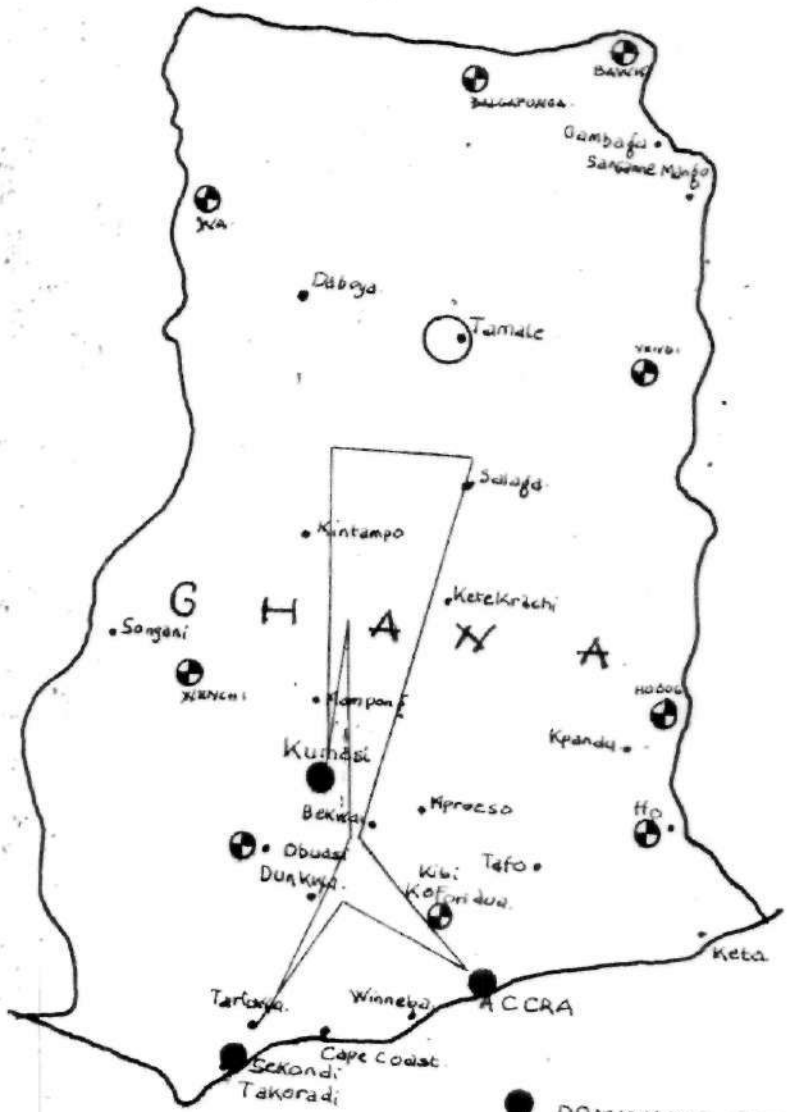
The regional problem here was deficiency in the number of cities of medium order. Accra,tema, Kumasi and Sekondi/Takoradi were the only big cities of urban status. These towns although constitute only 13.2% of the population of the country has accounted for:

58% of the population enjoying electricity

40.1% of the population enjoying pipe borne water

42.2% of the population enjoying hospital facilities.

Moreover these towns commands 80% of the commercial and industrial activities of Ghana. What ascentrate the problem was these towns with expectation of Kumasi were coastal towns, as such the vast portion of the country hardly felt the impact of urganization. This results



● DOMINANT GROWTH CENTRES.

◐ GROWTH POINTS AT DISTRICT LEVEL.

○ GROWTH CENTRE AT REGIONAL LEVEL

DIRECTION OF MIGRATION

REGIONAL PROBLEMS AND STRATEGY TAKEN.

FIG. 2·7

NAABBA S. HASSAN
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1988-89 A.B.U. ZARIA.

to massive migration especially from the depressed northern part to south.

By 1970, the Ghanian government decide to restructure the hierarchical distribution of city size.[15] Small and medium size centres were strengthened. Four tiers of hierarchy of growth centres were created.

1. Rural development service centre
2. Growth point at district level
3. Growth centres at regional level
4. Growth poles of the national level

(See fig. 2.7)

Rural Development Service Centre: These are centres of lowest under status created to provide central place within their basic area of influence.

Growth point at District level: These are growth foci designed for country's accelerated agricultural programme. Selection was done from among existing commercial, education, administrative and market towns, they are also known to be the principal centres for marketing of industrial product.

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15. C.D.K. Kudiabor, 1977. Page 86-91. Regional Planning and National Development in Tropical Africa. Edited by Akin L. Mabogunse and Adetoye Faniran. Rurbanization and Growth pole strategy for Regional Development in Ghana.

Growth Centres at Regional Level: This is an industrial town to serve as hub in the depressed north. Tamale was the town choices as the centre. It function was to process semi-finished agricultural product. It is also to provide a depot for all agric input as fertilizer, pesticides and farm machinery.

Growth Poles at National Level: These are Kumasi, Sekondri/Takoradi tema /cape town. There are proposed to remain dominant cities in the country and should continue to provide major pull for further economic activities.

Although regional disparities differs in their magnitude and dimension, however the fore-going review on problems, solution and case studies of the subject matter would help a lot not only to this study, but also in guiding the type of regional planning strategy to be use at different level or kind of disparity existing in a region. As to our study areas, the identification of the strategies to use would only be possible after analysis of the existing situation to see the form, the dimention, pattern and magnitude of the disparity to which the next chapter is pre-occupied with.

Chapter 3

EXISTING SITUATION AND RESEARCH FINDINGS

The first part of the chapter discuss on the existing situation. What is obtain within the study area. The position of Kano vis-a-vis other urban centres. It would more over trace the evolution of hierarchical order of these centres. How history contributed in establishing the irregular pattern. The second part under takes an analysis to establish the position of each centre in the urban hierarchy of the region. It moreover discuss on the result of the analysis, research findings, implication of the pattern and problems identified.

3:10 Introduction to the Study Area

The study area consists of Kano metropolis and twenty eight designated urban centres (Fig.3.1) The metropolis has been playing a domineering role in both administrative, commercial, economic, educational, industrial and all other sectors. Right from historical times, Kano metropolis enjoys strategic location in relation to the trans-saharan trade routes. This makes the city to continue attracting people from far and near distances. Moreover with the coming of the Europeans, they saw the potential and avenue for commercial activities therefore decide to make the city as one of their model points for collection of raw materials. The increase demand of grendnut by the foreign market coupled with construction of rail line and influx of multinational investment combine to make the city to grow and expand both economically and spatially.



KANO STATE DESIGNATED URBAN AREAS.

FIG. 3·1

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1988-89 A.B.U.Z.

More-over the declaration of the town as the state capital in 1967 established the complete domineering role of the town over the others. Although this domineering role is expected of any administrative capital, However, the degree and magnitude to which the capital superceedes the rest of urban settlements within the state is alarming and requires attention.

The next series of urban centres whose historical records prove that they emerged almost the same time with Kano are far left behind with regards to growth and development. The evolutionary history of these centres can be analysed in to three main periodicals:-

1. Pre-colonial period
2. The colonial period
3. The post-colonial period

During pre-colonial era urban development was related primarily to socio-political organisation. Such as the fulani empire, the Hausa states. Spatial circumstances such as the existence of an important shrine such as the "Barbush" of Dala hill in Kano metropolis. The activities of powerful local ruler, existance of important market all contributed in the growing of very high local population densities, nuclearted settlement and development of urban functions. Apart from the metropolis, centres that emerged during that time includes Hadegia, which came into being as a result of the River, i.e. River Hadegia and good grazing land that attracted the Maguzawa who migrated from far distance under the leadership of a hunter called "Hadejia".

KANO.

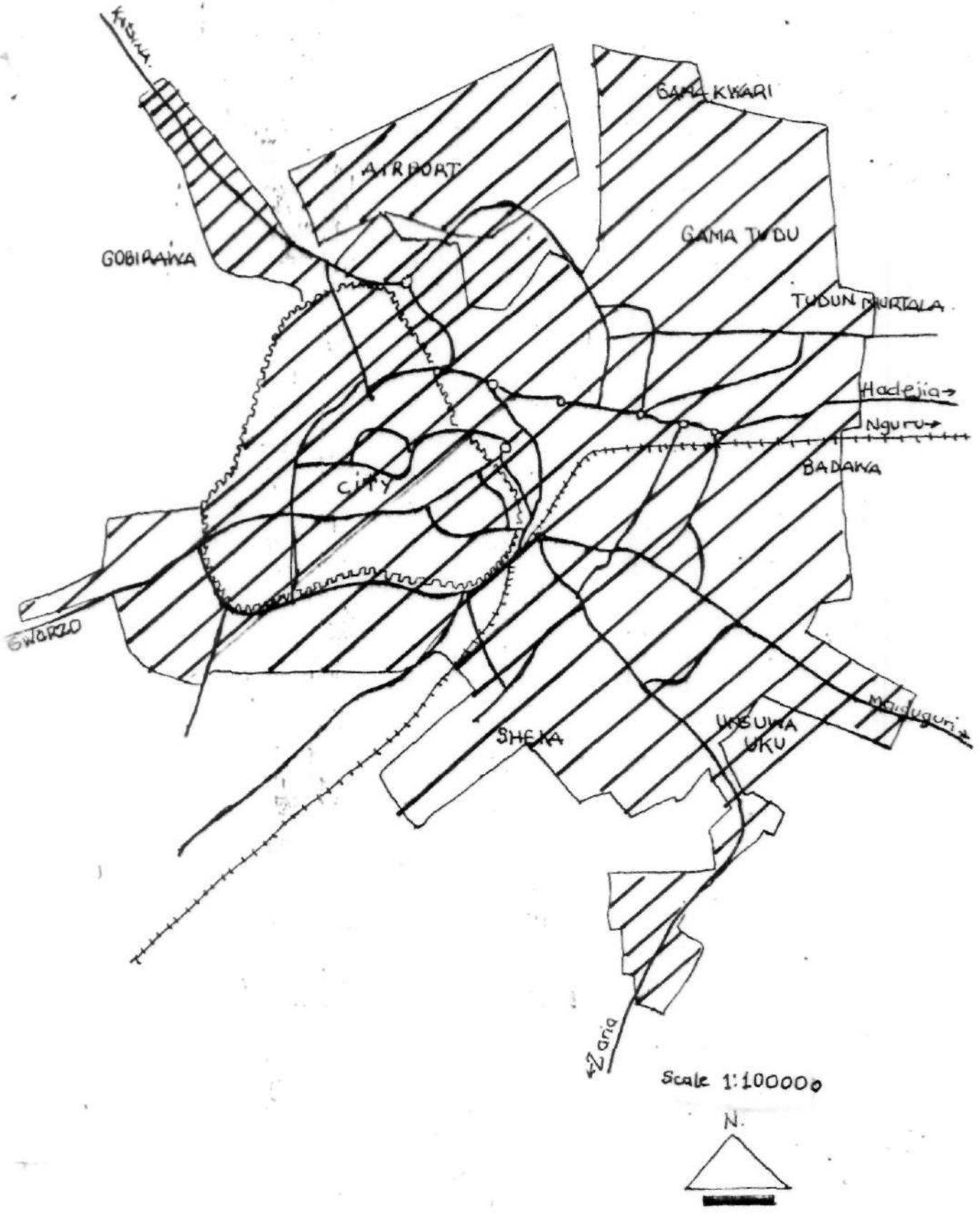


FIG. 3.2

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HADEJIA.

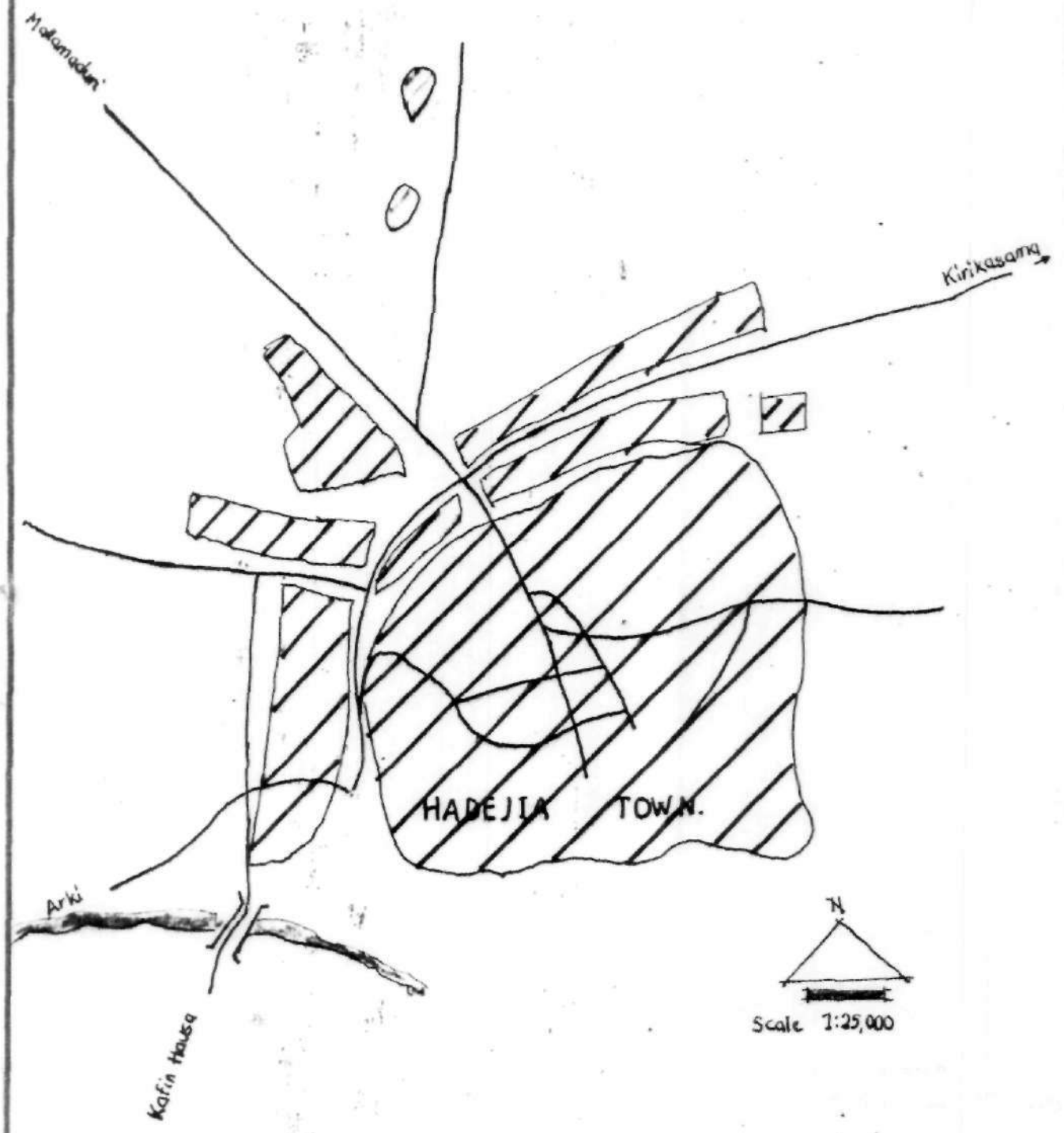


FIG. 3.3

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Hadejia was able to raise in status and assume emirate position in 1967 as a result of this early history.

Kazaure and Danbatta emerged during this period found by migrants from Egypt. The good agriculture and river further attracted more people. By 1967 when Kano was given a state, Kazaure was relatively a big town, and therefore assumed emirate status.

Gumel the other town of emirate status was formed by migrants from Ngargamu in Borno just before the coming of Europeans. The status of Gumel was able to raised because of its relationship with Borno and this further saved the town from attack of Fulani jihadist.

The colonial periods of urban development was dominated by the priorities of the colonising power, with export oriented economy. Rail lines and roads networks were developed in a country on north to south bases. This developed other urban nuclear in the state. Centres such as Ringim, Mallam Madori, Wudil, Kano, much later Kafin Maiyaki and Birnin-kudu become important routes centres. Another factor that led to the rise in status of other sets of centres during this period is the cash crop, which was highly needed by foreign markets. That what makes such centres as Babura, Bichi · Gwarzo, Karaye Minjibir Sumaila, Dutse and Gaya to achieved district headquarters status by 1967.

The post colonial period witnessed the readjustment of existing administrative boundaries and creation of new units and centres. The declaration of Kano metapolis as the state capital in 1967

established the complete dominance of metropolitan Kano over the other centres. Such centres as Hadejia, Gumel, Kazaure that had long standing history of urbanization were declared as emirate councils. Others that become district headquarters includes Babura, Bichi, Birnin Kudu, Danbatta, Dawakin Kudu, Karaje, Millam Madori, Minjibir, Rano, Sumaila, Tudunwada and Wadil.

Later administrative areas were created giving new functions to some towns. Thus Kazaure, Dandatta, Gumel Hadejia Gwarzo, Rano, Birnin Kudu and Kano metropolis become administrative area headquarters. Now with the recent creation of local government headquarters in 1989 all the twenty eight centres are local government headquarters of their respective areas. They all have the same administrative functions, however the central functions differ with the importance of the centres and the history of urbanization.

From the foregoing narration, it can be seen how the imbalance evolved, and how Kano was able to sustained it positioning as a domineering centre. It can furthermore be submitted that the imbalance of city size distribution reflect under-developed urban system. In a developed system there tends to be a relationship between the size distribution of towns and scale variety of functions which they perform for their service area. The present system is which elements inherited from the past have not yet adjusted to functional demands of today, present problems both for the internal efficiency of towns and their

effectiveness in serving their hinterland. Measures most be taken to make these centres to perform the functions they are suppose to render to their hinterland in a better coordinated regional framework.

BIRNIN KUDU

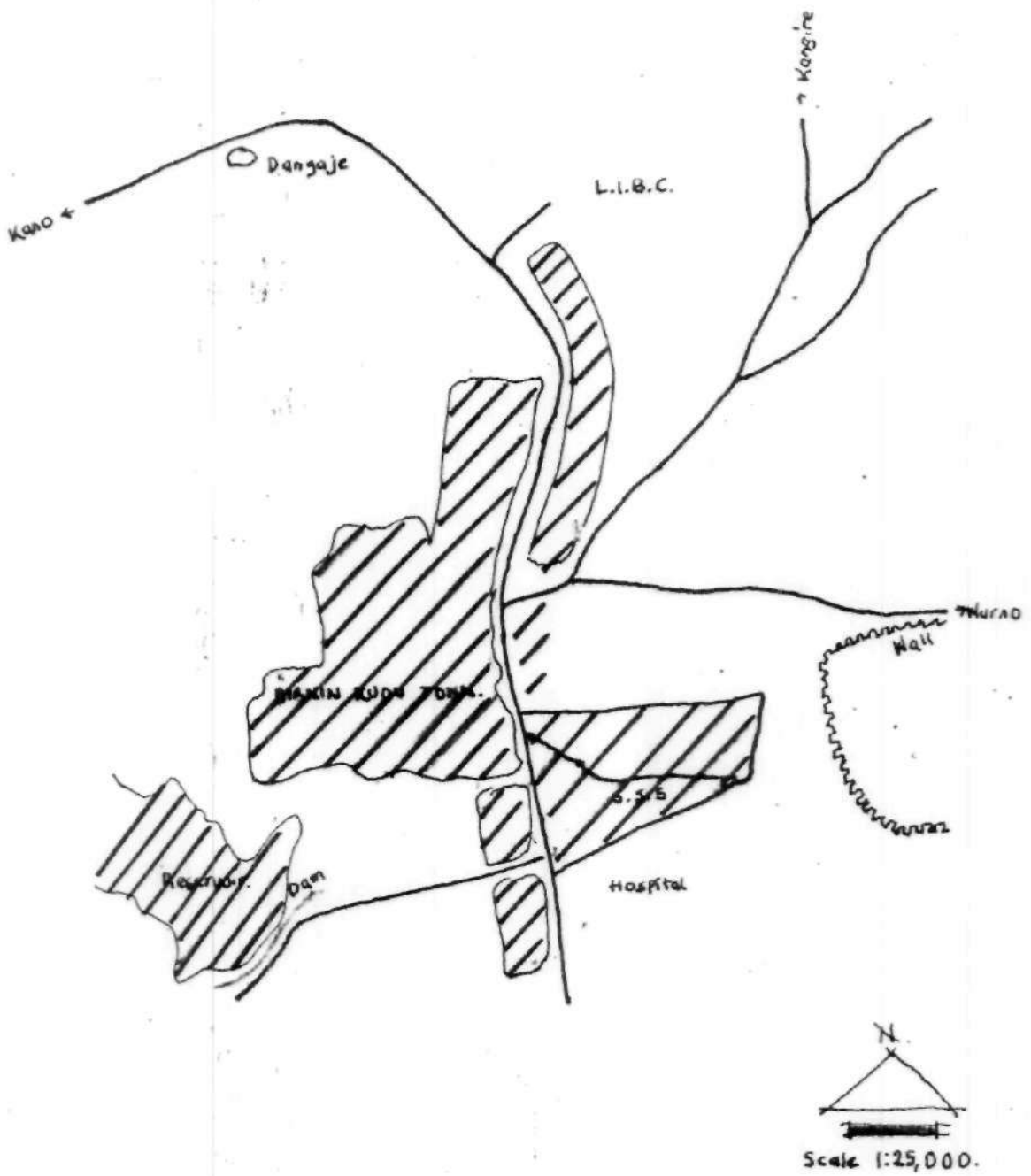


FIG. 3.4

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1988-89. A.B.U. Z.

KAZAURE

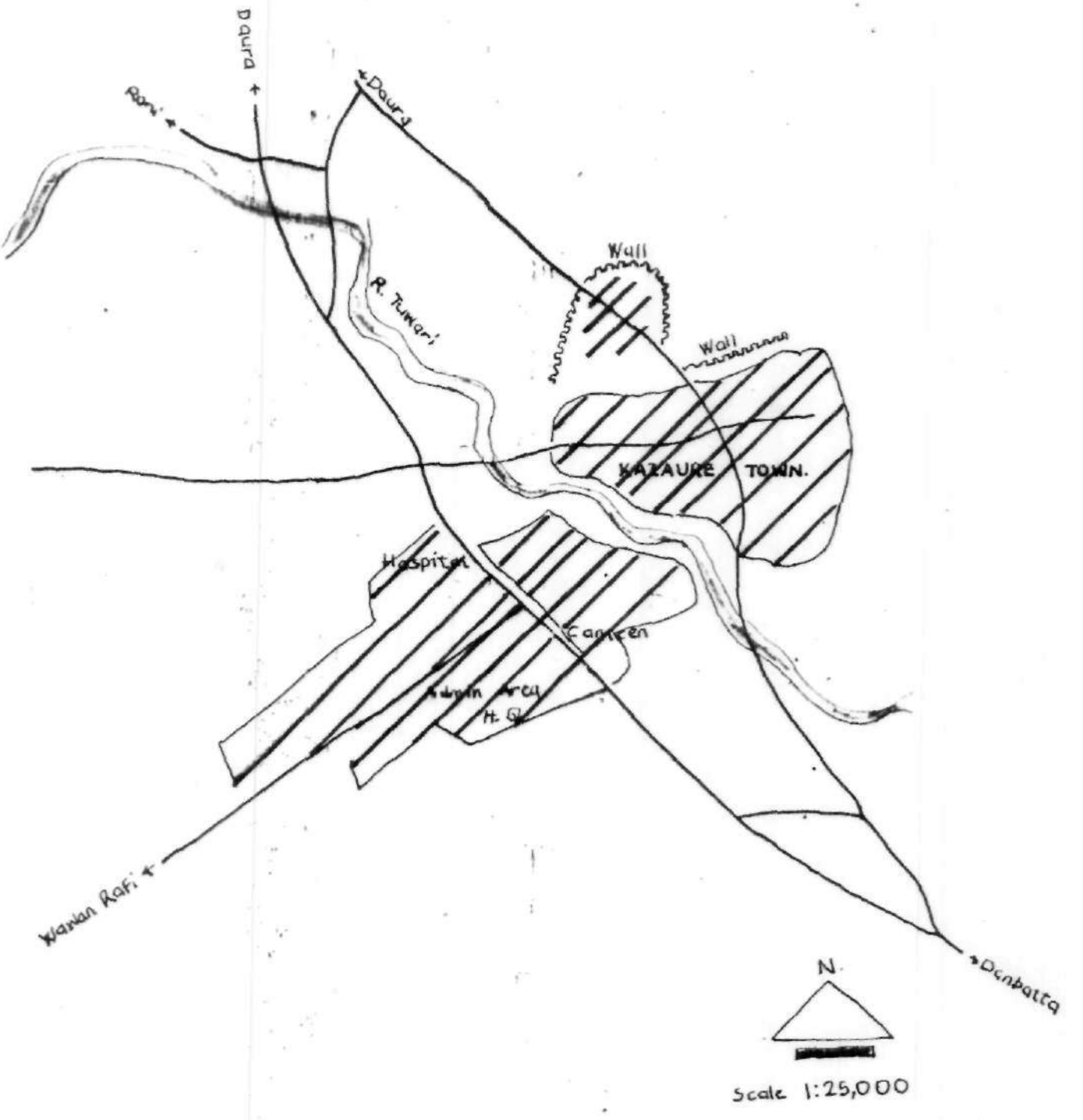
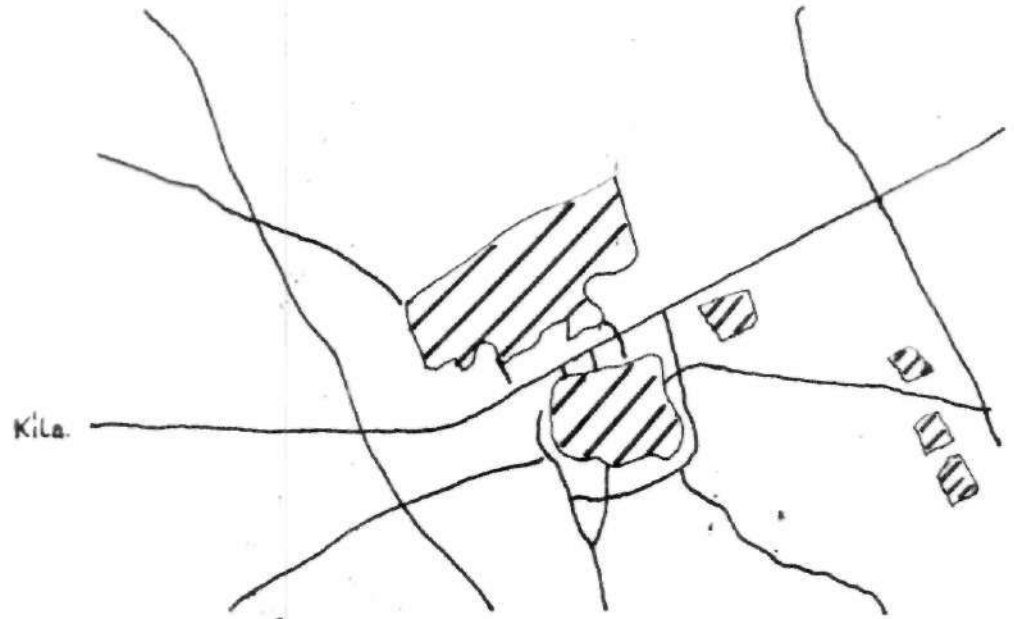
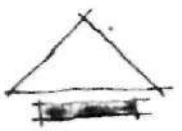


FIG. 3.5

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NEW GWARAM.



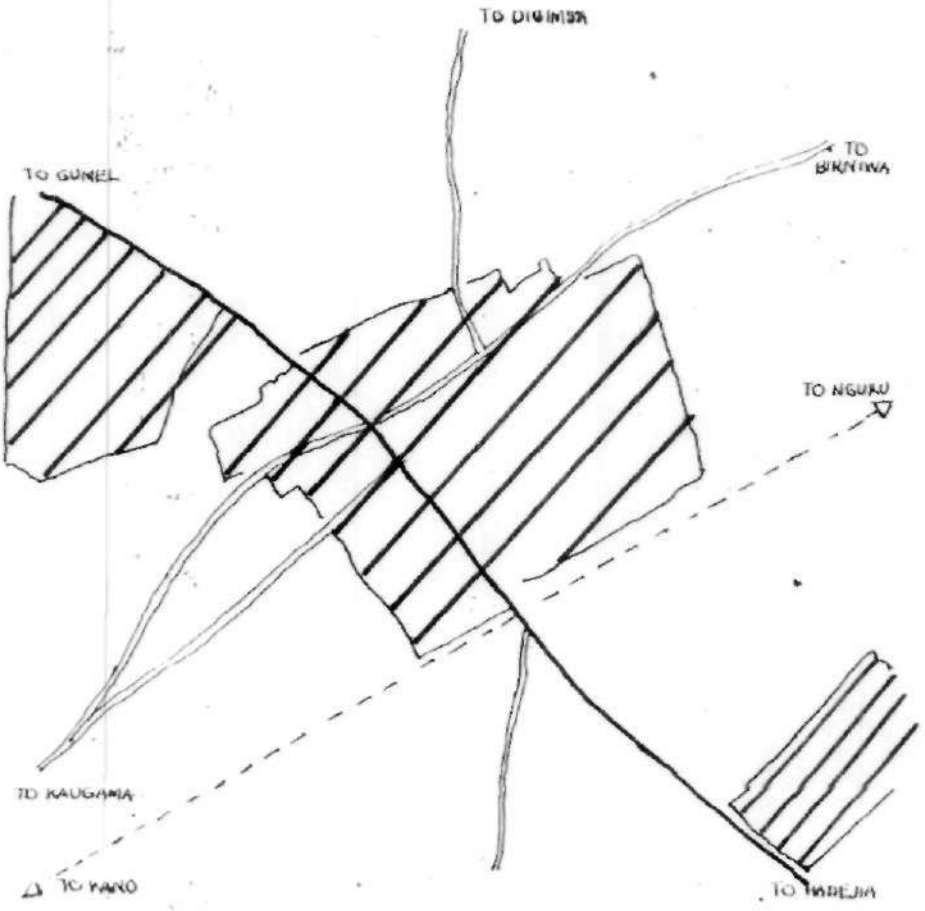


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FIG 3.6

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MALLAMMADURI.



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NA'ABBA S. HASSAN
M.SC II U.R.P. THESIS
1988-89 A.B.U.Z

FIG. 3.7

GAYA

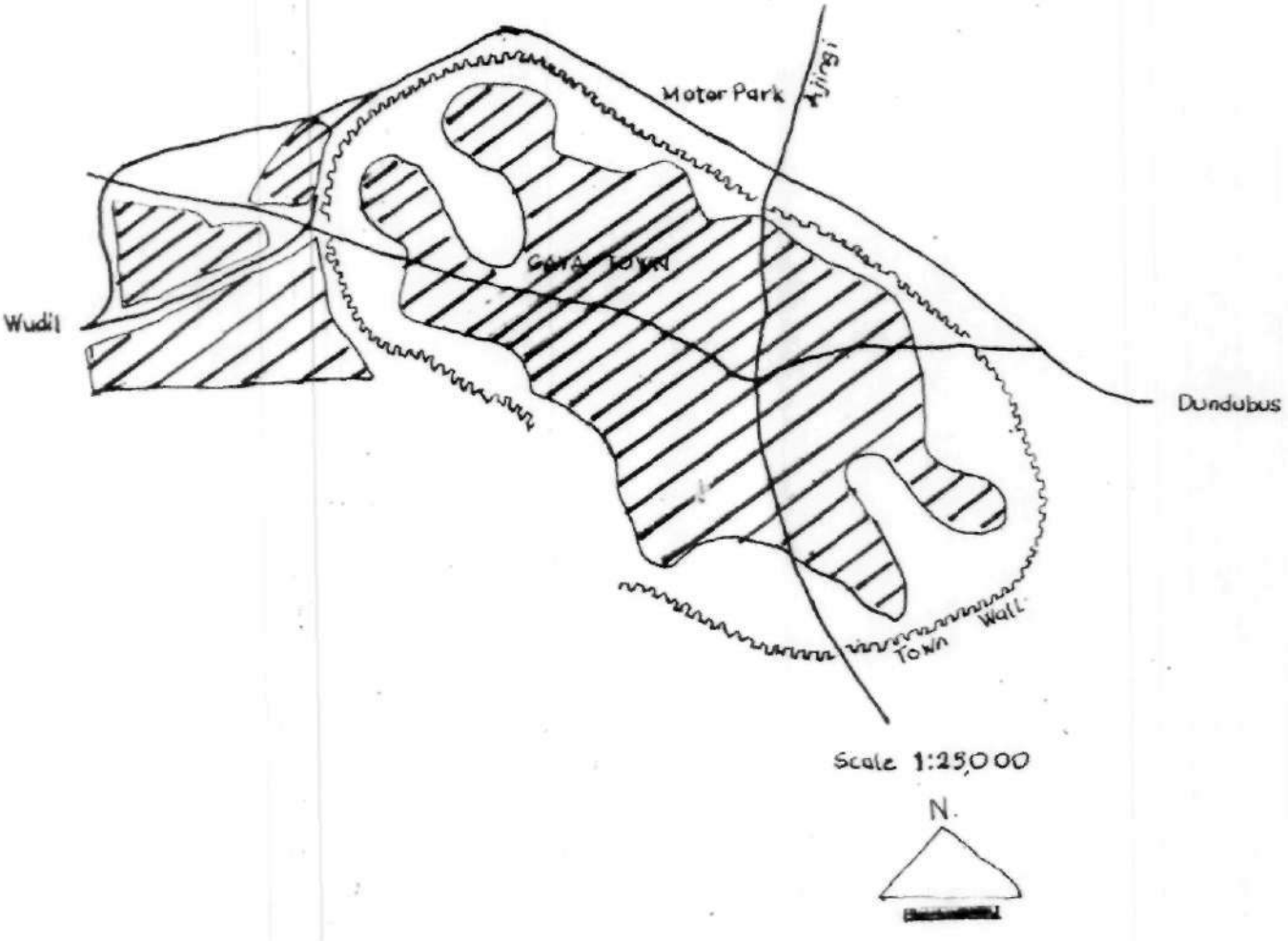


FIG. 3.8

NA'ABBA S. HASSAN
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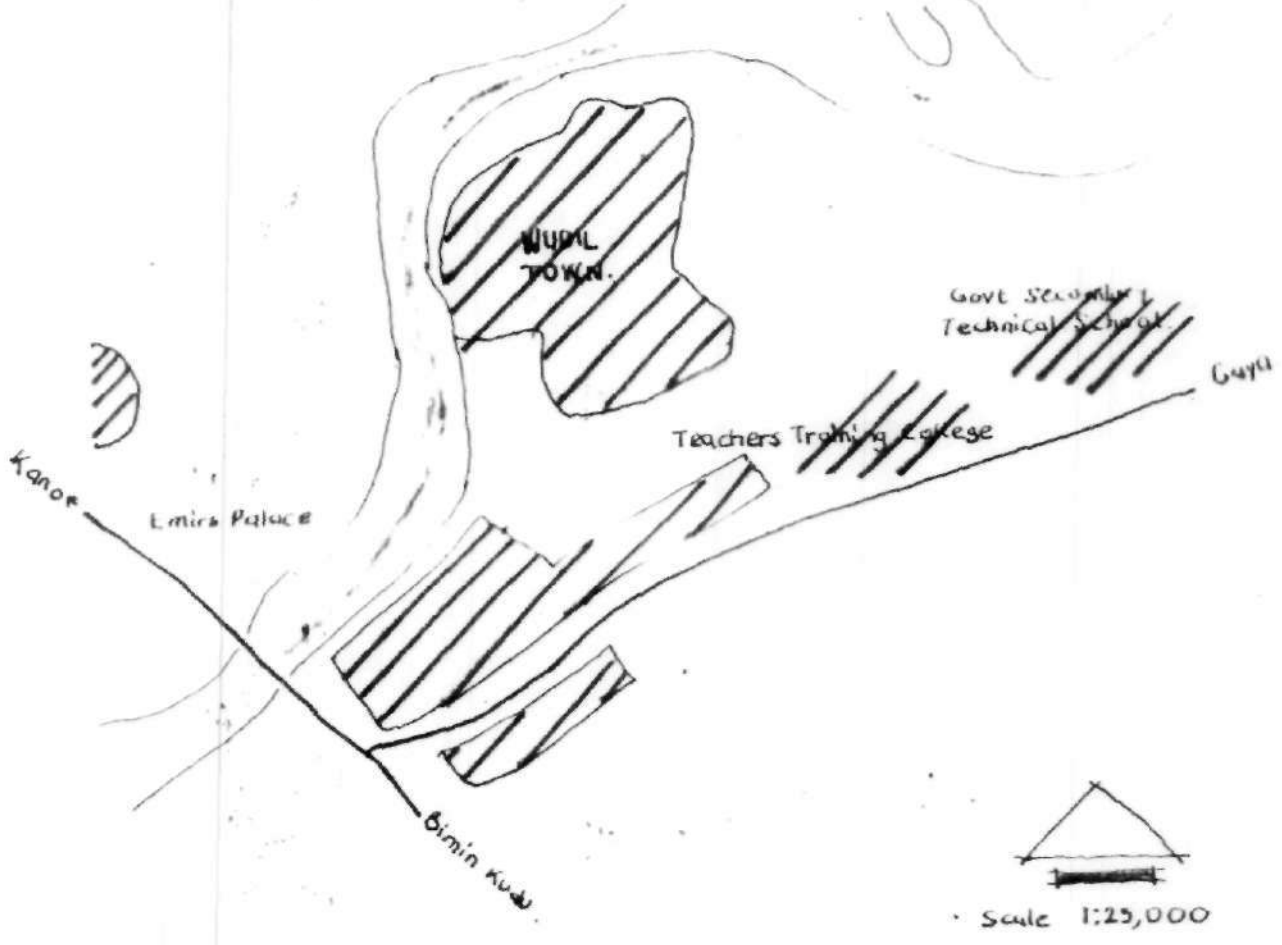


FIG. 3.9

NA'ABBA S. HASSAN
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1988-89 A.B.U.Z.

RINGIM.

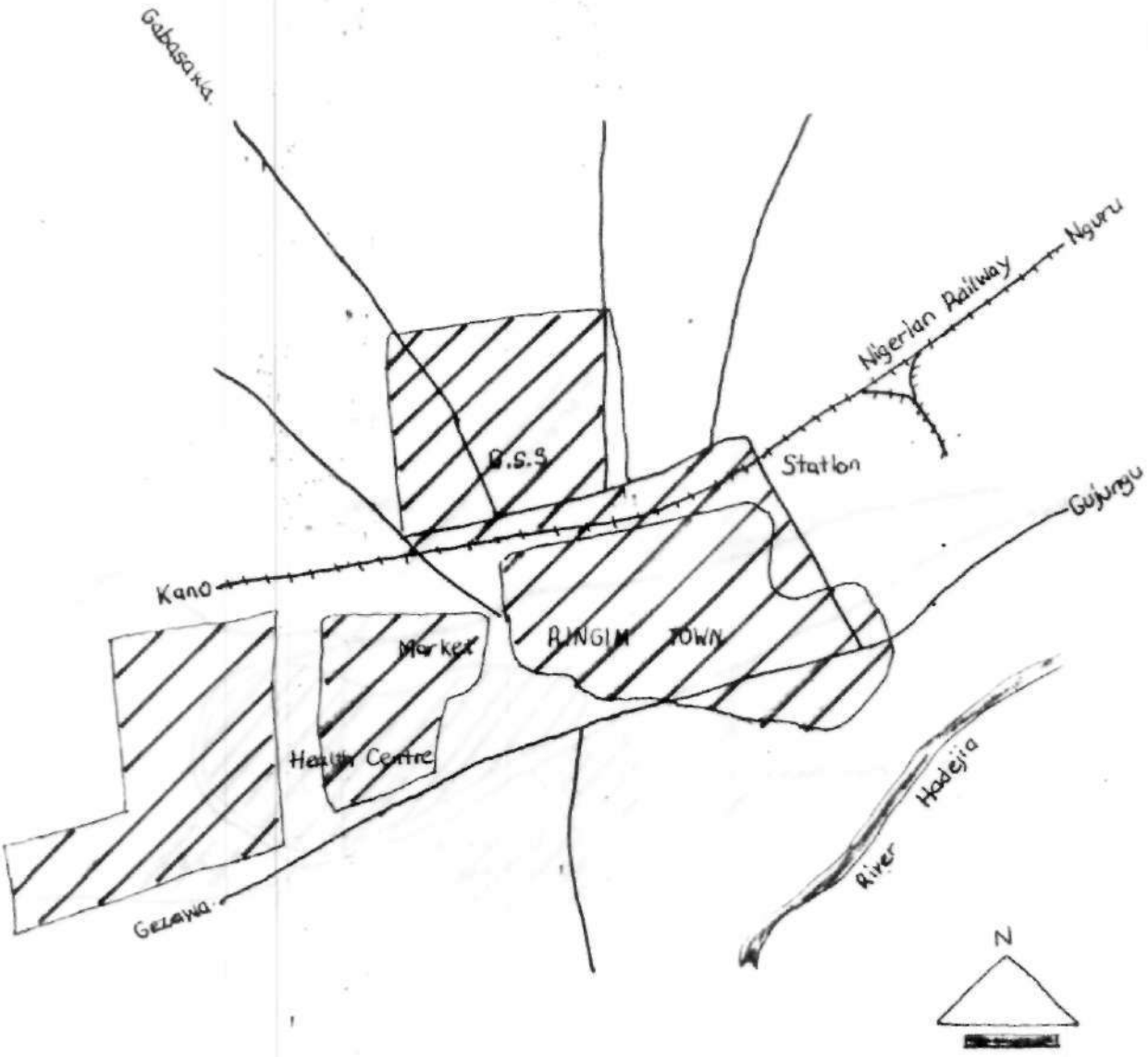
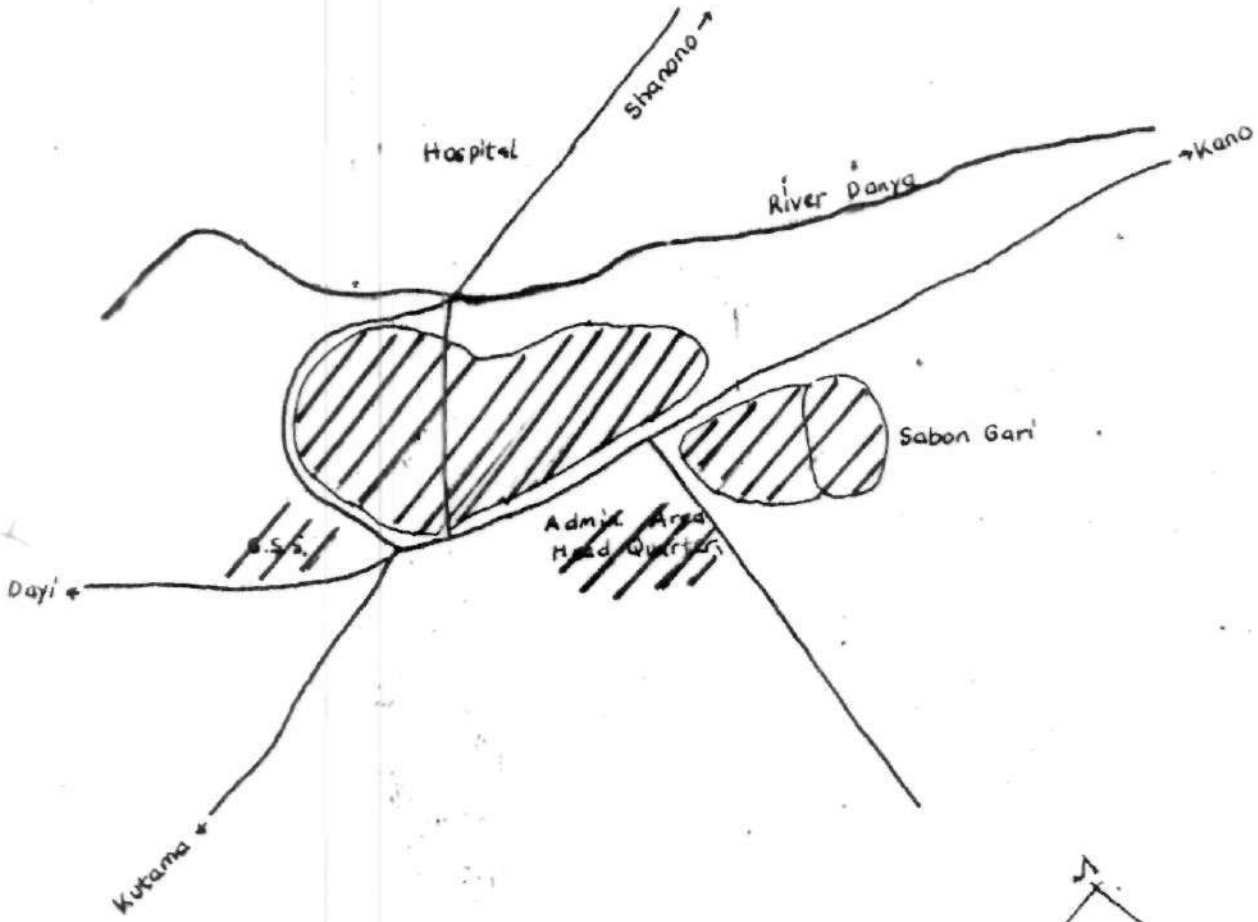


FIG. 3·10

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1988-89 A.B.U.Z.

GWARZO



Scale 1:25,000

FIG. 3·11

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M.SC. II U.R.P. THESIS
1988-89 A.B.U.Z.

KAFIN MAI YAKI

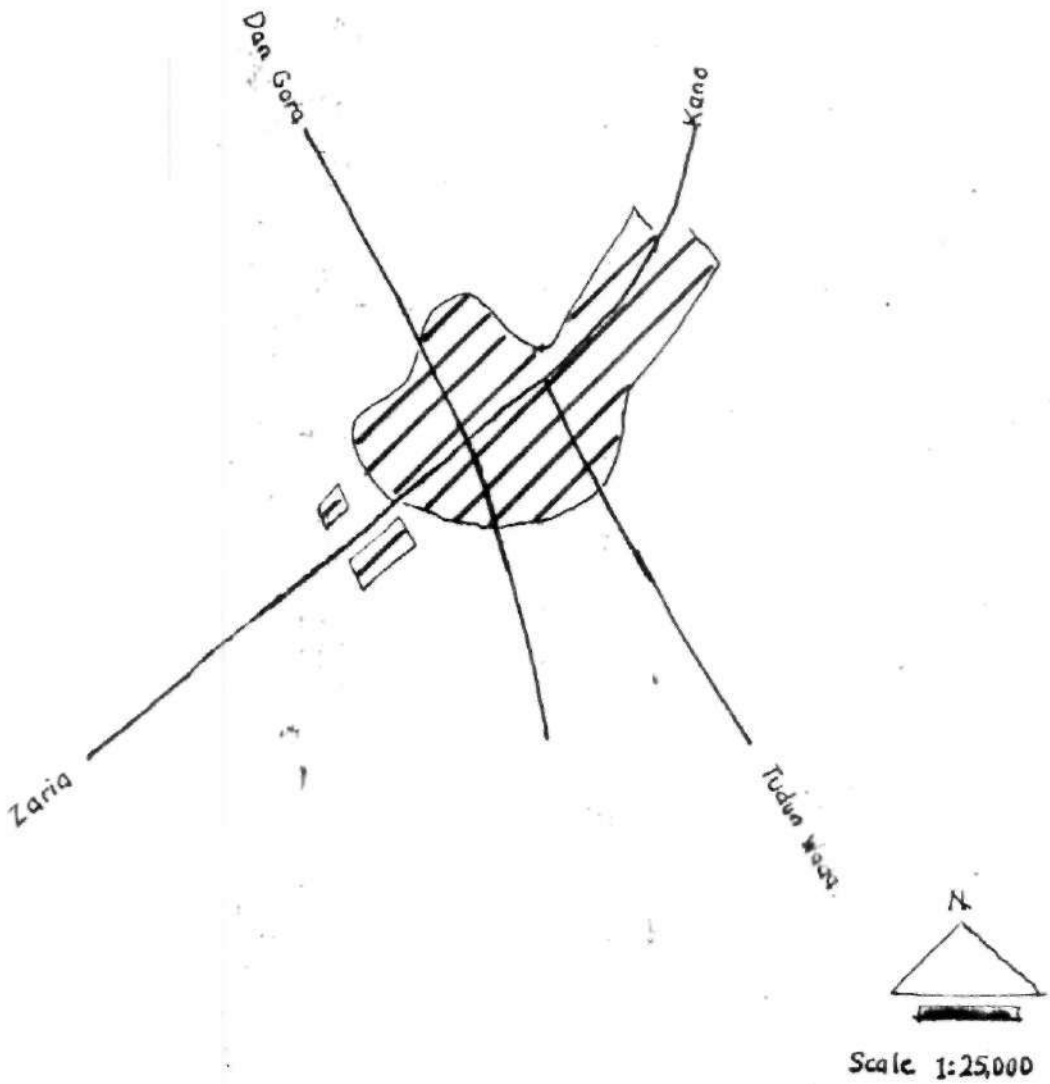
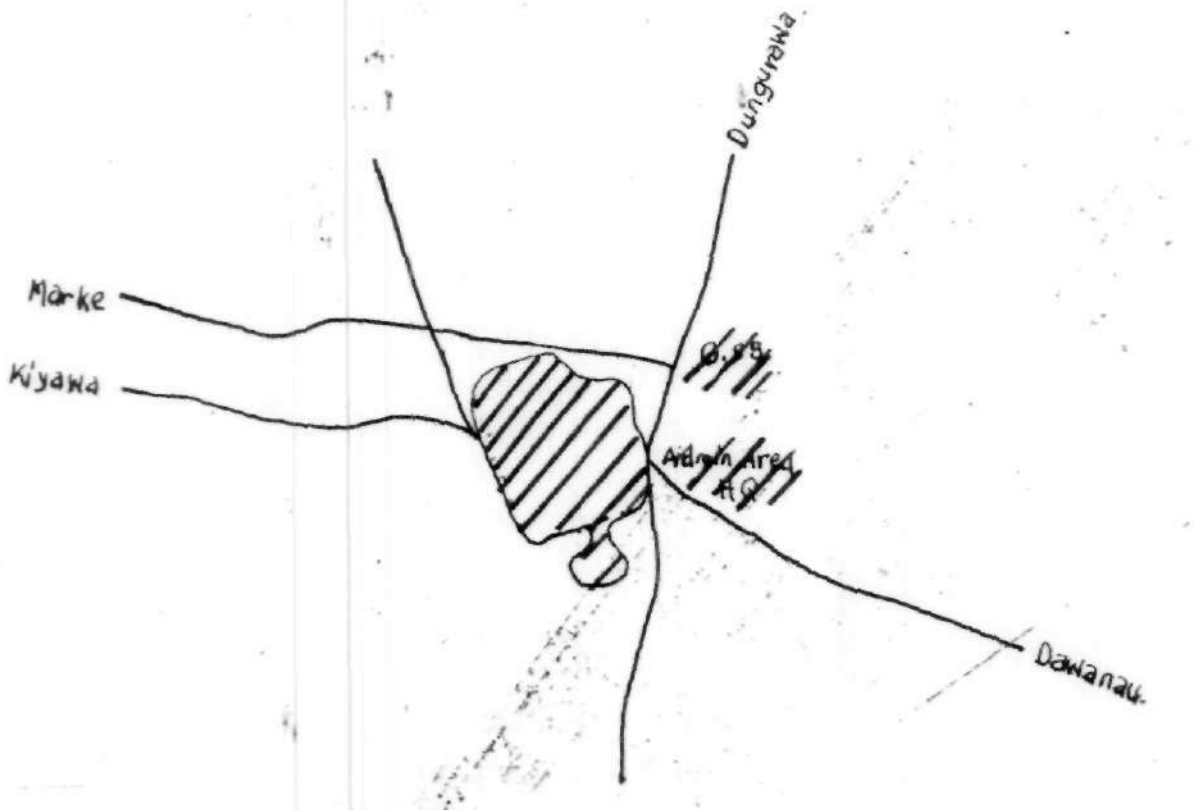


FIG. 3.12

NA'ABBA S. HASSAN
M.SC II U.R.P. THESIS
1988-89 A.B.U.Z.

DAWAKIN TOFA.



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FIG. 3·13

MA'ABBA S. HASSAN
M.SC. II U.R.P. THESIS
1988-89 A.B.U.Z.

RANO

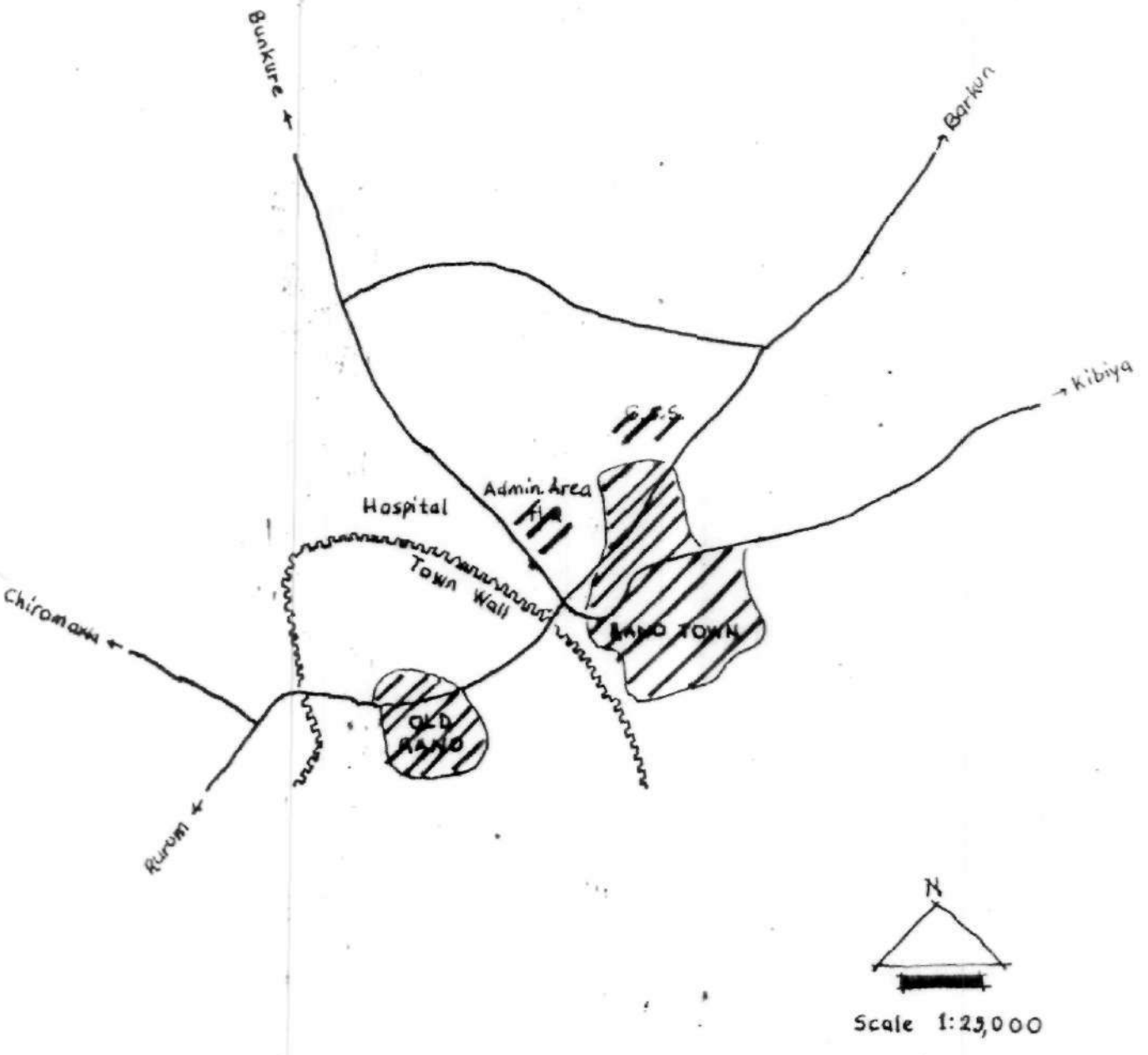


FIG. 3-14

NA'ABBA S. HASSAN
M.SC. II U.R.P. THESIS
1988-89 A.B.U. Z.

DANBATTA.

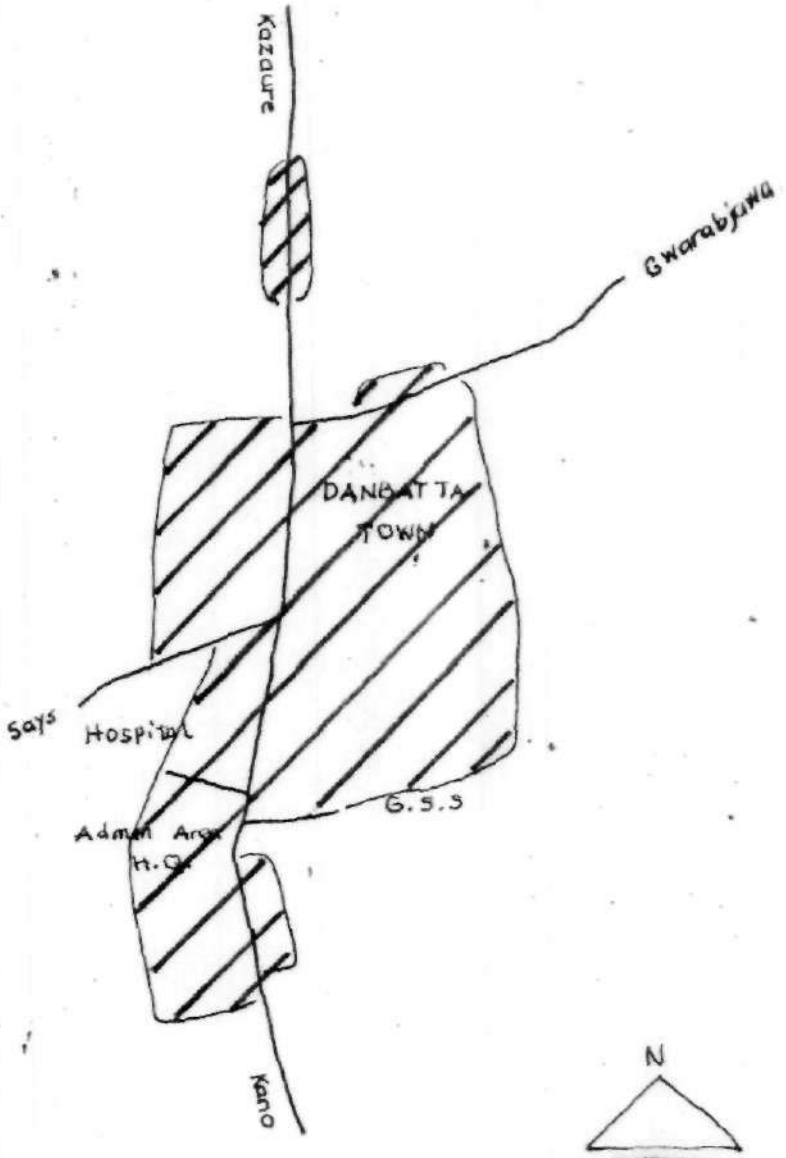


FIG. 3.15

NA'ABBA S. HASSAN
M.SC. II U.M.P. THESIS
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KURA.

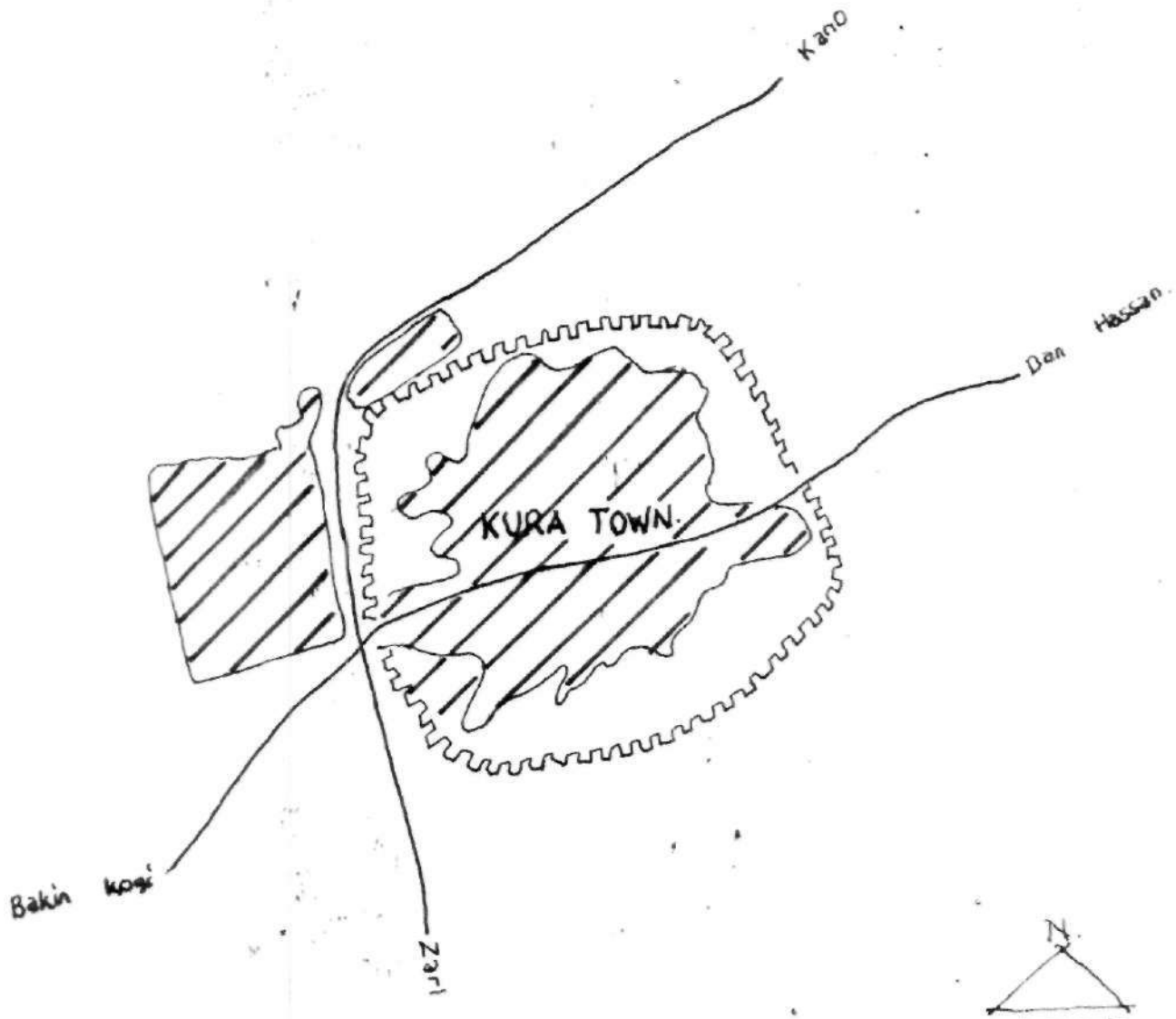
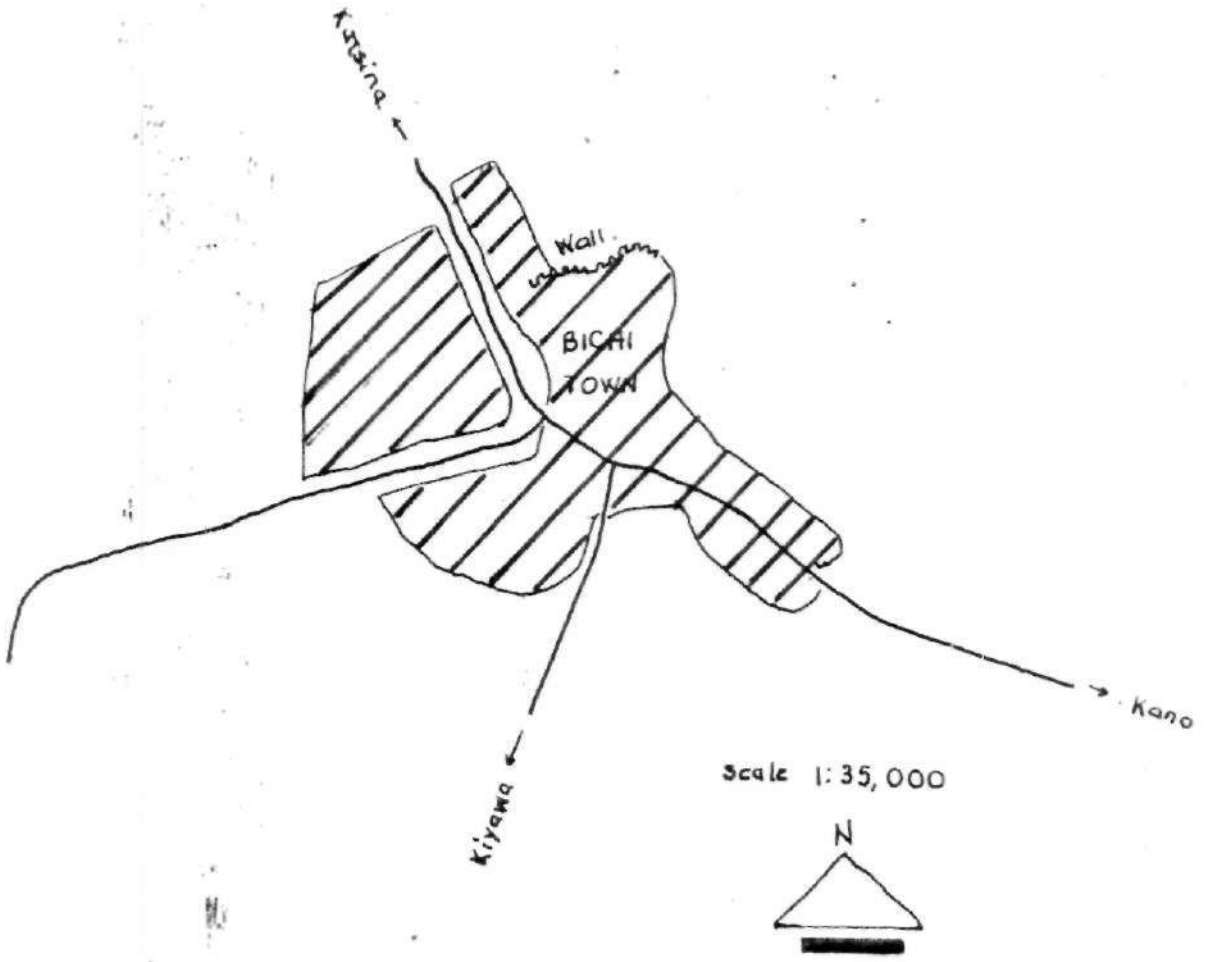


FIG. 3.16

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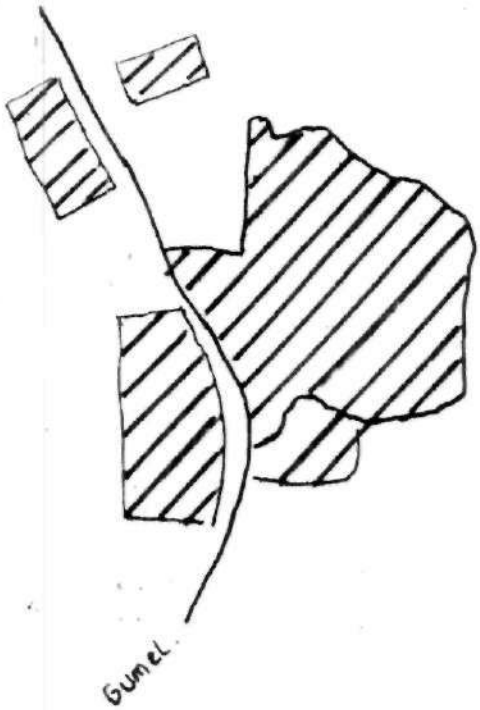


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FIG. 3.17

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MAIGATARI.



Scale 1: 25,000

FIG. 3.18

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3:20 Results of the Analysis and Research Findings

Analysis reveal that there is irregularity in city size distribution of Kano State. The metropolis is featuring some elements of regional primacy. (APPENDIX I.)

Out of the twenty nine centres analysed only one i.e. Kano metropolis qualified to be refered to as first order town. Twenty two fall into the third order, six into fourth order. It more over show that second order towns are defecient in the hierarchy. Fig. 3.20 illustrate the existing pattern. Based on the variables used for the analysis it is however find out that, out of the twenty-nine centres only twenty three are qualified by standard to be refer to as urban, i.e. only these centres has assume an urban status.

The result forthermore reveal that there is a greater divergence in level of development between Kano metropolis and other urban centres. The "million" city of the region take 59.3% of the urban population almost 95% of the modern industries, Appendix 2. 80% of the commercial institutions and more than 50% of the business turn-over of the region.[16]

The services which a city perform for its hinter land are considerable significance of its growth and development. Kano metropolis is the only town both for administration, commerce, industries and institution. This has considerably contributed

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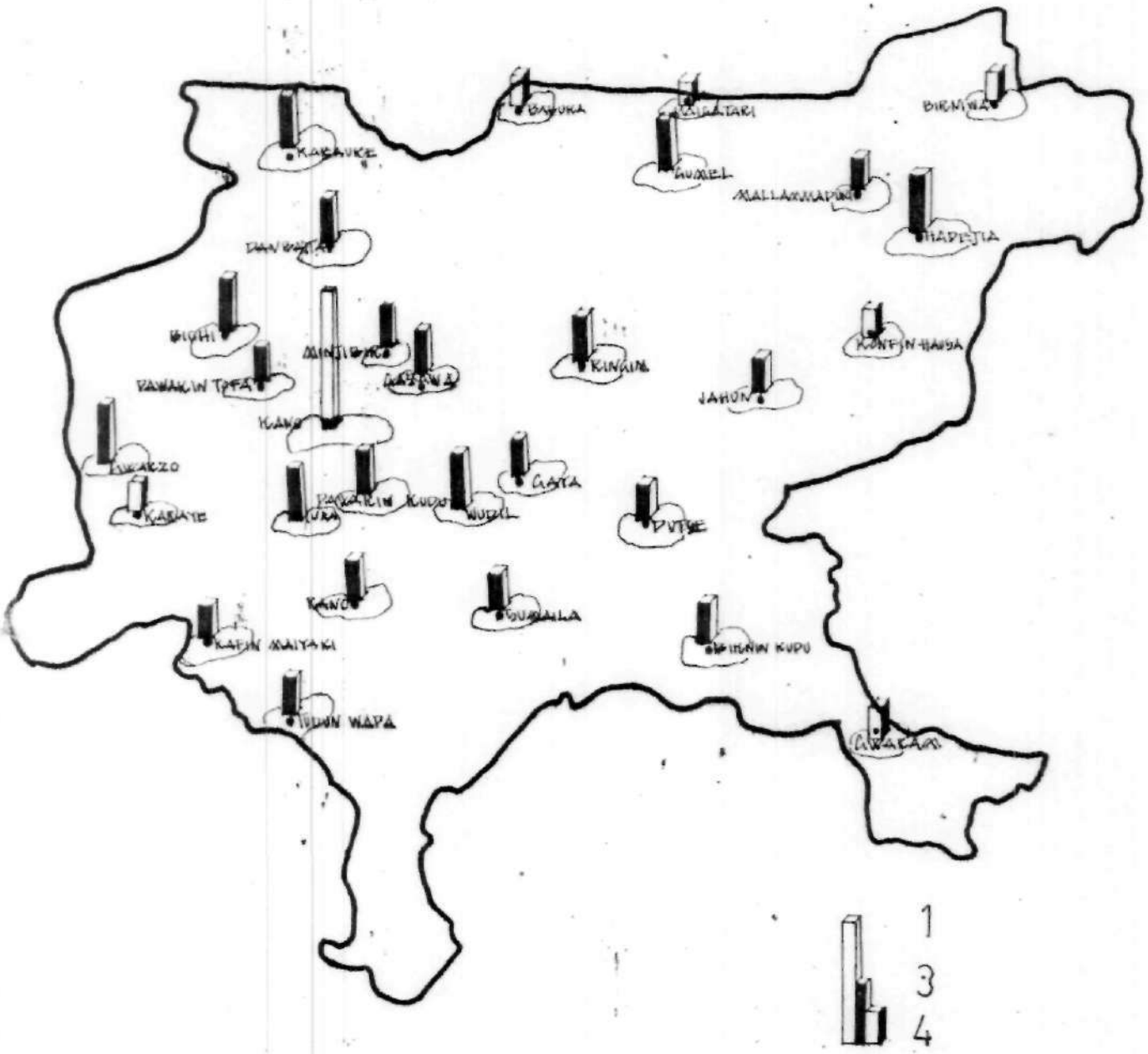
16. Author's field survey and Data analysis, 1989. See Appendix for more details.



PATTERN OF ROAD NETWORKS

FIG 3.19

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KANO STATE
EXISTING HIERARCHY OF URBAN CENTRES.

FIG. 3·20

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in limiting the spatial interaction in the region. Almost all major roads terminate at the metropolis. There is lack of spatial interaction, moverover the road net works are not well distributed throughout the region. This has a lot to do with the position of Kano. Fig.3.19. Master of everything of which every center has to focus to. This dominel role of the metropolis has not only encourage the development of satellite towns near the city. Moreover it enhanced the rapid growth and development of urban centres near the city relative to those far away. In view of the poor development of interaction, network of roads and communication system in the region. The concentration of resources, investment and facilities in the metropolis is expensive and frustrating for vast areas of the region remote from the metropolis.

The growth of centre examined in the light of functions identified that maximum growth is promoted by commercial activities, followed by agricultureal administration, Industry and other function in that order.

3:30 Implication of the Pattern and Problems Identified

The absence of second order towns results to some of the fundamental problems now facing the region, at both metropolis level to regional level. The most prominent among them are:

3;31 1. Migration

With concentration of all regional resources and investment in the metropolis people all over the region and

even beyond are attracted to the city, some seeking for urban opportunities others to enjoy the agglomeration and economy of scale the large market is providing. It was established that the metropolis is draining about 20,000 immigrants every year from its hinterland.[17] This is further more proved by the rapid peripheral growth of the city and development of squatter settlements at the fringe part of the city as seen in Fig. 3.2

3:32: 2. Un-employment

One general implication of this migration process is that a lot of this migrants are now unemployed and have been formed into very marginal service activities with extremely low productivity. The numerous road side vendours, street hawkers, beggers and host of other informal sector activities are very apparent in most big streets of the metropolis. Another problem of this informal sector apart from the nuisance they are causing. The state has no means of benefiting from their activities they are in most cases full time tax invaders.

The rate at which unemployment figure is rising in the metropolis is alarming. A table below reveal the situation within five years period.

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17. P.O. Sada 1984, The Nigerian city national Institute of Policy and Strategic Studies Publication, No. 3 Urban studies.

Table 3.1

Year	Total	Primary(Below School leavers	Secondary (Above School leavers
1979	6,728	5,578	850
1980	7,503	5,671	1,332
1981	5,564	4,478	1,085
1982	4,306	3,151	1,135
1983	32,448	10,224	22,224

SOURCES: Federal Ministry of Employment, Labour and Productivity, Kano.

Moreover the above table covers only a section of such people i.e. those that are educated.

3:35 3. Traffic Congestion

Despite the effort being imposed to control traffic and relieve traffic congestion through widening of major roads and installation of effective traffic controls, Kano metropolis is experiencing heavy peak hour traffic and numerous traffic congestion, thus travel time is every day becoming longer.

It is observed that the increase of vehicles in Kano is alarming, that it is tending to out-pace the number of urban families, while population of the town is increasing at 6.13% annually that of cars and trucks are increasing at 8.15% [18] per annum. Although now the

18. Vagale 1974, Industrial environment of Nigerian City.



KANO STATE URBAN POPULATION DISTRIBUTION 1983.

FIG. 3·21

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1988-89 A.B.U.Z.

URBAN POPULATION DISTRIBUTION
KANO STATE.
1983.

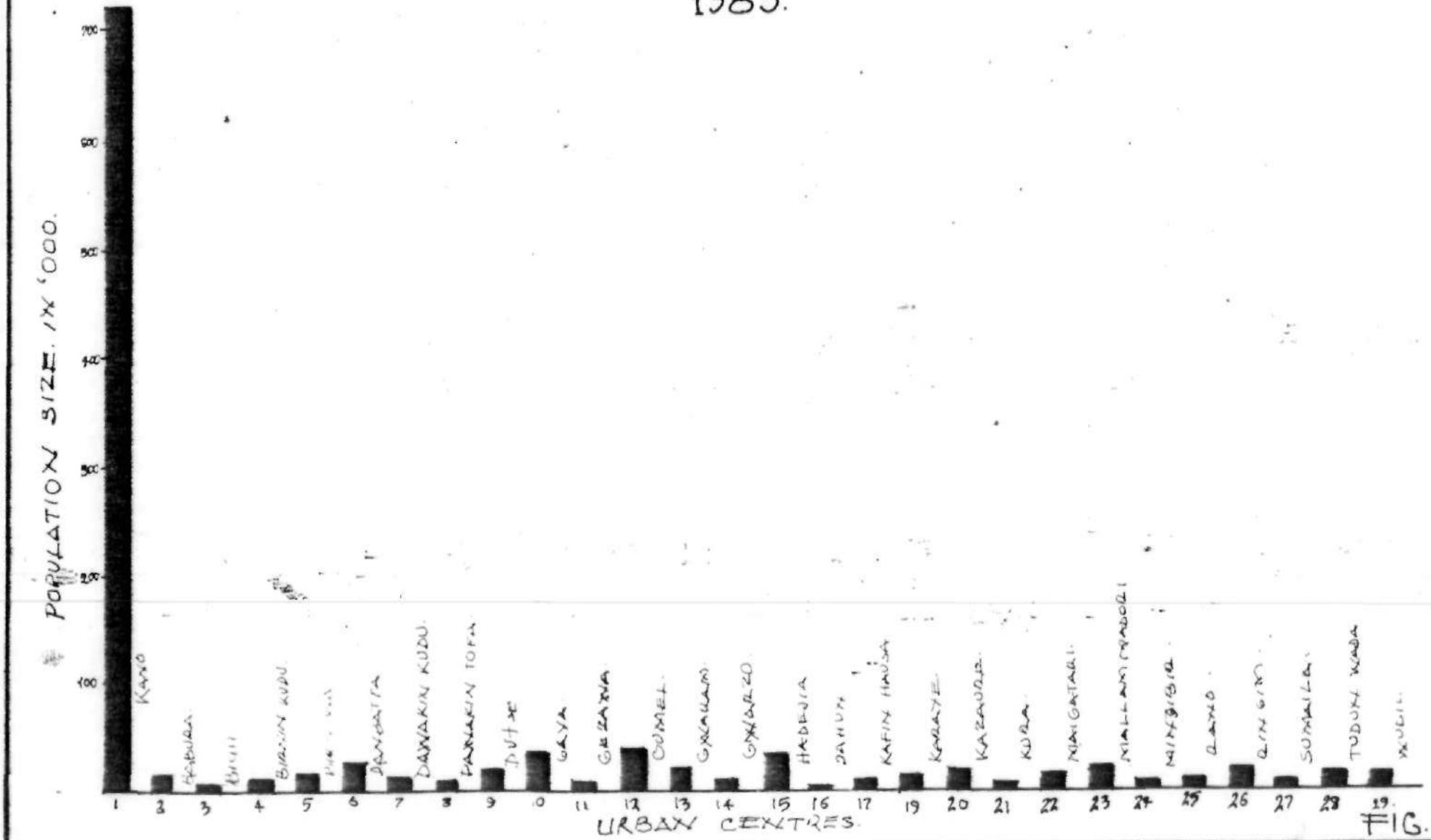


FIG. 3·22

trend may likely be declining with the current economic condition, however the city is still receiving substantial increase every year.

Regional Problems

At the regional level, there are the problem of:

3:34 1. General Stagnation of most towns in the lower order:

As indicated by the analysis, Fig. 3.10, most of the urban centres fall under third order team due to inadequate investment, commercial, industrial activities and un-appropriate distribution of utilities facilities and services to these centres. An analysis of the physical growth of most of these centres reveal that the centres are not growing. The rate of growth is highly unsignificant. The same thing happen to other variables, below table 3.2 shows the percentage of some of the major variables and their relative percentage in the other urban centres vis-a-vis the metropolis.

Table 3.2

Variables	Metropolitan Kano	Other urben centres put together
Urban Population	99.3%	40.7%
State Total Industrial Activities Modern.	95%	0%
State total commercial Institution Modern.	70%	13%
State total Utilities facilities at service.	50%	30%

3: 35 2. Retarding the Spread of Opportunities in the in the Region

The dominance role of the metropolis make the city to cohtinue to enjoy more urban opportunities, image of unlimited resource, image of constantly expanding opportunities, Employment Business, Investment become all attractive to the metropolis to enjoy agglomeration and economy of scale. This has on the other hand retard the spread of such opportunities to other subregional towns. Thus the other sub-regional centres are left with continous image of limited resource, image of limited urban opportunities. And the circle has been continuing making the region so dependent on the metropolis.

3:36: Retarding Social transformation of the region

With concentration of all opportunities of the state in the metropolis, graduates would have no place to seek for employment and residence, apart from the metropolis. The metropolis is the home of government institutions, ministries, parastales, private organisation. Industries, banks, insurance and host of others that can offer employment. While on the other hand other subregional centres has nothing apart from local government headquarters office and rural branches of banks. No any other formal institution that can offer employment opportunities. For that reason these class of people concentrate at the metropolis. This would result to high illiteracy at the other sub-regional centres. As these centres are the majority in the region, social transformation in the region would take time. This could be

the reason why up to now majority of the people outside the metropolis are yet to accept the ideas of sending their children to school especially females.

3:37 4. Retarding the Development of the Region

Cities because of their agglomeration, play an important role in national and regional development process. Agglomeration provide frequency for interaction. And this interaction has a positive correlation with high potentials for inventions. All class of people of heterogenous identity are there. Ideas would easily circulate.

With the kind of pattern existing in the state in which only Kano metropolis has agglomeration threshold necessary for such interaction and consequent invention. The spread of development in the region is much less. New idea and new innovation has only one source here i.e. the metropolis. And before it reach some areas remote from metropolis it would take time. That could have been one of the reason why it is only the metropolis that have modern industrial developments.

3:38 3. The Metropolis is Acting as a thread to the Development of the region

As earlier mentioned that Kano metropolis has attractive all the available resource, all investment, all business turn-over, all the utilities, facilities and service, That has turn the city to a monopolistic city having no competitors within the region. This has however prevent other new coming business and

investment to locate outside the metropolis, having seen all the opportunities to enjoy in the metropolis. This has thus make the metropolis to be seen as a threat to the development of the other sub-regional centres.

For these other sub-regional centres to start developing planned measures have to be taken. The market forces have to be termpered with. Induced changes have to be imposed. To dothat a hierarchy of urban centre need to be establish to know the position of each centre within region.

3:39: Model for the Hierarchy

The model involves weighting and ranking techniques. The selected subdivision of variables are given weights relative to their contribution to urban development in the study area, after which each centre is ranked in accordance with the weight of the variables it possesses. The selected variables and their relative weights are as follows:

a. Population size and density 40%

b. Commercial and industrial activities 30%

c. Political status, Utilities facilities and services, 20%

d. Size of the urban area 10%

3:40 Population size and density Total Weight 40%

The salient variables of population have been identified as gross population and density are given weight of 30% and 10% respectively.

Gross Population	=	% Weight	Overall Density	=	% Weight
0-100,000	=	3	0-50	=	0.5
100,001-200,000	=	6	51-100	=	1.0
			101-150	=	1.5
200,001-300,000	=	9	151-200	=	2.0
			201-250	=	2.5
300,001-400,000	=	12	251-200	=	3.0
			301-350	=	3.5
400,001-500,000	=	15	351-400	=	4.0
			401-450	=	4.5
500,001-600,000	=	18	451-500	=	5.0
			501-550	=	5.5
600,001-700,000	=	21	551-600	=	6.0
			601-650	=	6.5
700-001-800,000	=	24	641-700	=	7.0
			701-750	=	7.5
800,001-900,000	=	27	751-800	=	8.0
			801-850	=	8.5
900,001-1000,000	=	30	851-900	=	9.0
			901-950	=	9.5
			951-1000	=	10.0

Gross number of people is given a weight three times better than density, because it is always the quantity of people that determine every other variables, even the density inclusive.

3:41 Commercial and Industrial Activities Total Weight 30%

These are the critical commercial engagements that have been identified in the study for the basis of this ranking. They includes markets, banks, insurance, modern and traditional industries.

a. Market days are given 14% with each day given 20% marks

b. Banks are given 5%

c. Insurance are given 1%

d. Industrial activities 10%

Scale of Measurement for Banks and Insurance

Number	% Weight
1	0.5
2.5	1.0
9-9	1.5
10-13	2.0
14-17	2.5
18-21	3.0
22-25	3.5
26-29	4.0
30-33	4.5
34 +	5.0

Market is the most important commercial activity. It is even a means of measuring how big and important a centre is. Big and important centres tend to have more number of market days. Bank and insurance are not very common and not yet accepted by the people in the study area. That is why market is asign a weight higher than banks and insurances.

Scale of Measurement for Modern and Traditional Industries

Modern			Cottage/Traditional		
Number		% Weight	Number		% weight
1 - 10	=	1	1 - 10	=	0.5
11 - 20	=	2	11 - 20	=	1.0
21 - 30	=	3	21 - 30	=	1.5
31 - 40	=	4	31-40	=	2.0
41 - 50	=	5	41-50	=	2.5
51 -	=	6	51-60	=	3.0
			61-70	=	3.5
			71 -	=	4.0

Modern industrial activities are not found all over the region. They are concentrated at the metropolis. However this variable is given more weight than traditional industrial activities, because of its contribution to growth and development. This is because of the agglomeration it can generate.

3:42 Political Status, Utilities Facilities And Services 20%

Political Status 4%

Local Government headquarters = 4

District Headquarters = 2

Water Supply = 5%

Pipe born inadequate supply = 2.5

Pipe born adequate supply = 5

Electricity Supply 4 %

Rural supply = 2

N.E.P.A. = 4

Communication 3%

Air port = 0.25

Post office= 0.25

Road Network=2.0

Telephone line = 0.25

Rail line = 0.25

Police Station = 0.25%

Fire Service = 0.25%

Political status sub-variable is consider to be the most important. As centers with higher political influence and status tend to attract more political policies and project works. A good water supply is the next in importance. Water is necessary not only for domestic and industrial growth but even for physical growth. That is why centres with good water supply tends to grow relatively much faster. The samething applied to electricity only that water is far more important.

Educational Institutions 1%

University + High Institutions	=	0.5%
Post primary	=	0.25%
Primary	=	0.25%

University and other high institutions tends to generate more growth and development than primary and

post primary institutions, because of the various functions invested in them and this can relatively generate agglomeration.

Health 2%

Clinic = 0.5
Dispensary = 0.5
} Adequate 0.5
Inadequate 0.25

Hospital = 1) Adequate 1
Inadequate 0.5

Urban Recreation 0.5%

Club + Cinema = 0.25

Stadium = 0.25

3:43 Size of Urban area Total weight 10%

Square Km		% weight
0.1 - 0.5	=	2
0.6 - 1.0	=	4
1.1 - 1.5	=	6
1.6 - 2.0	=	8
2.1 - 2.5	=	10

3:44 Scale of Ranking

Town that scores 76-100 First class or first order towns that scores 51-75 second class or second under towns. Towns that scores 26-50 third class or third order towns; town that scores 1-25 fourth class or fourth order towns.

3: 45 Basis of Selecting the Variables

Some models have been used by various scholars for hierarchical organisation of urban centres. All the models have used certain consideration and variables for this purpose, depending on the objective of the exercise.

Some of the models include the one which was evolved by Reed Muech.[19] The model used centrality to propose a hierarchy of sttlement size. It was based on relative importance of central place, which are assumed to be suppliers of goods and services in excess of the amount demanded by local consumers.

J.A. Gana 1976[19] used the effectiveness of market centre of each towns to determine which of the centres should be placed at high position in the hierarchy. In his study of spatial hierarchy of settlements in Zaria division. His assumption was that provision of foods and services by market centres for the dependent population represents the major mechanism by which the surrounding region is effectively linked to the central place.

In the same way Christaller[20] also used centrality. And refered to centralized service, as services

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19. J.A. Gana, 1976, Spatial hierarchy settlement in Zaria, Nigerian Geo. Journal/ Vol. 19, No.2.

20. M.G. Kutty, 1967: Metropolitan and regional planning problems of organisation.

concerned with Administration, culture, health, social service, organisation of economic and social life, trade and industries. He uses the centralised services as his variables for the ranking.

Losch's work[21] on structural proportion in the location of a hierarchy of cities was able to come out with a theory which was based on the assumption that in every region there is a basic large populations areas performing central function, after which consist of centre performing elementary production and distribution function. Their market area is usually limited by the longest distance that is tolerable to the population which it serves. Using that as basis he postulated a hypothesis, that the size of any city is proportional to the population it serves. Using the formula

$$C = K (rtc)$$ he was able to produce his hierarchy of city size, where

r = population

c = the size of city

k = the proportional factor.

Pareto used the size of the largest city to determine the size of other centres in his hierarchying. His assumptions was that the size of the any city is approximately one of the size of the largest city, i.e. the size of

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21. Beckman M.J. 1958, Page 243-248 Econ.Development and Cultural Change, Vol. 6.
City Size Distribution and Economic Development.

the largest city. i.e. the size of any Second under city is approximately one half.the size of the largest city.

Nayan Singh[22] in his attempt of making a hierarchy of Indian villages was able to design a model, using such variables as communication network, population size, community service, amenities and productivity pattern. The model assigned weight to the variables and the total relative weight each village scored was added and that determine the position of the village in the hierarchy. Jaymala Diopee[23] in his

Table 3.3

Model and Author	Variables Selected	Purpose	Remark
Reed-Muech Model	: Excess functional units : Total functional Units : Population size	to determine a central place.	Applied mainly to those functions which repond directly to consumers demand.
Spatial Hierarchy of settlement in Zaria J.A. Gana	: Central functions : Utilities, facilities : Population size : Size of the town	to determine the functional hierarchy of centres.	Applied to economic activities can also be used for administrative and efficient distribution of services
Centrality: Christer	Central Services Administration Culture Health Social Science Industries	to find the centre of highest order	Mostly relevant to administrative ranking and sitting of firm
Losch's Theory of Location	: Population size : Size of the city	A locational model.	Applied to firm and commercial activities that would locate to maximize return of investment.

22. Nayan S.S. A simplified procedure for identifying the hierarchal growth centre is an area. Journal of the Institute of town planning India. No. 75 June,1973.

23. Jaymala D V.S. Datye 1982. Use of Settlement hierarchy in identifying of growth centres for regional planning Poona district, the Deccon Geographer Oct-Dec. 1982, No. 3.

Parto Distribution. Rank size rule	: Rank of the city : Size of the city	To determine normal or regular hierarchy of city size.	Theoretical in nature applied in a region known to have a normal hierarchy.
Procedure for identifying the hierarchal growth of centres Nayan Singh	: Communication network. : Population size : Service : Amenities : Productivity pattern.	Particularly used to determine hierarchy of some villages in India.	Although used for village hierarchy, can be used to over urban centre with a little modification.
Use of settlement hierarchy in identifying of growth centres. Jayamal Dibbee	: Population size : Function : Utilities facilities services	Particularly used for regional planning in Poone district India.	A good model for regional hierarchy of centres.

study in which he intend to identify growth centre in Poona district of India using settlement hierarchy gave more emphasis to population size, function, utilities, facilities and services.

It is observed from the case studies sited above in table 3.3 that a regularly recurring variables in the ranking are population, utilities facilities and services. Besides, most of the other models emphasize the central functions performed by the city. In the case of the urban centres in Kano, the major controlling function is commercial and to some extent slightly industrial, of particularly relevance is J.A. Gana's work on the spatial hierarc y of settlement in Zaria. The setting for the study has similar socio-political as well as urbanization experience and therefore, even though he uses the other

variables already discussed, alone his variables of size of urban centre becomes very important. It is largely on the basis of these reasons that this study has settled for the following variables for the purpose of ranking centres in Kano State.

1. Population size and density
2. Commercial and industrial activities
3. Utilities, facilities services and political status
4. Size of urban centre

3:46 Assignment of Relative Weight to the Variables

The selected variables are not the only variable responsible for the growth and development of an urban area, but for the purpose of this study the role each of the variables plays in the growth and development of Kano region are considered.

Ponulation size and Degree of Agglomeration

This is considered as the most important variables in the ranking of urban centres. This is because concentration and size of people are very crucial to urban growth and development. It is believed that innovation spread, urban opportunities and other aspects of urban dynamics are critically tied to people.

Within the study area, the other variable which is second to population in importance is the function, the pro- nant urban functions are commercial and industrial activities as is particularly related to the history of Kano region. Kano is known to be one of the most important

Commercial centres of the trans-saharan trade and of course of modern day Nigeria. Towns that fall within the trade routes of Kano region tend to grow and prosper with due respect to this function.

Utilities, facilities services and political status, are catalysts to urban growth in Kano region. Centres that are opportuned to have an efficient supply of this variables tend to be in better position to grow and develop more rapid than other areas. The degree of accumulation of these variables in a settlement are very relevant to the "Urbanness" of that centre.

Lastly, the bigger the size of an urban area, the more important the centre is in the the region, the better the centre is with regards to growth and development. Therefore the geographic or spatial spread of the urban sphere has been given this position in the ranking exercise.

It is on the basis of the above argument that the study decide to rank the centres, using the aforementioned variables, with a total of 100% points in the following order:-

Population size and density 40%

Commercial and Industrial activities 30%

Political status, utilities, facilities and services 20%

Size of the urban area 10%

The basis for the assignment of 40%, 30%, 20% and 10% weight to the various variables may at first appear arbitrary. A more indept and thorough scientific basis centering on a stronger imperical and statistical research will be required to bring this weighting exercise anywhere near friality. Even after such thorough analysis, any resultant model derived there from will still be subject of intellectual controversy. The weight assigned in this study have been based more on cursory observation from field work, Data available, Inferences from literature and the inferical roles which each variable seems to play in the urban growth and development within the region. Weights that have been used within the region of 40%, 30%, 20% and 10% produce a satisfactory basis for proceeding with the analysis, of course subject to further studies in this subject area; the details of which time and other constraints would not permit in the scope and present conception of the study.

Chapter 4

SUGGESTION AND PROPOSALS

This chapter contains suggestions and proposals on how to solve the problem of regional disparities in the study area, and any other part of the country that may have similar pattern. Suggestions were given on measures to be taken at each tier of government. General planning criteria and requirements are given to achieve regional balance. Proposals were narrowed down to local level. The proposals includes measures to be taken to create second order centres that are absent in the hierarchy. Adequate subregional linkages and adequate distribution of utilities, facilities and services.

4:10 Suggestions

In order to minimise the imbalance and further more discourage the occurance of regional disparity, a comprehensive regional development strategy has to be evolved, and intergrated with the wider national development strategy. Policies and plans for urban development should be fully co-ordinated with policies and plans for national development. These issues involves the joint work of the three tiers of government and the co-ordination between them.

In light of this, the study intends to propose measures at three levels of government federal, state, and local.

4:11 Measures at Federal Level

A coherent policy for urban development is urgently needed in the country to guide urban and regional development, as an integral part of a general strategy for development. This policy is to establish guidelines for planning of a coherent pattern of settlements in terms of distribution of population and location of economic activities. At the same time, the allocation of financial resources have to be directed towards the new goals for urban development. Appropriate legislative and administrative measure must be taken to ensure implementation of this policies. It is in line with that, the study further re-emphasises the need to intergrate physical and economic planning at both federal and state levels so as to have an equitable distribution of resources throughout the regions and to all sectors.

4:12 Measures at State Levels

The state governments needs a long term plan to ensure better distribution of population, resource and economic activities throughout the state. The plan should include among other things:-

1. Identification of centres on functional basis, their resource potentials and constraints to development.
2. The distribution of and trends in the population of the state capital vis-a-vis second and third order towns.

3. The distribution of and trends in economic, commercial and industrial activities and linkages between them.

4. The distribution of utilities, facilities service and Amenities.

5. The allocation and proper investment of financial resources.

Designated urban centres should play the role of a service centres. They should be seen to attract people, investment and at the same time dispersing development to the neighbouring settlements. To make these centres play this role, the state government must direct all resource first and foremost towards raising agricultural out-put at these centres, by increasing yield and by expanding available arable land. The government should furthermore make adequate public investment of economic opportunities and social amenities in presently under-developed parts of the region to redirect the stream of rural migration from the congested region.

4:13 Measures at Local Government Level

The structural frame work for planning needs to be located together with that for development and strategically enough to guide, influence and achieve implimentation. Although presently local government has manpower and legal constraints, there is also a problem between political boundaries verses planning boundaries. However this tier of government, with recent trend of events in which the federal government give subvention directly to local governments. They therefore have financial resource, they

also have rural land, population, political support and independence. They can therefore:-

a. Mobilise human and financial resources to serve local planning.

b. Provide means for local participation in urban regional development.

c. Co-ordinate at the local level a wide range of inter-dependent progects and adopt these to local circumstances. It should be seen to actively play that functional role. It is therefore suggested that this tier of government should be given more power to plan and implement their projects. More especially as planning and local government are local affairs and therefore should be tackled locally.

4:20 Planning Basis and Requirement for the Proposals

From the data analysed it is concluded that the hierarchy of centres is irregular, with too much concentration of centres in the third order status, and the second order is virtually absent. It is further reveals that the road network and pattern all focus on Kano metropolis. Internal linkages within the same hierarchy of centres is very inadequate. This has continue to raise the status of the metropolis. And making all centres to depend on it.

Utilities, facilities and services are grossly inadequate in most of the urban centres. Modern industries are all concentrated in the metropolis.

Virtually none of the other subregional urban centres have a modern industry. To rectify this problem in the region, and to effectively utilise the available human and material resources. The following guidelines are proposed. These criteria forms the basis of the proposals contained in the proceeding part of the chapter.

4:21 Basis for Hierarchy of Centres

To reduce the regional imbalance and improve the quality of life of the people throughout the region. There is a need to have a regular distribution of city size. In order to achieve this the following criteria are proposed:-

1. Population size of the centres needs to be determined.
2. Spatial area of influence of each centre and services provided by the centre to the surrounding region should be considered.
3. Development requirement and potentials of each centre should be assessed and established.
4. Presence of national resources in the centres should be clearly known.
5. Location and accessibility of each centre in the hierarchy should also be considered.

4:22 Basis for Sub-regional Linkages

To enhance accessibility and development within the region the following criteria are proposed for road planning.

1. A good network should link centres of about the same hierarchy as much as possible.

2. Road net work should encourage vertical and horizontal linkages between various hierarchies of settlement's in the region.

3. Road network should be laid to enhance relationship between the urban centres and their neighbouring villages.

4. The proposed second order centres should be linked effectively with third order centres.

4:23 Basis for Distribution of Utilities, Facilities and Services

Apart from Kano metropolis which has about 80%[24] of the utilities, facilities and services, analysis has revealed that these facilities are inadequately provided in the region. To have a balanced distribution of these utilities, facilities and services the following basis are proposed.

1. Population threshold and planning standards as contained in a proposal here after for the provision of these utilities facilities and services have to be considered.

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24. Author's field survey, 1989.

2. The status in the hierarchy of centres have to be reflected in the distribution.

3. Equity and distributive justice have to also be considered in the distribution, with a view to minimize the imbalance.

4. Increasing the general welfare of the people have to be taken into cognissance in the distribution process.

4:22 Basis for the Location of Proposed Industrial Development

In order to achieve a balanced regional development throughout the region there is a need for industrial distribution at appropriate points throughout the region. However for a general principle the following should be the basis for industrial development throughout the state.

1. Emphasis should be on agro-processing i.e. that would creat general demand within the environment.

2. The hierarchy of towns have to be considered together with their sphere of influence when locating the industries.

3. Availability of raw materials also have to be considered.

4:30: Proposals

Based on the analysis of the problem and findings, the following proposed measures, have been evolved in order to deal with the problem of irregular pattern of city size distribution in the state.

1. Restructuring the existing hierarchy of centres
2. Proposals for distribution of utilities, facilities and services
3. Proposals for effective sub-regional linkages.

4:31 Proposed Hierarchy of Centres

The analysis has tried in the proceeding sections to establish the existence of irregular city size distribution in Kano region and the attendant problems caused. In the main, there is a total absence of second order towns in the hierarchy. And more over Kano metropolis is assuming a domineering status within the state. There exists also an over concentration of centres of the third order class.

It is in view of the outlined findings that a proposed new hierarchical arrangement of urban centres in the state is made. A suitable hierarchy of the following order is here-in proposed

One - first order

Four- second order

Eight - third order

Sixteen - fourth order

This proposed pattern would bring about regularity and balance in the hierarchy of urban system in the region. The pattern is illustrated in f.4.1 It is proposed that only the thirteen centres of first to third order be refered to as urban centres. The remaining sixteen are to be regarded as semi-urban. Fig. 4.2 show the new proposed pattern vis-a-vis the existing.

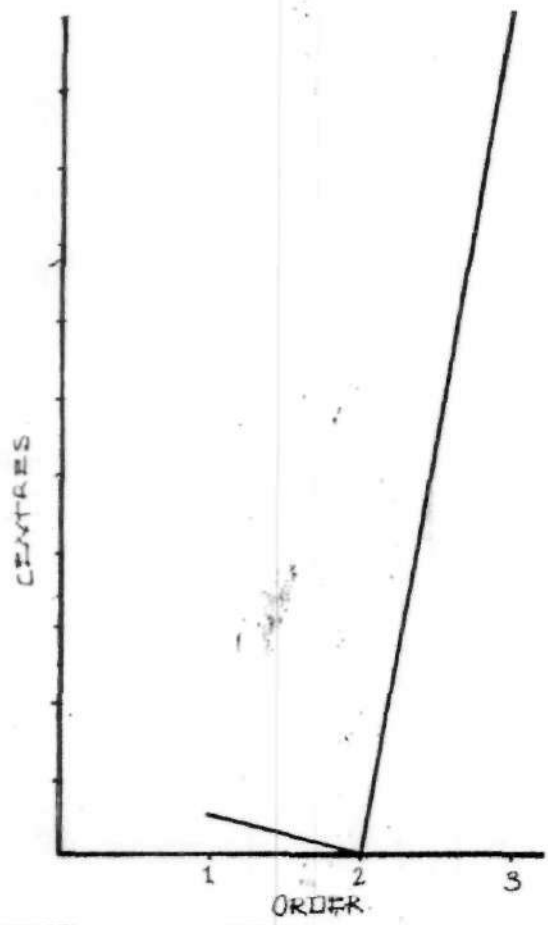


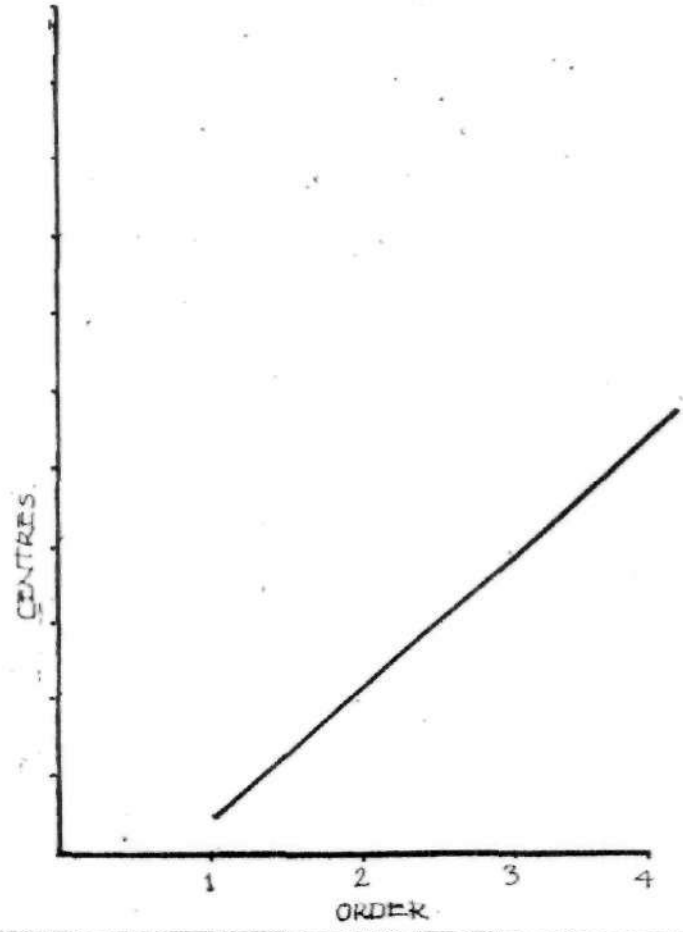
PROPOSED HIERARCHY OF URBAN AREAS

FIG. 4·1

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EXISTING		PROPOSED
ONE.	FIRST ODER	ONE.
NONE.	SECOND ODER	FOUR.
TWENTY TWO.	THIRD ODER	EIGHT.
SIX.	FOUTH ODER	SIXTEEN.





PROPOSED PATTERN OF HIERARCHY.

FIG. 4.2

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4:32 Schedule of Requirements for the Proposed Centres

Proposed First Order Centres

There should be one first order settlement in the hierarchy. It should act as a foci for regional and national development. This centre should serve as the state capital, it should have all state level centrel functions. It should take 50-60% of all industrial and commercial activities in the state. Since Kano metropolis is already carrying out such central function and it more over has all the necessary requirements, the centrally located, the study propose the retaining of this center as the first order centre. This would however go along way in reducing the coast of implementation of the proposals.

Proposals, planning requirements and standard for the provision of utilities, facilities services and amenities are provided in table 4.1

Second Order Centres

The number of towns proposed for this order are four. Presently there is absence of this order in the hierarchy. For this reason, some centre from the lower order towns need to be up-graded to attain this status. The choice of these centres is based on analysis of certain variables, which are considered very important for ideal location of these centres. This is contained in Appendix

The second order centres should be of urban status and serve as foci for regional and local development planning. These centres could assume administrative functio as local government headquarters,. However, the influence

of the central functions should go beyond the local government area. They could assume the role of zonal subregional headquarters for regional development. Put together these centres should take about 30-40% of industrial and commercial activities of the state.

Proposals, planning standards and requirements for the provision of utilities facilities services and amenities are provided in table 4.1.

Proposed Third Order Centres

Presently there are twenty two of such centres in the region. And what we have in the proposals are eight. These eight centres were obtained from the application of the same variables used in the analysis of the second order towns used. They were to be provided with adequate facilities to enable them assume the responsibility of third order settlements. The other fourteen centres are to be assign a semi-urban status.

The third order centres should act as foci for local and district area planning. They should function as local government headquarters with local area and district central function. Put together the centres should take 10-20% of all industrial and commercial activities in a state. (mainly of traditional and cottage types).

Proposals, planning standards and requirements for the distribution of utilities, facilities and services is provided in table 4.1.

Table 4.1

UTILITIES FACILITIES SERVICES	PARTICULAR ITEM	STANDARD	FIRST ORDER		SECOND ORDER		THIRD ORDE	
			Normative	Realistic	Normative	Realistic	Normative	Realisti
Population				5000,000-1,000,000		50,000-100,000		50,000
Education	1. Nursery	1/7,500	130	80	16	4	1	1
	2. Primary	1/3,000	333	180	16	10	6	3
	3. Secondary	1/12,000-16,000	83	30	10	3	5	1
	4. Post Sec.	1/50,000	20	10	1	1	0	0
	5. University	Exclusive	1	0	0	0	0	0
Socio-Cultural	1. Mosque	1/5,000-15,000	40	40	10	10	2	2
	2. Pub. Library	1/25,000,50,000	10-20	6	1-2	2	1	1
	3. Museum	50,000-100,000	10	2	1	1	0	0
Postal	1. Central	1/750,000	1	1	0	0	0	0
	2. Post Office	1/30,000-10,000	31-33	20	1	1	0	0
	3. Sub P/Office	1/25,000-50,000	20-40	10	5	2	2	1
Fire Service	1. Firs Station	1/25,000-50,000	20	10	2	2	1	1
Police Serv.	1. Post	1/20,000	50	30	5	3	1	1
	2. Station	1/100,000	10	7	1	1	0	0
Prison Ser.	1. Prison	1/Town		1/Town	1/Town	1/Town	1/Town	1/Town
Health	1. Central State	1/State	1	6	0	0	0	0
	2. Teaching	"	1	1	0	0	0	0
	3. General Hosp.	1/½-1 million.	1	1	0	0	0	0
	4. Distric. "	1/100,000-150,000	10	5	1	1	0	0

	5. Pri. Health CH	1/30,000-50,000	20	12	2	2	1	1
	6. Health Centre	1/10,000-30,000	100	15	10	7	5	3
	7. Mental Hosp.	1/200,000-40,000	5	3	0	0	0	0
	8. Leprocy Hosp.	1/13,000,000	0	0	0	0	0	0
	9. T.D. Hosp.	1/150,000-300,000	6	2	0	0	0	0
	10. Dental Centre	1/150,000-300,000	6	3	0	0	0	0
Water	Pipe Burne	100 litre/cupit/ day	15milion litre/day	500million litre/day	5million liter/day	100milion litre/day	1 million litre/day	20,000 litre/day
Electricity	1. National Grade	Adequate	Adequate	Adequate	Adequate	Adequate	-	-
	2. Rural						Adequate	Adequate
Bank	1. Main branch	1/Town	1/Town	1/Town	1/Town	1/Town		
	2. Ruz-1 branch						1/Town	1/Town
Telephone Exchange		1/Town	1/Town	1/Town	1/Town	1/Town	1/Town	1/Town
Amenities	1. Cinema	"	"	"	"	"	"	"
	2. Stadium	"	"	"	"	"	"	"
	3. Park	1/5000	200	"	10	"	2	"
	4. Area Court	1/Town	1/Town	1/Town	1/Town	1/Town	1/Town	1/Town

Sector	Particular Item	Standard	FIRST ORDER		SECOND ORDER		THIRD ORDER	
			Normative	Realistic	Normative	Realistic	Normative	Realistic
Industrial	Manufacturing							
	Agro processing	1/5-7000	142	142	7-14	7	7	5
	Small Scale	1/5000	200	200	10-20	10	10	7
	1 Cottage	1/5000	200	200	10-20	20	10	10
Commercial	Large daily market	1/800,00	10	6	1	1	0	1
	Shopping Centre	1/80,000	10	5	1	1	0	0
	Market place	1/5-7000	1/cohert	1/cohert	1/cohert	1	1/cohert	0
	Cooperative store.	1/15,000	1/cohert	1/cohert	1/cohert	1	1/cohert	0
	Cooperative shop	1/15,000	1/quarters	1/quarters	1/quarters	5	1/quarters.	5
	Cooperative Bank	1/80,000	10	5	1	1	0	1
	Produce Buying Centre	1/5-7000	10	5	5	5	5	5



DISTRIBUTION OF EDUCATIONAL FAC

FIG. 4·3

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1988-89 A.B.U. Z.



DISTRIBUTION OF SOCIO-CULTURAL FAC

FIG. 4·4

NAABBA 9: HAGGAY



DISTRIBUTION OF HEALTH FACILITIES

FIG. 4·5

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DISTRIBUTION OF INDUSTRIAL ACTIVITIES

FIG. 4.6

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DISTRIBUTION OF COMMERCIALS ACTIVITIES.

FIG. 4·7

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Proposed Fourth Order Centre

These centres should be sixteen in the hierarchy. These centres should acts as foci for their respective local district. And have semi-urban function. However since their population threshold is in most cases the same with the third order centres they are to enjoy the same provision for the distribution of utilities facilities and services.

4:33 Proposed Distribution of Utilities, Facilities Services and Amenities in the three proposed Hierarchy of Centres

This proposal is based on standard as submitted by chapin. The study further propose a normative and realistic values of the items in each of the status of centre.

The normative is drive from the standard while the realistic is in addition what the study feel is realistic considering the stage of development of the study area and existing national economic predictment.

4:34 Selection of Centres

The centres to be upgraded are:-

1. Four from third order to second order
2. Eight are to be given facilities to maintained a better third order status.

The following are the variables that have been used for the selection.

318847

a. Urban population and physical growth 50%

b. Distance from Kano 20%

c. Resource potentials 20%

d. Administrative status 10%

The relative weight were distributed as thus:-

(1) Urban Growth

Population and physical growth are considered as the highest variable because they are the most viable variables that can show trend in growth of the centre. Twenty years assessment was undertaken of the population and physical growth of the centres. Centres with highest population and physical growth are more likely to grow faster and therefor given more score.

More over as population is the most important factor here and independent, it is assign 30% while physical growth is assign 20%,

Population 30%

Formerweight		Present weight
20-10	-	30
10-5	-	20
5	-	10

Physical growth 1969-89

SQ km		% Weight
1.0	-	20
0.9-0.7	-	15
0.6-0.4	-	10
0.3-0.1	-	5
0.15	-	0

Distance from Kano Metropolis 20%

Since there is an over concentration of centres near Kano, preferably the proposed second order centres should be located away from Kano, that should even help in

diverting the focus away from Kano metropolis direction. As such, centres would be given weight relative to their distance from the metropolis. The further away the centre is from Kano metropolis the higher the weight.

Distance km		% weight
150 - 200	=	20
100 - 149	=	10
50 - 95	=	5
5	=	0

Resource Potentials 20%

It is assume that the more a centre has resource the more chances of rapid growth and development of the centre. It is on that basis therefore the following assignment of weight is done.

Resource		% Weight
Goed climate condition river and Dam	=	20
Good climatic condition and river	=	15
River and Dam	=	10
Good climatic condition	=	5

Administrative Status 10%

Centres with higher administrative status or that enjoy long term of higher administrative status tend to grow and developed more rapidly than centres that are of low status or are given higher status of recent time. Therefore here centres with higher administrative status and long term are assign higher weight. This is because the

former has for long been acting as foci and attracting project than the later, therefore can groth much faster.

Administrative status		% weight
Former emirate headquarters	=	10
Initial local government headquarters	=	5
Recent local government headquarters	=	2
District headquarter	=	0

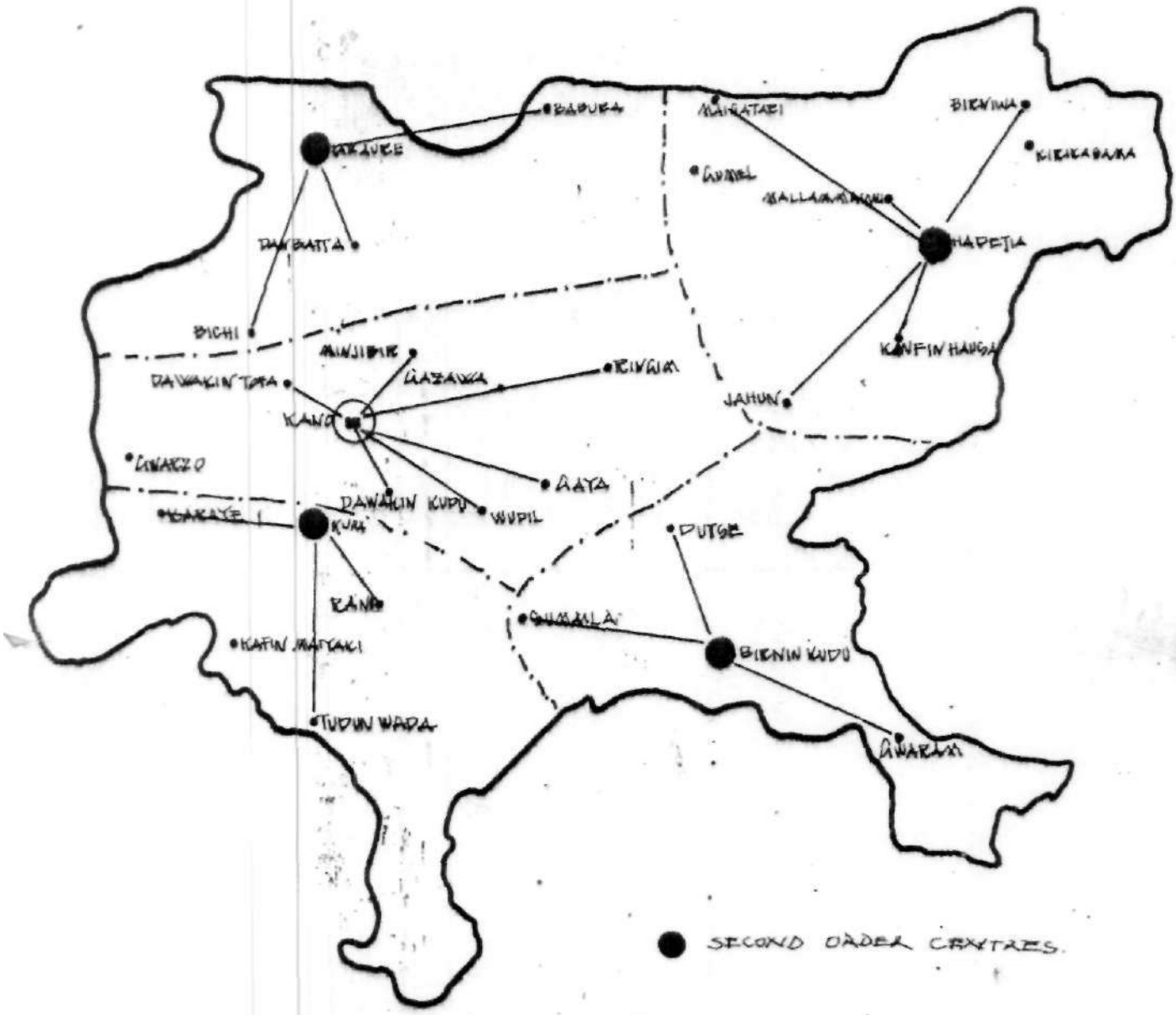
Results of Analysis

The application of the result of the analysis indicates that Hadejia, Birnin kudu, Kura and Kazaure have qualified to be up-graded to second order and Gwarzo, Ringim, Gwaram, Danbatta, Sumaila, Gumel, Tudun wada and Bichi are to be given incentives to attain a better third order centre. The result of the analysis is contained in the Appendix 2.

4:40 The Proposed Second order centres and their Likely sphere of influence

Background Study

The proposed second order towns are the towns proposed to act as foci for regional development. They are spread at the four corners of the state . Two of them are former emirate headquarters i.e. Hadejia and Kazaure. Birnin Kudu was an area headquarters of Kano South East area. Kura is relatively a recent creation and is located on an important regional roads Kano-Zaria, the towns has been able to grow very rapidly.



PROPOSED SECOND ORDER CENTRES AND THIER LIKELY SPHERE OF INFLUENCE

FIG. 4·8

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4:41 Hadejia

Situated at the north eastern corner of the state. With a total population of 37,041 people (1983)[1] it is the second in importance with regards to growth and development after Kano metropolis. It is about 209km away from Kano. The town was the headquarters of Hadejia Emirate council controlling eight districts. With the introduction of 1976 local government reform Hadejia emirate was broken into two local government areas.

Hadejia was able to raise in status because of the relatively good agricultural land, and the presence of the Hadejia river. This river is used for irrigation farming. Presently Hadejia is one of the most important rice producing areas in the state. As it is very far from Kano, it would attract and spread developments to towns and villages that are within eighty kilometers away from the towns (i.e. the sphere of influence of Hadejia would be about eighty kilometers radius.) Such centres as Jahun, Kafin Hausa, Birniwa Maigatari, Gumel and host of others would focus on Hadejia instead of the metropolis. Fig. 4.8

4: 42 Birnin Kudu

Located at the south-easthern part of the state on Kano-Maiduguri road. It is about 134 km away from Kano. Birnin Kudu was the headquarters of Kano southern east area.

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1. Statistical year book 1984 (Kano State Ministry of Economic Planning).

Being located at the southern part of the state, the town has a good climatic condition that favours cultivation of variety of crops. It also has a good grazing land for rearering.

It has a total population of 11,318 people in 1983 projected from 1965 census. The town when developed would attract a lot of people and spread development to towns within the range of 50km radius because of its strategic location. Centres that fall within this range include Gwaram, Dutse, Sumaila and host of others. Fig. 4.8.

4:43 Kura

It is very close to Kano metropolis, just 40km on Kano-Zaria road. It derives its importance from the presence of the road. It has a population of 7,418 (1983) people. It is an agricultural town. Here agriculture is practised throughout the year. The irrigation farming is much more important in this area than the rainy season farming. Kura produces more than fifty percent of tomatoes and pepper used in the state.

Its proximity to Kano could be seen as a regional planning problem especially to adding more of urban physical expansion of the matropolis. However the town being an agricultural settlement is rather helping in checking the physical expansion towards that side, i.e. creating an agricultural buffer zone between Kano and Kura. This approach would be more

beneficial. When the centre is given more incentives it would developed as entirely an agricultural town, especially as most of its neighbouring towns such as Kadawa, Bagauda are also agricultural centres.

When developed as growth centre, it would have a sphere of influence of about 80-90km to the south of the state. Centres such as Tudun wada, Karaye, Rano Wudil may likelly focus to this centre. Fig. 4.8

4:44 Kazaure

Lying to the north of the state, it is a town of many natural elevations, punctuated by rocks and small streams. It is about 90km from the metropolis. The old settlement is situated on a depression between hills, however growth is now taking another direction outside the depression.

Since 1960 there has been great socio-economic, agricultural and administrative changes in the town. The town is yet another agricultural towns. At present there are two schemes, one for dry season wheat, and tomatoes, the other dry season with rice as the main crop. There are two irregated areas one at Wanwan Rafi and the other is at Jakande operated by two dams.

The town has a population of 21,105 people, (1983) and its about 90 kilometers away from the metropolis. Kazaure town when given incentives would really developed to a big sentre. And could help in spread of development to such centres as Dambatta which is also coming up already, Babura and Bichi, fig. 4.8.

4:50 Proposal for New Sub-regional Linkages

One of the major problems in the study area is the pattern and direction of linkages. Most of the major roads terminate at Kano metropolis, with not much extensive regional linkages. This has contributed considerably in the underevelopment and absence of intergration in the region.

With this problem, and considering the new proposed growth centres the study intends to proposed the following hierarchy of roads.

1. Free ways: regional roads to provide regional and metropolitan continuity and unity, to link first order centres to second order. It should moreover link the second order towns. This road should have a right of way of 60-90m and carriage way of about 15-22m[25] and should be tarred.

2. Sub-regional roads to link second order centres to third order centres. It should also provide linkage within the third order and semi-urban centres. More consideration should be given to this class of roads, as it is the kind mostly deficient. This kind of road should have at least a right of way of about 30m and carriage way 7.[25] It should also be tarred.

3. Inter-districts, to provide linkages within the fourth order centres and to neighbouring villages.

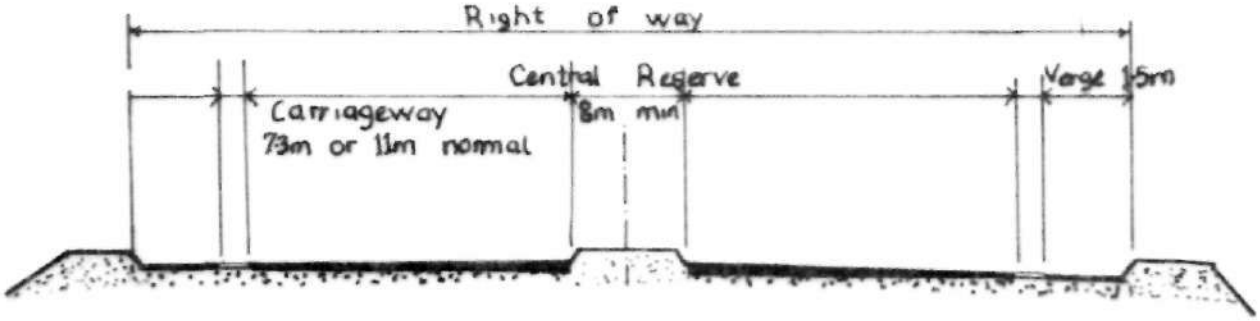
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25 Oluremi I. Obateru, 1986 page 10.

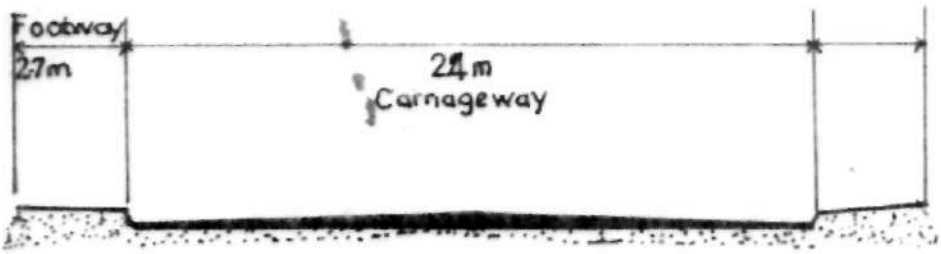
It should also provide linkage from neighbouring villages to any of the centre discribe above, should have a right of way of 24m and carriage way 18m, and should also be tarred.

The cross section of the three proposed kinds of roads are provided in fig. 4.9 and the proposed regional pattern in fig, 4.10.

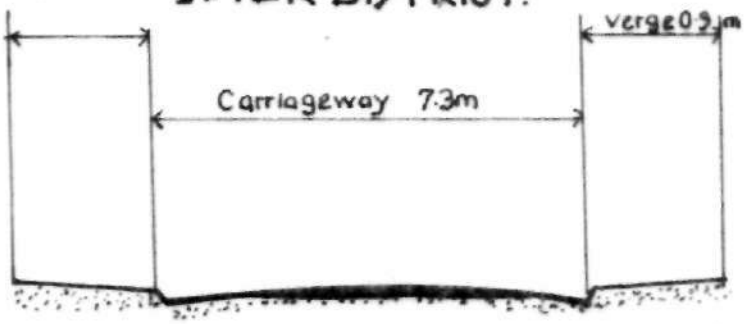
REGIONAL ROAD



SUB REGIONAL



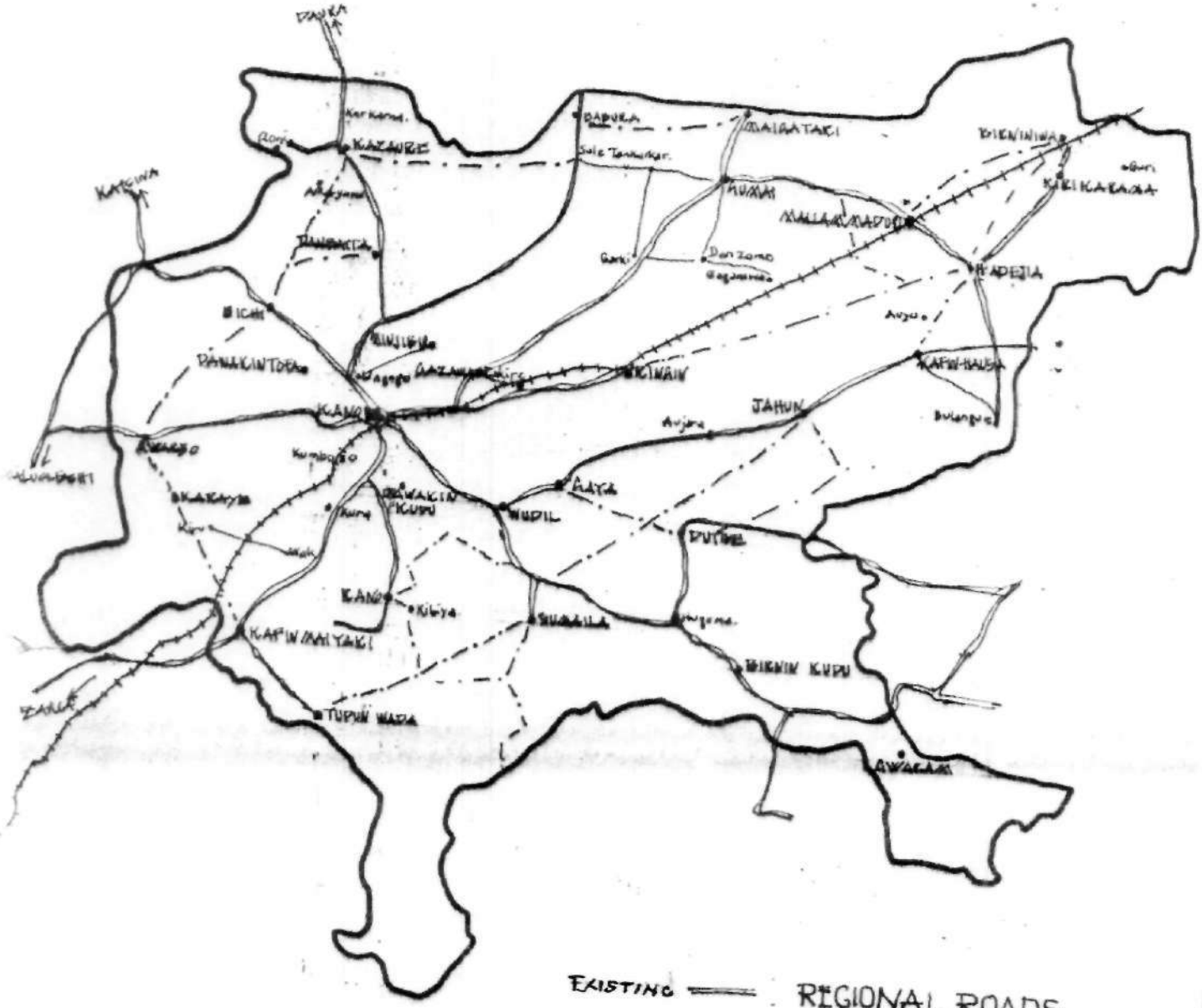
INTER DISTRICT.



PROPOSED HIERARCHY OF ROADS.

FIG. 4·9

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PROPOSED HIERARCHY OF ROADS.

FIG. 4.10

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1988-89
A.B.U. Z.

Chapter 5

RECOMMENDATIONS AND IMPLEMENTATION

The chapter deals with recommendations, programme and framework for implementation, phasing and conclusion. In line with the proposals two major recommendations were given. Industrial and commercial investment in each of the selected sub-regional second order centres. This is however back by policy guide lines that would help in the implementation process.

5:10 Recommendations on the Selected Sub-centres

In line with the proposals and for initial stimulation of growth and development in these centres, the following are recommendations aimed at strenghening the economic base, of the proposed centres.

Siting industries at the four proposed centres, the resource potentials of each of the centres needs to be assessed vis-a-vis the possibility of locating the definitive industries.

Table 5.1

Centres	Poetntials	Recommendation of Investment
Hadejia	- High potentials for Rice production. - High potentials for Commercial activities - Potentials for cattle Rearing.	- Should be devdlop as commercial centres. - Rice processing Industries. - Milk and other dairy processing industries.
Birnin Kudu	- Potentials for lime stock - Potential for quarrying.	- Livestock allied industries. - As commercial centres - Milk and other dairy processing - Quarrying Industries.
Kura	- Potential for tomatoes rice and sugar production. - Conclusive environment for learning	- Should be developed as Institutional and Agriculture. - Other related agriculture Industries, such as farm implement and fertilizer.
Kazaure	- Wheat production - Tomatoes production - Sugarcane production	- Flour mills - Tomatoes processing - Sugar processing industry

It is worth while to mension here that these potentials shown in table 5.1 are not exhaustive, however they are the resources needed at this initial stage to initiate development. Moreover the recommended industries do not have to be very modern and sophisticated. They could at this initial state be so simple and indigenous way of processing such agricultural commodity of the area. It is Grongly believed that this can stimulate growth and development in the respective areas.

It is also believed that the establishment through adequate public investment of commercial activities in a wider sub-regional centers in the state would help reduce congestion at the metropolis, and people who could have migrated to the metropolis would be attracted to these areas thus relieving physical congestion and social depression in the metropolis. It would also help in providing economic opportunities and social amenities in the under developed parts of the region.

However the success of this proposal depends on, at the initial stage government ability to invest and campaign for the growth of these centres. For effective taking up of this proposal the state government policy have at this time:-

Give more preference to the four proposed centres in:-

1. the process of resource allocation, in the distribution of utilities, facilities and services.
2. Aim at developing the four centres as growth poles and foci for the spread of development
3. Direct all further public investment on industrial and commercial activities to the new proposed centres.
4. Give private firms all kind of encouragement to locate at the new centres, (such as free site and services plot, import tax free, tax holiday.)
5. Encourage through campaign and assistance the development of local industries (traditional and cottage).

6. Direct all new institution coming up to located at the proposed centres especially higher educational institutions.

7. Aims at making all it's parastatals such as K.S.U.D.B., W.R.E.C.A., N.E.P.A. Nitel, Nipost, Investment and properties, Kano foundation to open effective zonal offices in each of the proposed centres.

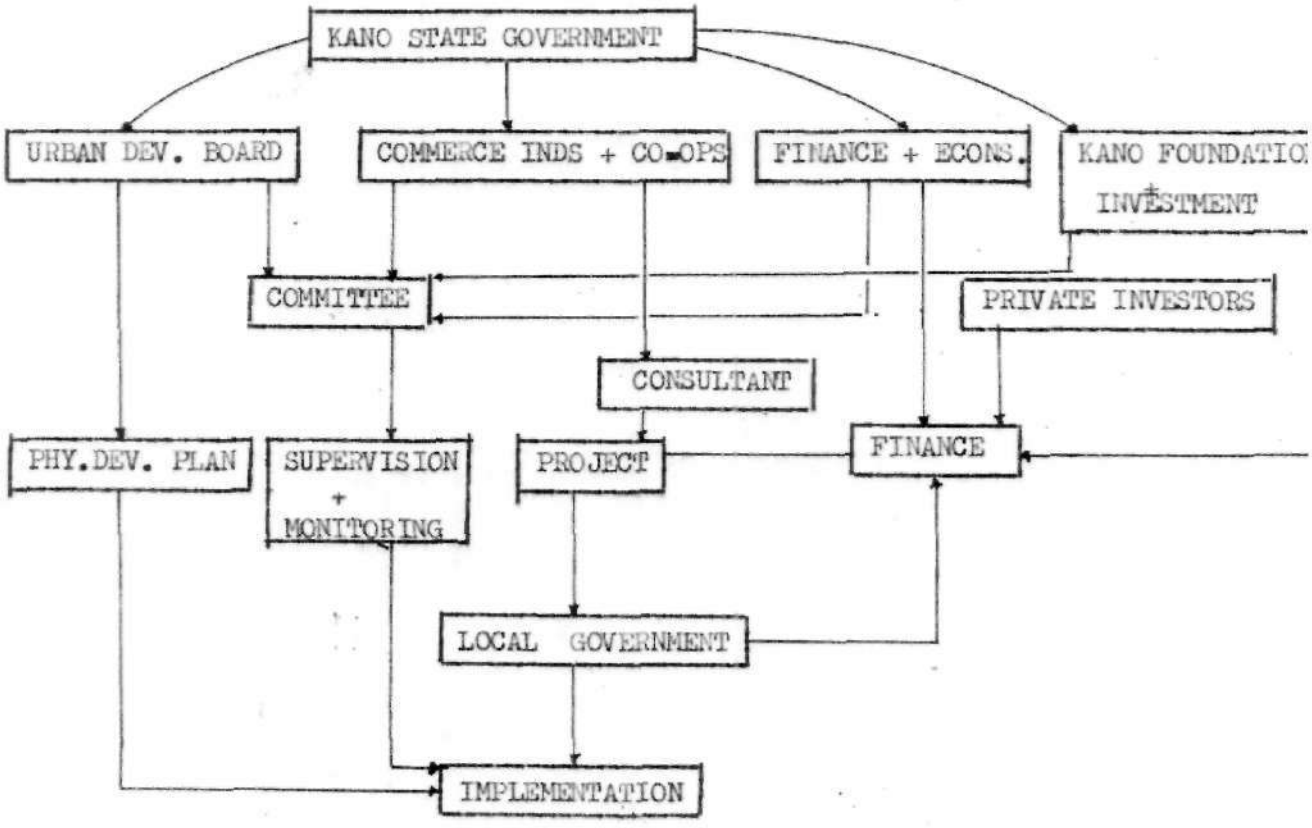
At the same time making the Kano state Urban Development Board a regional planning machinery i.e. dealing with planning of the whole region not only urban centres. The former would be more effective as it would compose of so many professional, to cover all aspects of stream of development.

5:20 Programme for Implementation And Phasing

For proper implementation of these proposals the two tiers of government, state and local have to work hand in hand. The state government represented by relevant ministries and parastatals to provide with the development plan, documents, the master plans, layout, infrastructure, utilities, facilities services and some part of finances; for each of the projects. The local government would ensure the implementation and co-ordination of the projects. A supervision committee would be formed at the state level with its members drawn from each of the

ministries and parastatals involved. This committee should be changed with responsibility of supervision and monitoring of each of the projects.

Fig. 5.1



FRAMEWORK FOR IMPLEMENTATION

FIG. 5.1

As stated in the proposals, two centres, Bimin Kudu and Hadejia were to be developed as commercial centres, projects to be done here include upgrading of the main markets. The exercise will involve design and construction of a much bigger market that would be function every day

in the two areas. The design and construction is to be carried out by Kano of the urban development board financial by the respective local government. At the compleshing of the construction the market will be fully owned by the local government. It is the body that would hold the responsibility of allocation of shops and stable to respective investors.

To attract private inves ors the shops and stall should be free and tax free for at least two years pending on the circumstance. The Kano state Investment and should take 10%, commerce industries and co-operative 5% Kano foundation 15% local government 10% and private Investors 60% of the total investment i.e. business turn over of each of the two areas. However state government is to make the two centres depot for the sell of agricultural products.

For the industrial activities all the four centres were to be explore as submitted by the proposals. Here, Kano State urban development boards would design and construct small scale industrial layouts in each of the four centres. Industrial site and services plots should be allocated as follows.

10% to investment and properties
5% to local government
10% to Kano foundation
65% private investors

As stated earlier industries should base on resource of the respective areas.

The allocation formula for both commercial and industrial investment can later on be review as circumstances warrant. The bringing in of large government investment at this stage is necessary so as to create the necessary business agglomeration that would attract more private investors to the areas.

5;30 Bodies and Organisation Involved

1. Kano State Urban Development Board

The physical planning machinery of the region. It will provide master plans, layout plans and detail designs and construction of every industrial, and commercial layout of the areas.

2. Ministry of Commerce, Industries and Co-operatives

To intensify research, to identify areas of potentials and constraints for industrial and commercial activities, look in to the possibility of sitting specialised industrial and commercial activities, encourage the growth of local markets. Provide business consultancy service. Keep records and stocks of industrial and commercial activities of the state. Mobilize and compaign to people the importance of the programme.

3. Ministry of Finance and Economic Planning

As the state's body of finance and economic planning, its function is to propose for enough financial vote allocation to the project. Guide the plan and direct all government investments to the project.

4. Kano Foundation

It is a non-governmental self-help organisation with idea to pool resources and used or invest for the common good of the people of the state. It was initiated by the people of the state with aim of complementing the role of government to solve societal, social and economic problems.

The foundation has already enough finance to go into large project investment. This project could be one of the areas where the association can use the money for the common good of the people of Kano State.

5. Kano State Investments Properties and Co-operatives

It is a government parastatals, form with idea to invest government resources in profit ventures. This parastatals is to be one of the source of finance for the propose projects.

6. Local Government

As the tier of government very close to the people, can therefore help in mobilising people to invest in to the projects. They are also to co-ordinate implementation. Management and coordination of all government commercial and industrial Ventures should be undertaken by this tier of government. They also to be part of the finances, more especially as they are now receiving large subvention directly from the federal government.

In addition the following bodies need to be aware of the activities of the proposals so as to reflect them in their future plans :

1. N.E.P.A.
2. W.E.R.C.A.
3. Ministry of Land and Survey
4. Ministry of Work
5. NITAL
6. Nipost
7. Ministry of Education
8. Ministry of Health
9. Fire Service
10. Police force

Phasing

Initial stage of the projects should concentrate on the provision of linkages throughout the state, and distribution of utilities, facilitate and services. This would be followed by sitting Agricultural processing industries. That could create demand for agricultural raw materials and service in their respective centres. It is this kind of activities that would initiate growth, development and accelerate the comulative process of urban growth.

The implementation would be in two phases of five, five years. Given moren priorities to incentives, facilities and service at Phase one while the second phase would feature the fully undertaking of the projects. The details of the phasing in illustrated in Table 5.2

Table 5.2 (cont.).

Sector		PHASE ONE					PHASE TWO				
		Years									
		1	2	3	4	5	6	7	8	9	10
Commercial Market design + Construction	Design + Construction works.			———							
Commercial Campaign + Mobilization	Campaign and Mobilization		———	———	———						
Commercial People Investment	Investment					———	———	———	———		
Industries Design + Construction	Design + Construction						———	———	———		
Industries Campaign + Mobilization	Campaign and Mobilization of Private							———	———	———	
Industries Investment	Investment								———	———	———

Table 5.2

Sector	Particular Item	PHASE ONE Years 1	2	3	4	5	PHASE TWO Years 6	7	8	9	10
WATER	Pipe Borne	Initial per day	Initiate per day	2 million litre per day	2.5m	2.5m	3	3.5	4	4.5	5
ELECTRICITY	N.E.P.A.	300,000 KW per Month	300,000	350,000	400,000	400,000	450,000	500,000	600,000	800,000	100,000
TELEPHONE EXCHANGES	TELEPHONE EXCHANGE	1	-	-	-	-	-	-	-	-	-
FIRE SERVICE	FIRE SERVICE	1	-	-	-	-	-	-	-	-	-
POLICE SERVICE	POST	-	-	-	1	-	-	-	-	1	1
	STATION	-	-	-	-	-	-	-	-	-	1
HEALTH	CENTRAL	-	-	-	-	-	-	-	-	-	-
	TEACHING	-	-	-	-	-	-	-	-	-	-
	GENERAL	-	-	-	-	-	-	-	-	-	1
	PRI. HEALTH CENTRE	1	-	-	-	1					
	HEALTH CENTRE	1	1	1	-	-	1	1	1	1	-
POSTAL	POST OFFICE	-	-	-	-	-	1	-	-	-	-
	Sub Post Office	1	-	-	1	-	-	-	-	-	-
Commercial Market desig. Construction	Desigmt. Constitution works			———							

5:40 Conclusion

The pattern of spatial structure of a region and specing of its towns are crucial functions in its growth and development potentials. For effective regional and national development process consideration must be given to spatial dimension. The traditional process whereby the national development plans are meant to achieve only economic ends, and that plans are no more than public works has proved to be a menance to effective growth and development.

In order to succeed, development plans have to be clearly related to details in social, spatial and economic problems of the society. The wise use of resource and improvement in the quality of life. For that it need to be comprehensive as that would lead to achieving an even development as well as balanced environmental improvement.

Regional plans which could fit into the national plan and integrate urban plans is highly necessary in a country like Nigeria, more especially in areas with rapid growth of one city over the other. These cities can grow to cities of "millionaire" population, and as they grow, they are growing with problems. It is high time for both the federal and state governments to start thinking of these problems and adjust themselves to the serious repercussion that might cause. The temptation to ignore urban and regional problems until they reach crisis proportion must be resistant. Now is the time to plan ahead for an orderly development of such regions and the country as a whole.

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APPENDIX 1.

DATA ANALYSIS WEIGHTS AND RELATIVE RANK OF URBAN CENTRES

	POPULATION		ECONOMIC ACTIVITIES					POLITICAL STATUS, UTILITIES FACILITIES AND SERVICES.												ACTIVITIES AND SIZE						RESULTS		
	SIZE	DENSITY	MARKET	BANK	INDUSTRY	TRANSPORT		POLITICAL STATUS	WATER	ELECTRIC	MARKET	ROAD	POST OFFICE	TELEPHONE	RAIL LINE	POLICE STATION	FIRE SERVICE	HEALTH HOSP	HEALTH CLINIC	HEALTH MATERNITY	INSTITUTIONAL	TRADE	TRANSPORT	LABOUR CLASS	STREAMS	SIZE	TOTAL WEIGHT	POSITION	RANK
KANO	30	10	14	5	1	6	4	4	5	4	0.25	2	0.25	0.25	0.25	0.25	0.25	1	0.5	0	0.5	0.25	0.25	0.25	0.25	10	99.5	1	1
BABURA	8	2.5	2	0	0	0	1	4	0	2	0	0	0	0	0	0.25	0	0.5	0	0	0.25	0.25	0.25	0	0	6	25.	24	4
BICHI	12	5.5	2	0.5	0	0	1	4	2.5	4	0	0	0	0	0	0.25	0	0.25	0.25	0	0.5	0.25	0.25	0	0	6	33.5	8	3
BIRNIN KUDU	12	2.5	7	0.5	0	0	1	4	1	4	0	0	0.25	0	0	0.25	0	0.5	0	0	0.25	0.25	0.25	0	0	4	38.75	11	4
BIRNIWA	9	1.5	2	0	0	0	1	4	0	2	0	0	0.25	0	0	0.25	0	0	0	0	0	0	0.25	0	0	0	20.25	29	4
DANBATTA	12	5.5	2	0.5	0	0	1	4	2.5	4	0	0	0	0	0	0.25	0	0.5	0	0	0.5	0.25	0.25	0	0	6	37.25	12	3
DAWAKIN K	15	6	2	0	0	0	1	4	2	4	0	0	0.25	0	0	0.25	0	0	0	0.25	0	0.25	0.25	0	0	4	29.25	9	3
DAWAKIN T	9	6	2	0	0	0	1	4	2	4	0	0	0	0	0	0.25	0	0	0	0.25	0	0.25	0.25	0	0	0	29	19	3
DUSTE	9	3	2	0	0	0	1	4	2.5	2	0	0	0	0	0	0.25	0	0	0	0.25	0	0.25	0.25	0	0	6	28.5	20	3
GAYA	6	3.5	2	0.5	0	0	2	4	2	4	0	0	0	0	0	0.25	0	0	0	0.25	0	0.25	0.25	0	0	4	31	15	3
GEZAWA	9	7.5	2	0.5	0	0	0	4	2	4	0	0	0.25	0	0	0.25	0.25	0	0	0.25	0	0	0.25	0	0	6	34.25	13	3
GUMEI	9	3	7	0.5	0	0	1	4	5	4	0	0.5	0.25	0.25	0	0.25	0	0.5	0	0	0.5	0.25	0.25	0.25	0	4	42.5	7	3
GWARAM	9	1.5	2	0.5	0	0	1	4	0	2	0	0	0	0	0	0	0	0	0.25	0.25	0	0	0.25	0	0	2	15	25	4
GWARZO	21	4.5	7	0.5	0	0	1	4	2.5	2	0	0	0	0	0	0.25	0	0.5	0	0	0	0.25	0.25	0	0	6	45.75	4	3
HADEJIA	35	3	14	1	0	0	2	4	5	4	0	1.5	0.25	0.25	0	0.25	0.25	0.5	0	0	0	0.25	0.25	0.25	0.25	4	48.5	2	3
JAHUN	9	2.5	2	0.5	0	0	2	4	2.5	2	0	0	0	0	0	0.25	0	0.5	0	0	0	0.25	0.25	0	0	2	27.5	23	3
KAFIN HAUSA	6	2	2	0.5	0	0	2	4	2.5	2	0	0	0	0	0	0.25	0	0	0	0.25	0	0.25	0.25	0	0	0	23.75	26	3
KAFIN MAIYARI	8	2.5	14	0.5	0	0	1	2	0	4	0	0	0	0	0	0.25	0	0	0.25	0	0	0	0.25	0.25	0	0	28	21	3
KARAYE	12	2.5	2	0.5	0	0	0	4	0	2	0	0	0	0	0	0.25	0	0	0	0	0	0.25	0.25	0	0	6	27.75	27	4
KAZAURE	3	1.5	14	0.5	0	0	1	4	5	4	0	1.5	0.25	0.25	0	0.25	0.25	0.5	0	0	0	0.25	0.25	0	0.25	4	42.75	6	3
KURA	15	7	7	0.5	0	0	1	4	0	4	0	0	0	0	0	0.25	0	0	0	0.25	0	0.25	0.25	0	0	2	43.5	29	4
MAGATARI	6	2	2	0.5	0	0	0	4	0	2	0	0	0	0	0	0.25	0	0	0	0	0	0	0.25	0	0	0	19.25	29	4
MALAMMADORI	6	2	7	0.5	0	0	1	4	0	4	0	0	0	0	0.25	0.25	0	0	0	0.25	0	0.25	0.25	0	0	2	27.75	22	3
MINJIBIR	12	7.5	2	0	0	0	0	4	2.5	4	0	0	0	0	0	0.25	0	0	0	0.25	0	0.25	0.25	0	0	0	33	16	3
RANO	15	3.5	2	0.5	0	0	1	4	2.5	2	0	0	0	0	0	0.25	0	0.5	0	0	0	0.25	0.25	0	0	2	34	14	3
RANEIM	15	1.5	2	0.5	0	0	1	4	2.5	4	0	0	0	0	0.25	0.25	0	0	0	0.25	0	0.25	0.25	0	0	6	39	10	3
SUMAILA	15	2.5	2	0	0	0	1	4	0	2	0	0	0	0	0	0.25	0	0	0	0.25	0	0.25	0.25	0	0	6	33.6	15	3
TUDUNWADA	9	1	7	0	0	0	1	4	2.5	2	0	0	0	0	0	0.25	0	0	0	0.25	0	0.25	0.25	0	0	4	31	17	3
WUDIL	12	5.5	14	0	0	0	1	4	2.5	4	0	0	0	0	0	0.25	0	0	0	0.25	0	0.25	0.25	0	0	2	35.25	9	3

APPENDIX 2

DATA ANALYSIS

URBAN CENTRES	TREND IN POPULATION	GROWTH PHYSICAL GROWTH	RESOURCE POTENTIALS	DISTANCE TO KANO	ADMINISTRATIVE STATUS	TOTAL PERCENTAGE	POSITION
Kano	30	*	=	=	=	=	=
Babura	10	0	0	20	2	32	12
Bichi	20	10	10	5	5	50	7
Birnin Kudu	20	10	20	20	5	75	2
Birniwa	20	5	0	10	2	37	11
Danbatta	20	10	20	0	5	55	6
Dawakin Kudu	30	5	0	0	5	40	10
Dawakin Tofa	20	5	10	0	5	40	10
Dutse	20	5	10	5	2	42	8
Gaya	10	5	10	5	5	35	14
Gezawa	20	0	0	0	2	22	14
Gumel	10	10	0	20	10	50	7
Gwaram	20	10	5	20	2	57	5
Gwarzo	30	10	5	5	5	55	6
Hadejia	10	10	20	20	10	80	1
Jahun	20	10	10	10	5	35	6
Kufin Hausa	30	5	0	20	2	57	5
Kafin Maiyaki	10	10	10	5	0	35	12
Karaye	20	10	10	5	2	47	8
Kazaure	10	15	15	10	10	60	4
Kura	30	20	20	0	2	72	3
Mugataari	10	10	6	10	2	32	13
Minjibir	20	10	0	5	5	40	10
Rano	30	10	5	5	5	45	9
Ringim	30	19	5	5	5	55	6
Sumaila	30	15	0	5	5	55	6
Tudun-wada	20	10	5	5	5	45	9
Wudil	20	15	5	0	5	45	9
Wallam Madori	10	10	0	10	2	45	11

APPENDIX 3

POPULATION DISTRIBUTION

URBAN CENTRE	DISTRICT AREA IN KM. SQUARE	DISTRICT POPULATION 1989	OVERAL DISTRICT DENSITY	URBAN CENTRE POPULATION PROJECTION 1983
Kano	550	935,886	1,702	720,022
Babura	930	194,917	210	15,098
Bichi	580	301,529	520	9,1500
Birnin Kudu	1,960	395,218	202	11,318
Birniwa	1,720	229,377	133	1 8,596
Dawabatta	1,717	370,450	317	27,086
Dawakin Kudu	730	415,679	569	14,642
Dawakin Tofa	380	222,915	586	19,218
Dutse	830	262,760	295	9,160
Gaya	630	194,916	309	36,354
Gezawa	360	264,914	336	8,438
Gumel	180	50,613	281	40,850
Gwaram	1,760	223,993	127	22,037
Gwarzo	1,400	605,212	432	12,559
Hadejia	50	47,382	348	37,041
Kafin Hausa	96	158,302	165	9,934
Kafin Maiyaki	NA			
Karaye	1,290	319,835	248	12,786
Kazaure	240	35,536	148	21,105
Kura	680	447,986	659	7,418
Maigatari	980	169,071	172	17,180
Mallam Madori	810	143,226	177	23 ,324
Minjibir	420	311,247	341	6,473
Rano	1,420	430,715	303	8,438
Rimgim	1,790	447,986	250	22,24
Sumalla	2,000	441,524	220	
Tudunwada	2,650	230,453	87	10,564
Wudil	730	368,295	87	14,743
Jahun	900	201,377	224	2,533

APPENDIX 4

POPULATION DISTRIBUTION

TYPES OF SETTLEMENT	1963		1983	
	POPULATION	PERCENTAGE	POPULATION	PERCENTAGE
TOTAL REGIONAL	6,014,725	100%	9,864,978	100
OTHER URBAN CENTRES	166,792	2.8	492,562	3.0
SEMI URBAN CENTRES			618,811	6.3
LARGE RURAL CENTRE	380,427	6.3	1776,953	18.0
OTHER RURAL CENTRE	5,134,405	85.4	6,251,652	63.4
KANO MUNICIPAL	333,057	5.5	719,000	7.3

APPENDIX 5

SPHERE OF INFLUENCE

URBAN CENTRE	DISTANCE FROM STATE CAPITAL	NUMBER OF VILLAGES	NUMBER OF HAMLETS
KANO		33	218
BABURA	42		
BICHI	42	96	268
BIRNIN KUDU	134	82	400
BIRNIWA	248		
DANBATTA	96	67	299
DAWAKIN KUDU	24	91	286
DAWAKIN TOFA	28	58	145
DUTSE	134	98	256
GAYA	62	57	144
GEZAWA	33	98	156
GUMEL	127	50	62
GWARAM	202		203
GWARZO	68	102	388
HADEJIA	209	62	67
JAHUN.	143	61	172
KAFIN HAUSA	226	72	181
KAFIN MAIYAKI			
KARAYE			6
KAZAURE	90	49	41
KURA	35		9
MAIGATARI	144		19
MALLAM MADORI			190
MINJIBIR	42	104	168
RANO	52	106	248
RINGIM	81	61	363
SUMALLA	79		
TUDUN WADA	123	70	150
WUDIL	42	81	266

APPENDIX 6

DISTRIBUTION OF UTILITIES, FACILITIES AND SERVICES

URBAN CENTRE	WATER SUPPLY	ELECTRIC SUPPLY	TELEPHONE LINES	POSTAL SERVICE	POLIC SERVICE	FIRE SERVICE	HEALTH SERVICE		
							GENERAL HOSPITAL	HEALTH CENTRE	CLINIC
KANO	200 million Litre/ day	19,334,400 KWH/ Month RURAL	6,372	Post Office 7	100	3	7	0	23
BABURA	NA	NC	0	0	1	0	1	0	0
BICHI	"	171,520	0	Postal Agency 1	1	0	1	0	1
BIRNIN KUDU	"	2,200,000	0	Post Office 1	1	0	1	0	0
BIRNI-WA	"	Rural	0	Post Office 1	1	0	0	1	0
DANDA-TTA	"	285,952	0	0	1	0	1	0	0
DAWA-KIN KUDU	"	113,152	0	1	1	0	0	1	0
DAWA-KIN TOFA	"	86,784	0	0	1	0	0	1	0
DUTSE	"	RURAL 1,150,000	0	0	1	0	0	1	0
GAYA	"	197,376	0	0	1	0	0	1	0
GEZAWA	"	637,44	0	1	1	1	0	1	0
GUMEL	"	191,672	500	1	1	0	1	0	0
GWARAM	"	RURAL 840,000	0	0	1	0	0	2	1
GWARZO	"	RURAL	0	0	1	0	1	0	0
HEDAJIA	"	287,560	500	1	1	1	1	0	0
JAHUN	"	RURAL	0	0	1	0	1	0	0
KAFIN HAWSA	"	RURAL	0	0	1	0	0	1	0

APPENDIX 6

DISTRIBUTION OF UTILITIES, FACILITIES AND SERVICES

URBAN CENTRE							HEAL SERVICE		
	WATER SUPPLY	ELECTRIC SUPPLY	TELEPHONE LINES	POSTAL SERVICE	POLIC SERVICE	FIRE SERVICE	GENERAL HOSPITAL	HEALTH CENTRE	CLINIC
KAFIN MAIYAKI	NA	RURAL	0	0	1	0	0	0	1
KARAYE	"	3,160,000	0	0	1	0	0	0	0
KAZAURE	"	297,984	100	1	1	1	1	0	0
KUKA	"	263,168	0	0	1	0	0	1	0
MAIGATARI	"	RURAL	0	0	1	0	0	0	1
MALLAMMADORI	"	958,88	0	1	1	0	0	1	0
MINJIBIR	"	760,32	0	1	1	0	0	1	0
RANO	"	1,500,000	0	1	1	0	1	0	0
RINGIM	"	203,522	0	0	1	0	0	1	0
SUMAILA	"	RURAL 3,850,000	0	0	1	0	0	1	0
TUDUNWADA	"	RURAL 1,6000,000	0	0	1	0	0	1	0
WUDIL	"	271,360	0	1	1	0	0	1	0

APPENDIX 7

DISTRIBUTION OF COMMERCIAL + EDUCATIONAL INSTITUTIONS

URBAN CENTRES	COMMERCIAL INSTITUTIONS			EDUCATIONAL INSTITUTION		
	BANK	INSURANCE	INDUSTRIES	POST SEC	POST PRI	PRIMARY
KANO	90	42	1,615		42	95
BABURA	0	0	0	1	2	75
BICHI	1	0	16	1	1	50
BIRNIN KUDU	1	0	15	1	1	89
BIRNIWA	0	0	0	0	1	60
DANBATTA	1	0	29	2	2	92
DANAKIN KUDU	1	0	30	0	2	75
DAWAKIN TOFA	1	0	27	0	3	49
DUTSE	1	0	11	0	2	94
GAYA	1	0	79	0	2	58
GEZAWA	1	0	7	0	1	53
GUMEL	2	0	33	1	2	21
GWARAM	1	0	12	0	1	49
GWARZO	1	0	0	0	1	126
HADEJIA	2	0	248	0	6	8
JAHUN	1	0	9	1	2	38
KAFIN HAUSA	1	0	92	0	2	
KAFIN MAIYAKI	1	0		0	2	
KARAYE	0	0		0	1	99
KAZAURE	0	0	14	0	3	0
KURA	1	0		0	2	89
MAIGATARI	0	0		0	1	67
MALLAM MADORI	1	0		0	2	44
MINJIBIR	1	0	28	1	1	100
RANO	1	0	28	1	1	100
RINGIM	1	0	53	0	2	95
SUMAILA	1	0		0	2	712154
TUDUN WADA	1	0	37	0	1	125
WUDIL	1	0	17	0	2	117

KANO REGIONAL POPULATION DISTRIBUTION BY DISTRICT AREA

AHMADU BELLO UNIVERSITY
KASHIM IBRAHIM LIBRARY

