

AN ANALYSIS OF SPATIAL DISTRIBUTION OF SOCIAL
FACILITIES IN JALINGO LOCAL GOVERNMENT AREA
IN TARABA STATE

BY

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DECLARATION

The author profoundly declares that this thesis is a product of personal labour, it has not been presented anywhere in the world for any purpose. All other works that have been consulted are duly acknowledged.



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DEDICATION

This is dedicated to Mbajir Community especially the one in Taraba State, and all other neighbouring communities living in dispersion.

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ABSTRACT

Deep in the heart of the researcher, lay the question, "what may be the revealing facts about this region with regards to what is conceived as "development"? Thus, seven major indices were selected: water, education, market/stores, electricity, motor-park, housing and health facility provisions. Seven major settlement locations were also selected for research, with the aim of discovering the nature of the distribution of social amenities in the region. Three independent variables population, distance and the number of taxable adults per location were used to formulate the following hypothesis: That there is no significant relationship between facilities located in a community and spatial indices such as population, the number of taxable adults and distance from Jalingo.

The conceptual framework was built around two theories - Growth Pole and Central Place. Data collection was based on both the primary and secondary sources, that is, questionnaire (structured and unstructured), and the field survey for the primary source; and textbooks, theses, news papers and information from offices for the secondary sources. Two regression models were used in the analysis of data. These are, the multiple and simple regressions. The former was the main tool of analysis. The latter model was used to broaden our base for the final conclusion.

In order to identify centres with deficient number of

facilities, the standard score model was used. The scores depicted the levels of inequality for all the locations.

The two regression models produced two contrary results. The multiple regression, as was later discovered, accepted the null hypothesis as a result of collinearity in the independent variables. This collinearity was indicated by the resulting insignificant t-values, while the R^2 values remained quite high. The simple regression on the other hand rejected the null hypothesis, which means that the independent variables are significant in determining facility location. In the midst of this occurrence, we drew the conclusion that in the operations of government, these independent variables are quite passive. The most active ingredient is public policy which determines most significantly what occurs in geographical space.

From all that has proceeded, this research must be recognized for its contribution in the sphere of development. But I have acknowledge limitations also of this research. First, time, monetary resources as well as opportunities did not favourably unit to perfect the research. Besides, development per se is not stagnant. Governments are supplying more electricity, more water and building more schools. As a result, findings of research are soon out of tune with current situation; this research is not an exception.

However, this research has helped to generally confirmed the conclusion by Idachaba (1981) that the area is rural.

Also, like the research by Bashir (1997) disparity in facility distribution was seen to exist. The research has deepened the knowledge about the current social status-quo of the L.G.A.; not in a general manner but in a particular sense. Since the creation of Taraba State in 1991, no research, except this one, has been conducted to bridge the gap between previous researches and the present trend in development.

The standard score model which measured the levels of inequality showed that of the seven locations, only two were not deficient in the number of facilities required per settlement location. These two settlements represent 28,5%, that is to say 71.5% of all the main centres in the area *are* deficient with regards to the number of facilities. Based on the foregoing, we recommended improvement in the supply of agricultural tools for the ruralites, and also suggested that urbanization of a higher order should be highly encouraged by government.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND

Unevenness as a general principle or concept can be seen to have occurred in several spheres of life and especially among natural phenomenon such as vegetation, soils and water bodies. The unevenness exists in the form of size number and location.

Similarly, unevenness in distribution is displayed among races, nations and even among ethnic groups. These variations are among other things found in colour of the skin, location and numerical concentration. There are a number of factors that may be said to be responsible for each of these differences. But it suffices here to say that these differences in most cases emerge naturally that is, they are not predetermined or planned for, by man, although in other circumstances, man creates them through his usual process of social interaction. One of such examples is the emergence of the mestizos. According to Butland (1960) who identified six principal ethnic ingredients that form the population of Latin America, he said, "it is however the blending of these three principal types, Indian, Iberian and Negro, that accounts for the majority of Latin Americans today. The Mestizo or Iberian-Indian mixture is the largest single element in the continents population, numbering some 60 million or 1/3 of the total".

With reference to this work, attention is focussed on the unevenness in the distribution of basic human needs such as education, water, health facilities, and many more that are stated under the conceptual framework (1.2.3). These are viewed with interest because one of Nigeria's goals has been the development of the rural areas under the Rural Development Programme, which is aimed at reducing income inequality. Such inequality is shown by the variance between urban and rural areas.

In Jalingo Local Government Area, (including Jalingo as the Taraba State capital) there exists differences in the distribution of social facilities as is evident in the surrounding settlements and villages. The villages are predominated by either the Fulani, Kona or Mumuye ethnic group. One may not still lose sight of other differences among these village settlements in terms of culture, settlement patterns, innovation adoption and levels of social interaction which may have been accounting factors for other variations in the development process in the entire area.

A visit to the area reveals that the Mumuye are more dispersed in their settlement pattern than either the Kona or Fulani; while the Kona and Fulani though also dispersed, are nucleated to a larger extent. In addition, the Mumuye are more prone to migration than the two other groups.

According to Kane (1987) the Mumuye are the single most populated ethnic group in both Jalingo and Zing Local

Government Areas of Taraba state. The tendency for migration stems from the fact that they are dominantly farming-families; consequently, soil exhaustion causes them to migrate. Kene (ibid) admits that the Mumuye are traditionalists and practice witchcraft, so sometimes a family migrates because it is fleeing from being harmed or killed by witches. These factors of migration perfectly agree with those stated by Clarke (1965:), where he enumerated 25 migration-stimulating situations.

The Fulani on the other hand are quite flexible and quick responding cattle herdsman. They also have settled and have become an urbanized group. It is common place in the study area to hear of "Wuro or Jauro.." referring to a Fulani Settlement or named by them. Wuro Sembe and Jauro Yino are such examples respectively. A visit to Jalingo city and Wuro Sembe proved the fact, that the Fulani are both businessmen and farmers. In politics, they can not be left out of the schemes of things. They are the rulers of the area since the time of 'emirates', when Jalingo (now a Local Government Area) was in the Muri Emirate. Recently too, they have been able to have created for them another Local Government Area, with the headquarters at Sunkani (Ardo Kola L.G.A). This L.G.A was created out of the then Jalingo L.G.A in 1996 by the Abacha Administration.

Markets in the vicinity of the capital city such as those in mile 6, A.T.C, Wuro Sembe, Wuro Musa, Kona and Jauro Yino (which is particularly outside the study area) are held in the open space. Sometimes shanty structures are provided to give shelter and to serve as drinking places for the locally brewed alcoholic drink. Women from the Kona and Mumuye tribes especially, feature in the sell of the locally brewed liquor and firewood which are their main sources of income. Fulani women specialize in the sell of cow milk, the "nono".

A majority of the people in the study area live in thatched round houses, especially those outside the capital city, where sources of drinking water are mainly wells and streams. We can thus describe the people as generally 'poor', but many can aptly be described as living in object poverty. The inequality in income, the prevalence of unemployment in government services, the lack of a viable source of income, lack of adequate food and a balanced diet and a host of other underdevelopment indicators are overt characteristics of the area.

Because of these disparities, the social implication can be guessed - a hidden grief, several questions about the true function of government (both at local and state levels), and even a plan of evil. Haq (1976) postulated such an incident when he stated that a situation where the highly privileged are few and the desperately poor are many, and when the gap between them is worsening rather than improving, it is only a

question of time before a decisive choice must be made between the political costs of reform and the political risk of rebellion. A situation equivalent to strife and contention has once occurred in Nigeria. Some sections of the country were grieved that their wealth was being used to help poorer people in other parts of the country (Post and Vickers 1973). But in order to make others appear not to be working for others, it will be reasonable to provide schools to all the sectors of the country. This will free the minds of people from being suspicious of exploitation. Education will also help to broaden peoples views about what is helpful and desirable for progress. It will also help to integrate people into the process of nation building. Education, according to Swindell et al (1989) plays a unique role in economic development and the social transformation process; it affects the pattern of employment, income and thus the level of well being.

The synopses of this socio-economic environment of the study area points to the facts of diversity in culture, settlement patterns and disparity in the availability of development facilities. It also shows the level of poverty of the people and the future or current fear of a choas in the society. It is this scenario that has inspired the theme of this study.

1.2 STATEMENT OF THE PROBLEM

1.2.1 Introduction

With the inclusion of the year 1999, it is more than twenty-one years since the Local Government Reform was launched on Thursday 19th August 1976. This date becomes important when consideration is given to the "independence" which was given to Local Government Areas (LGA) through out the Federation. From that time, Prior to the reform, L.G.A.s used to receive from their state governments financial assistance in the form of grants in aid. This used to be as low as 3% or 6% of the state's revenue. According to Yahaya in Oyediran (1981), after the reform, local government's finance from both the Federal and State governments improved. These contributions are as shown below in table 1.

TABLE 1: Federal and State Governments' Contribution to Local Governments' Finance in 1977/1978.

STATE	GOVERNMENTS CONTRIBUTION	TOTAL REVENUE	% OF GOVERNMENTS' CONTRIBUTION
Bendel	29,548,302	44,696,554	66.00
Borno	26,502,687	40,780,442	89.50
Imo	30,758,258	47,477,673	64.80
Kwara	18,309,740	20,659,259	88.60
Oyo	28,487,740	38,261,141	74.00
Plateau	18,574,090	24,613,065	75.00

Source: Oyediran 1981.

In the reform, not only were Local Governments to depend on the resources they could generate from within, they were also not to be subject to the development programmes of the state. They were to go ahead to plan and execute their own development plans.

Thus, the past 21 years, when placed against the level and pace of expected development makes one to either question the need for the creation of more local governments or the need for the increase in local government finances. Furthermore the aim of the reform according to the Federal Military Government was that "a fundamental and salutary change would be brought about in the lives of all the citizens of this country". And to further advance the course of development, local governments were advised to raise more funds by local taxes. They were also given clear cut areas for development like the provision of dispensaries and schools.

In the light of the above, one expects that facilities would be made available to an extent that basic amenities of life are not lacking. These basic human needs in this context are defined to include water, housing, electricity, markets/stores, health facilities, motor-parks and schools.

The necessity for the provision of these facilities may not be over emphasized, because the need for a better standard of living for the entire third world has become a known fundamental policy. Besides, a higher percentage of Nigerians are still living in the rural areas where development is yet

to be appreciated (Dike 1991). Brigadier Shehu Musa Yar'Adua (Oyediran 1981:221) at the launching of the local government reform said, "If stability at the national level is to be quaranted, a firm foundation for a national government at the local level is imperative". Thus, if the Brigadier's speech is accepted as fundamental to the development of a nation, this research will bring out results which will show the extent to which the local level has been prepared for national development.

Consequently, the definition of the research problem is outlined as follows:-

1.2.2 Research problem

Although there are other ways of stating research problems, here, preference is given to what is known as "research questions". It is believed that this approach is sharper in focusing at what is desired. The research questions are therefore as follows:

1. what is the nature of the provision of the social facilities?
2. what geographical explanation can be adduced for the spatial variation in the distribution of facilities?
3. consequently, what is the relationship between the provision of facilities and variables such as population, income and distance?

1.2.3 The Conceptual Framework

For long, it has become obligatory for societies to fulfil certain social goals which benefit all its members. This implies that what becomes significant is not only the factors of production, but also the factors of distribution. This implicitly calls for the economics of agglomeration whereby people are expected to nucleate to make easier the distribution of the society's goods. By this principle therefore, all things been equal, the higher the level of nucleation, the easier the distribution process and the more the required facilities or products are made available. Barbour and Prothero (1961) stressed the need for urbanization for the purpose of easy distribution in the following words.

A concentration of people can be provided with services and facilities which can not be supplied, easily or economically, to a people who are scattered through out a rural area. Water supply, drainage, sewage and sanitation, as well as schools hospitals, clinics and shops can clearly be made available more readily and cheaply to an urban population than to every member of a widely dispersed community.

Consequent upon this understanding, the geographical aspects of the concept of the growth centre as a model explaining the distribution of social facilities has been adopted here. According to Kuklinski and Petrella (1972), a growth centre is "an agglomeration capable of providing possibilities of varied occupations and collective services such as: health, education, cultural, commercial or industrial services". According to them, "the idea of growth centre is interesting

from the point of view of economic policy, because the presence of such centres is indispensable for the creation of a milieu in which growth could spread".

Although the concept of the growth pole was conceived to mean a region with a whole complex of activities which complement each other in technical interrelationships (upward and downward activities). The general functions of a growth centre is very similar to that of the growth pole. So, in this work, the two terms will be used interchangeably. The growth pole model was postulated by Francois Perroux in 1955, Hansen (1972). According to Perroux, growth does not occur or appear universally or every where at once. It manifests itself in points, and is identified as a point where centripetal forces are attracted, and from which centrifugal forces are distributed through out the field of influence.

Omuta and Onokerhoraye (1986) pointed out that central factors which create a pole are:

- i) the introduction or opening up of a new market area or reservoir of consumption;
- ii) the introduction of a new good or for a new quality of existing goods;
- iii) the achievement of a new monopolistic position;
- iv) the exploitation of a new source of supply of raw materials or manufactures and
- v) The introduction of a new technology of production or commercialization.

Since growth does not appear everywhere at once, but still has to diffuse through the economy, it is evident that this diffusion is not of the old stock but of something new, which is termed an innovation. Thus the ability to adopt an innovation and utilize its potential through investment, has been profoundly noted as the major engine of development. Similarly, according to Hansen (1972), the role of growth centres involves the simultaneous filtering of the innovations that bring growth down the urban hierarchy and the spreading of the benefits accruing from the resulting growth. Thus, it is without argument that the involvement of hierarchy necessarily entails distance. Hence within a region there must be the first order centres, second order centres and down the ladder in that manner. These orders according to Hansen (ibid) are subject to a threshold limitation - a minimum size, beyond which diffusion will not proceed. Following this principle therefore, the lowest levels of welfare would be found in areas peripheral to urban centres in out-lying hinterland region. It is to be understood that the larger the population of a centre in a given hierarchy, the earlier the spread of development indices to it and the farther away from the dominant centre (distributing centre), the longer it will take for development to filter to it. If therefore a centre is small by its population size, and is distantly located, the experience of its development will be subject to slow filtering and time-consuming processes from the dominant

centre, such a centre will reflect a very low level of development.

The influence of population and distance on development is described by Northam (1975), depicting that there is a denser pattern of urban settlement in proximity to major urban centres, and that outward from the central city, the density of smaller population centres becomes progressively less, until it begins to increase as another major centre is approached. According to him, the centres of a lower order are nested within the spheres of influence of places of higher order, which is contingent on distance from the larger and dominant centres. He says, the number of lower order centres is greater in the vicinity of larger urban centres, because of their higher population densities, and because they have greater per capita incomes. It is doubtless then that since development is people-oriented, the size of the population is significant, and that the location of a centre relative to the major urban centre within a region is also significant. These three factors - population size, distance from the major centre and per capita income, determine the maximization of an advantage position or minimizing its disadvantaged position.

As Northam (1975) has indicated, the higher density areas have higher per capita incomes. This is possible because, the higher the population the more of commercialization and fund generating activities. Usually, in a community, energies are invested into the production of differing articles of trade

which necessitate trade and exchanges. This encourages specialization and increased productivity and hence greater per capita income. The size of the population at a centre is important in determining the purchasing rate, which is concomitant to income.

Taken from the preceding discussions on the growth centre theory, we can more categorically state that:

1. development filters or trickles down from the dominant centre in a region to the lower order centres in a hierarchical manner;
2. the emergence of a dominant centre is determined by its population, which is higher than any other in the region;
3. incomes per head are higher in such a major centre than all the surrounding centres; and that both the population size and per capita income of other centres decreases from the immediate vicinity of the dominant centre to the farthest centre where the population and per capita income are least.
4. these dominant centres, which sometimes are referred to as major centres, growth centres or higher order centres, pioneer development as a result of their ability to adopt and use an innovation; and that lower order centres that could grow must emulate this character and
5. increasing distance from the growth centre was an indication of a decreasing level of development, except where another major centre was being approached would a

change be experienced.

The growth centre model portrayed in this way has shown the role of population, distance and income. It is implicit that although the governments of communities are obliged to provide social amenities, sometimes community members need to assist. This is done through taxes which are levied on the people and where the per capita income of the people is high, such taxes can be paid with ease. Where the people are poor, with a low per capita income, the collection of the levi would be slow, and may generate a wrong attitude.

It was based on this understanding that the conceptual framework was built on the growth centre model, which deals with the essence of population, distance and income (or tax income) in the development process. Also, because the model has wide usage not only in geography but also in urban planning, it was easy to see the rationale for adopting it.

To further broaden the base for viewing the influence of population distance and income in the spatial distribution of social amenities, the Central Place Theory is here examined also.

Historically, Walter Christapher is known as the propounder of the Central Place Theory; but Beaven (1977) says that the main principles on which the theory is built, such as the location and size of settlements, the homogenous plane with an even distribution of population and the hexagonal system of town sites were works of Machialli who can be

regarded as one of the earliest central place theorists, and Lalanne who produced the hexagonal system.

Christaller believed that some ordering principles governed the distribution of central places, which Short (1984) defined as places which provide goods and services, but perform a number of administrative functions such as schooling, and the provision of various public goods such as art galleries, parks, libraries etc. A central place, according to Christaller has two qualities, these are

- i) discrete central activities and
- ii) a specific population size. Other concepts introduced for a central place were, range and threshold size.

Range, according to Short (1984) is the distance which people are prepared to travel to purchase their needs. Beavon (1977) however adds many factors such as demand (indicated by the size of the population), income distribution, transport facilities and other market conditions.

Threshold, according to King and Golledge (1978) is defined as the minimum level of support, as measured by the number of population, required to support a function in a particular community. Similarly, Taylor (1980) adds to the meaning of the threshold, that, it is the amount of purchasing power necessary to support a service in a particular size or place. Yet, another terminology used in the model, was the complementarily region; this refers to the area that is served by a central place. Within a region was observed a hierarchy

of places or centres. These hierarchies are described by Taaffe (1970) in the following way-a group of villages tributary to a town, a group of towns tributary to a city, a group of cities tributary to a larger metropolitan centre. Taylor (1980) describes the hierarchies in a slightly different manner. According to him, the hierarchies range "from hamlets to villages to towns to cities".

The "central place" having thus been understood, is expected to function in such a way that benefits flow from it to the other areas or centres in the region. The features of the theory significant to this work are population, distance and income. In the theory, concepts which directly affect our spatial variables are the range, the threshold and income (demand).

The theory was initially set up with purely commercial activities in mind. However, its application goes beyond strick commercial lines. Some of the services which a central place provides for consumption include schools, hospitals and security. According to Beavon (1977) the demand for and consumption of these commodities depends upon population concentration, the socioeconomic variations in the population and on the distribution. And that it would depend on the distance that people have to travel to obtain the commodities.

Population as a necessary variable is seen first in being the main constituent of a central place, and then of determining the sustainability of the demand for a product as

was used in the term threshold. It is evident that goods or products are made available by man and for man. In the business sense, products need a large threshold or continual purchases, and so the significance of a high population is obvious.

It is quite obvious that some commodities can not be provided for a small threshold, but only for a large one, for example, a University, or a hospital. Because people need them, for a proper survival, they must travel for them. With regards to the research, people have to come to the central place to make request for such needs as schools, boreholds, health clinics and many others. They have to report about damaged properties and receive other new items. All these necessitate movement, which involves, distance, and indeed, economic distance.

The concept of demand as expressed in the central-place theory for produced commodities, makes it explicit that demand must be backed up with cash. Since the emergence of a medium of exchange which substituted direct exchange of a product for another 'demand' has always stood for that medium. The concept of a threshold is principally based on the fact of the purchasing power of the population, similarly, range too hinges on the same fact that people travel to go and pay for their demands. Thus income as a variable for development has a strong position to occupy.

The generation of income is highly related to population. For example, if every individual represents N10.00, in two communities of ten and fifteen people, the community with fifteen will produce more Naira. And the market situation is such that the more you have the money, the more you can purchase and satisfy your needs. Similarly, Beavon (1977) expresses the relationship between income and distance in this way, "that demand would fall off to zero with increasing distance from the central place". This does not only reflect the declining influence of a central place with increasing distance from the centre, but also the increasing level of poverty farther away from the centre - where business ceases and demand does not exist.

In concluding, we recall Taylor's hierarchical order (Taylor 1980), which ranges from hamlets to villages to towns and cities. Implicit in this is the fact that cities have larger population and income levels than hamlets, and that they have a higher concentration of facilities than hamlets and villages. Thus, given the arrangement of central places, the villages and hamlets are some distance from the cities; and that cities and towns are separated from villages and hamlets by distance. This makes it clear that facility distribution is a direct function of population and income, and an indirect function of distance. All things being equal therefore, the higher the population and income of a location, the higher the distribution of facilities. Also, the longer

the distance from a central location, the lower the number of facilities located in the settlement.

These aspects of the Central Place Model, having thus been invoked in explaining facility location are symbolically expressed as follows:

$$y = f(X_1, X_2, X_3) \text{ where}$$

y = facility distribution in a given area;
 X_1 = population size;
 X_2 = income and
 X_3 = distance from a central place.

Based on these, we expect the following:

- i) that population of a settlement be positively related to the distribution of facilities. This is so, given the Growth pole model as well as the central place model which speculate that the number of facilities in a centre is positively related to the size of the centre. Thus we expect the sign associated with population to be positive;
- ii) that income of a settlement be also positively related to the number of facilities located at a centre; thus we expect the sign associated with income to be positive and
- iii) that the number of facilities in a location be negatively related to distance, thus we expect the sign associated with distance to be negative, this relationship is also supported by both the growth pole and central place theories.

Thus the terminologies and concepts used in these theories have helped to explain the significance of population, distance and income in facility distribution, and hence their adoption for this research.

1.3 AIM AND OBJECTIVES

To a large extent, settlements in Jalingo L.G.A are still traditional and ethnically based, although in most of the locations within the range of 1-5 kilometers away from the main built up area of the city, the population is becoming highly mixed up. This is as a result of its present status as the state capital.

This preamble became imperative to state before the aim and objectives because of the incoherence between the stated figures for the villages and what may be currently observed, with respect to population.

The research seeks to discover the general nature of the distribution of social amenities, that is the spatial variation of the distribution, as found in those villages and settlements of the study area. Other specific objectives for the research are:

1. to identify facilities available in each of the selected villages;
2. to explain the nature of the distribution of social amenities; and
3. to make recommendations and suggestions based on research findings.

1.4 HYPOTHESIS

For obvious academic reasons, this research calls for a hypothesis. For example, according to Nwana (1981:37) a hypothesis aims at "delimiting the direction in which the solution to the problem can be found". He further described it as an "intelligent guess" yet to be verified.

Consequently, one sufficing hypothesis has been formulated for the research, and is stated thus:
that there is no significant relationship between facilities located in a community and spatial indexes such as population, the number of taxable adults and distance from Jalingo.

1.5 SCOPE AND LIMITATION

Jalingo was a Native Authority District during the colonial era; it remained so until in 1976 when it was transformed into a Local Government Area. About two decades later, (1996) during the Abacha regime, Ardo Kola Local Government Area (LGA) was created from it.

Thus, the position of this research is that Jalingo L.G.A from 1996 is what is being researched on. This area became an interesting one because from 1976 - 1996, it was a local government headquarter; and from 1996 to date, it has been serving as the Taraba State headquarter. Because of these factors, and with regards to development, it is a good research ground. So we expect a better quality of life regarding the development indices selected for research. These

indices have been classified into two, as physical and cultural needs by Coates (1977). But as it were, they are usually referred to as basic human needs. For this research, these needs are water, housing, electricity, markets and stores and health facilities. Others are motor-Darks and education. These same needs serve as our development indices for this research.

The research used a base number of 250 people per village in selecting the locations for study, and this threshold number was based on the supply of population figures by the National Population Commission for the whole of the L.G.A (NPC 1991, Taraba State Office).

Without doubt, the research has faced limitations. Some were foreseen, for example, time limit. The number of people who could have been interviewed and perhaps served with questionnaire were not treated as intended. Similarly, sources of fund have also limited the extent to which the research could have gone. For example, not all maps desired for this work were obtained. We need mention that 'development' as a concept, and research as an activity and its purpose have not been understood by many people. Appallingly including civil servants. In many offices people clearly refused to release materials and documents to the researcher. They claimed such documents were 'classified'. Thus, the shortage of information and materials relevant in some way to the research have placed a limitation on it. The researcher was refused and/or

prevented from seeing the sketch map that was presented to the Commission for state and Local Government Creation of 1996.

However, in spite of these limitations, amelioration was found in holding interviews with people who responded in confidence. Some aspects were also resolved by personal survey efforts. We can therefore maintain that the standard of the research has still been maintained and preserved.

1.6 SIGNIFICANCE OF THE STUDY

Historically, the most powerful force that has changed human society towards development as is known today was the Industrial Revolution. It affected the technical and economic structures in human history such that social life today hinges on what progress is made by technocrats and technologists. Referring to it, Knowles and Wareing (1980) described it as "the most potent force affecting the development of the whole history of urbanization". Thus technology and urbanization have become cemented together, and have split society into two urbanites and ruralites. Even though society has been split thus, development, following people must not discriminate, but rather seek to spread, to as far as where people are found. This implies that the level of urbanization has a relative significance to development.

Rural-urban drift is a common social phenomenon today. But since the rural areas still have communities of people in them, there should be some measure of development reaching

them. In Nigeria, the Federal Department of Rural Development carried out a survey in 1981 and Gongola State then (Jalingo been one of the L.G.A's) was described as "one of the most rural states of the Federation (FDRD 1981).

Since this survey was carried out, about 18 years ago, a most relevant question could be, how rural is "Gongola State" now? The significance of this research lies in discovering and differentiating between what it was and it is presently.

The ruralness of the state was reflected upon in 1970. Udo (1970) when writing about the Fulani in the Middle Niger valley stated that "they are found living side by side with the local pagan groups, some of which go about without any type of clothing".

So, twenty years after a national independence if parts of a country are described as above and as a rural state, it will be right enquiry to desire to know what improvement must have occurred in the social and economic life of the people thereafter. This is the 'treasure' that this research seeks to find out. Secondly, the FDRD (1981) Survey report indicated that there existed alot of disparities, and attributed the same to "due to varying levels of seriousness and commitment of the successive local government authorities and state governments to the issue of rural basic needs and rural welfare".

One persistent question that one may ask is whether the successive governments have now changed attitudes since the

report and have implemented development policies for a better welfare of the people. The value of this research now becomes glaring - where are the boreholes, the schools and the health services? Are the people now wearing clothes and living in better houses?

Some new dimension was introduced in the study area. Bashir (1997) in his examination of development in the former Gongola State (when Jalingo L.G.A, was part of it) said it was governments' deliberate effort through policy to promote urban development, while the same government policy had failed to check the imbalance which tilted away from the rural areas.

Thus it is implicit in this document that some kind of development is going on, but to the neglect of the rural areas. But as we indicated in the conceptual framework, locations closer to the central city have higher populations than those further away. And that the hierarchical filtering process of development is expected to benefit them most, the significance of this research is to verify whether this principle has been applicable or that there is a general biasness towards the rural areas as Bashir (ibid) has stated.

In summary therefore, government has become aware of the need for development and the existing disparities. Whether attempts have been made successfully to balance development is not known. The research hopes to find out. If there are still some disparities, how grave are they?

1.7 THE STUDY AREA

This research covers the entirety of Jalingo Local Government Area, and Figure 1 shows the study area. Jalingo city is the local government's headquarter, it is also the headquarter of Taraba State; it thus serves a dual purpose in this perspective. So, politically and administratively, it is the centre of all centripetal and centrifugal forces for building up the area.

Although Jalingo is one of the first-generation of local governments that were created in 1976, today Jalingo L.G.A as a study area is different, both in terms of its landmass and population. This is because part of it was removed to form or become Ardo Kola Local Government Area.

By location, the area lies between $11^{\circ}15'E$ and $11^{\circ}30'E$ and between $8^{\circ}43'N$ and $8^{\circ}59'N$. It has a total area of about 30 square kilometers, and lies diagonally from the Northwest to the Southeastern direction. It is surrounded by 3 other Local Governments. These are Ardo Kola, which covers from the North Northwest (NNW) through the west to the southwest direction. Yorro Local Government covers from this point through the East to the North Northeast (NNE). The remaining portion in the North is bordered by Lau L.G.A, the map is shown in Figure 3.

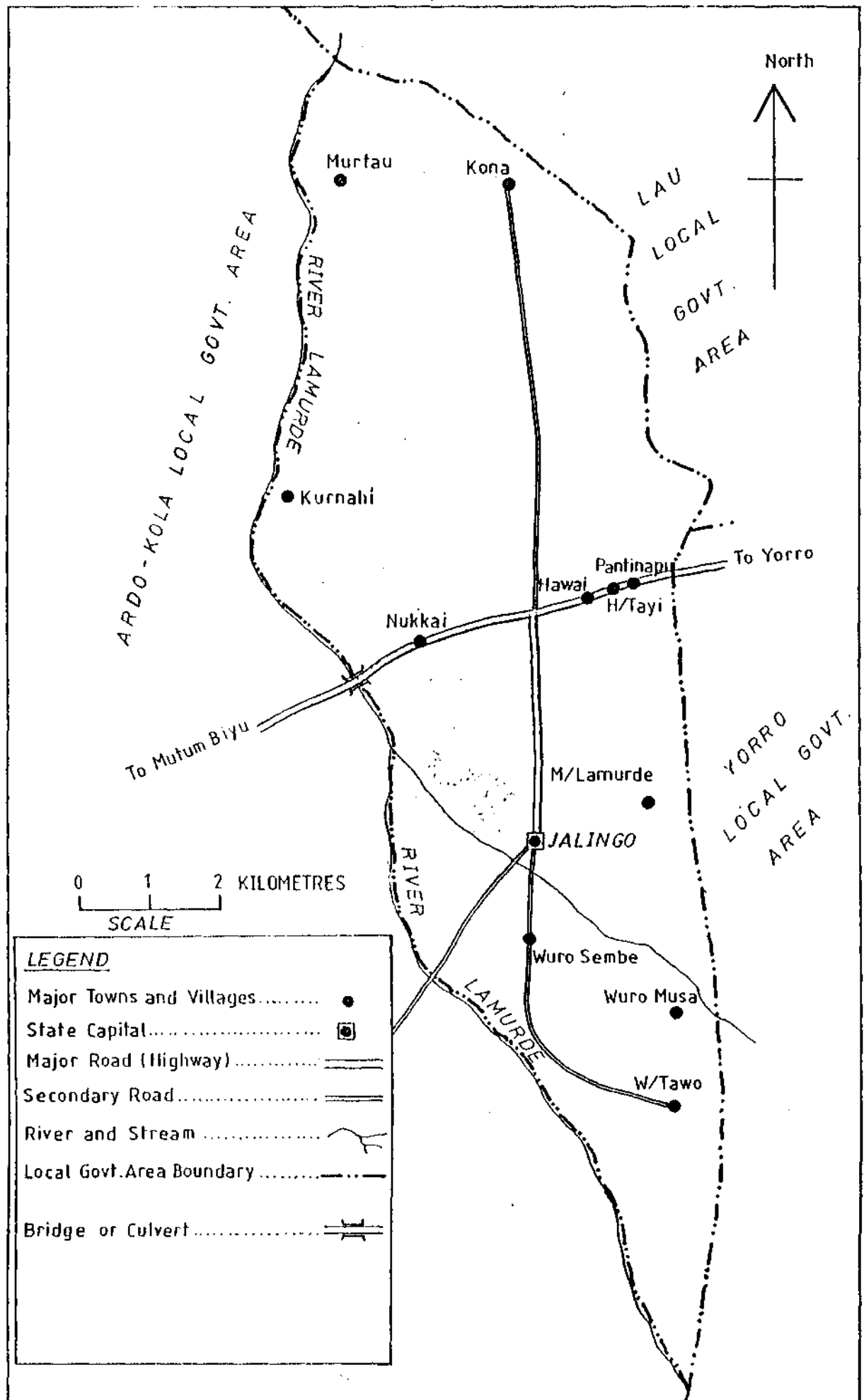


Fig. 1. Jalingo Local Government Area : Major Towns and Villages.

1.7.1 The People

Jalingo city as seen today has been a Fulani settlement. But oral tradition holds that it was a Mumuye village. The Fulani came later on invitation by the Mumuye to war against their neighbouring Kona. It was on this ground that the Fulani made it to become their capital, even up to the present time.

Kane (1987) has claimed that the Fulani were encroaching into Kona land, so this encroachment made the Kona to form a military alliance with the Mumuye against the Fulani. Dong et al (1992) in their writing made a contrary claim. According to them Mohammadu was a Fulani Warrior during the Jihad era, and he was the one who made Jalingo his headquarters between 1874 and 1896.

Today however, the scene has changed. Apart from the 3 indigenous ethnic groups - Fulani, Kona and Mumuye, several over ethnic groups have migrated into the city and the surrounding region. The population has thus swollen, and has become a mixed multitude. This has not removed the formation of "Sabongari", while the indigenous villages can still be distinguished.

1.7.2 Rainfall and Vegetation

Jalingo Local Government Area falls primarily into the biggest vegetation zone in Nigeria, the Guinea Savanna. This is generally a grassland vegetation, but it is also full of shrubs and scattered trees. The most easily seen are the

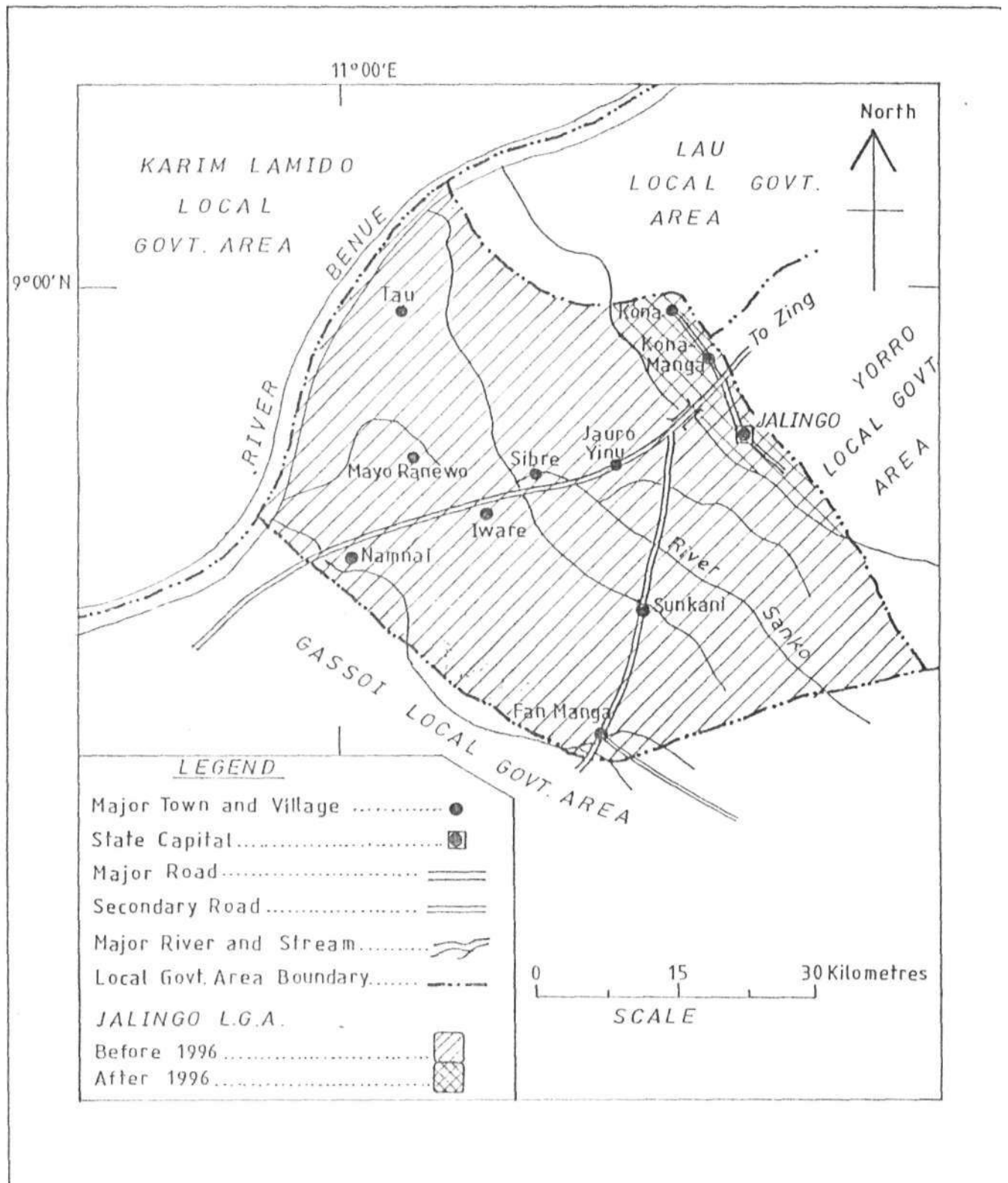


Fig. 3. Jalingo Local Government Area (L.G.A.) Amidst Other L.G.As
 Source: Taraba State Survey Office

locust bean and the shea-butter trees. On both Government Reserved Areas (GRA's) and private residential homes, the nim and malina have been domesticated. In very few patches of land, the eucalyptus are planted as part of the afforestation process.

Presently, the more northerly part of the area appears more forested than the south. This difference has occurred as a result of less farming activities. Rainfall in the area varies between 125 cm - 150cm per year (Udo 1970).

Rainfall normally lasts for a period of six months. It begins at about the middle of April each year and ends in the middle of October. The rainfall peak occurs between August and September, with a break coming up sometime, in July. But this is not a firmly fixed routine, as sometimes the break extends into the early part of August.

This amount of rain allows grasses to reach a height of between 1-2 metres tall, with the exception of the giant grass which grows above 3 metres. Along the streams and "fadama" are found other tall grasses which are used for making mats for fencing homes and private places. Bush burning is uncommon especially at the onset of the dry season. Grasses may be described as the people's 'zinc', and each year it is preserved until most intending house builders for the season and house-menders have gathered enough before burning starts.

The soil is sandy in most places, while in others, it is sandyloamy. The sandy soil is loose and favours the

cultivation of groundnut. The sandy loamy is used for yam cultivation, maize and guinea corn. The Mumuye are the main producers of yam. The 'fadama' are the muddy areas and are best for the cultivation of a variety of rice species. This is cultivated by many people more than yam.

CHAPTER TWO

2.0 REVIEW OF RELATED LITERATURE2.1 INTRODUCTION

The geographers primary objective is the understanding of the differences between one part of the earth's surface and another. The question of differentiating between parts started in the nineteenth century as Balchin (1970) has stated, this means that this was the birth of the regional concept. As it is, the study of the surface of the earth without regionizing became so vast that it made its complete understanding more difficult, after all, even since that time "no two areas are the same". Thus, the adage that necessity is the mother of invention' found its fulfilment in the study of geography. Although a region can be defined in many ways, one of the most accepted includes the one presented by the Association of American Geographers (AAG), which is: an area of any size that is homogenous in terms of specific criteria and is distinguished from the surrounding regions, on the earth surface.

According to Garnier (1996) evidently then, a region is not an object, but an intellectual concept, an entity created by the selection of certain features, and by the disregard of certain features in order to study the grouping of complex phenomena within an areal unit. Consequent upon this, the demarcation and selection of Jalingo as a region and worthy of study and research is understood to be correct.

2.2 JALINGO L.G.A AS A REGION.

At a generally broad level, geography as a discipline discusses three basic regions: the formal, the specific and functional regions. The formal region deals with spatial expression of particular aspect of the environment, be it social, biotic or physical. Examples of such include climate and vegetation.

The specific region, sometimes described as "elusive" because it has emphasized nothing substantial in particular, but rather a fact, that individual parts of the world differ from each other and are unique.

The functional region on the other hand is concerned with rendering services. There exists centrifugal and centripetal forces which disseminate services and bring in services through the market forces, hence it has an area that it serves. This operation is based on the unity of the social and economic organisation that occurs within its influence.

It is this aspect of the region that has been used to delimit Jalingo as a region. In other words, it is the administrative and political criteria that have defined for the researcher a study unit.

What will follow in the subsequent paragraphs are theories of development. For this research is inclined towards the same nature, having to do with the spread of indices of development of the region of our concern.

2.3 Theories of Economic Development

2.3.1 Introduction

The subject of economic development as underlined above shall not be discussed fully as when dealing with it as a topic of itself. Its engagement here is to show that the research has appropriated some development indices to apply them to the research area, and to see the extent to which they have effectively spread.

The body of theories is large, but not all may have direct relevance to this research. We shall therefore not deal with too many of them but such as are seen to be useful. Moreover, they are to serve as examples of what development has been conceived to be.

2.3.2 Development as a Concept

Because of its wide spread nature and interdisciplinary usage it has not a common definition. Of this concept, Angelopoulos (1972) said, it "is infact a highly complex phenomenon, and some of its determinant factors do not readily lend themselves to quantitative measurement". Bryant and White (1982) described development as "one of the most compelling concepts of our time. It provokes painful questions about values, techniques and choices". Development has been seen as a normative concept and implies choices about goals for achieving the realization of the human potential. The following are some of the theories in regard to development.

2.3.3 The Classical Theory

This is a school of thought whose view examines technology and capital as the main thrusts of economic development. According to it, technological progress would ultimately act as a function of capital accumulation, which will be followed by greater mechanization and a further division of labour. The theory sees profit as a necessary ingredient that must or should come from the rate of capital accumulation, and that if more profits were to accrue, there should be a higher investment of capital. This also will in return further technological advances.

The theory sees population increases as an impediment for bringing diminishing returns, causing less profits, slowing down the process of capital accumulation and eventually the technological advance. The bursts of technology is seen as a stimulant to greater and more rapid development from time to time. According to Hailstone and Brennan (1970) the classical theory predicted that population would eventually crumble development and settle it at a no-change level, and stagnation would set in.

2.3.4 The Entrepreneurial Theory

The propounder of this was Joseph Schumpeter. Like the classical theory, this also sees the place of technology as indispensable. The dual aspect of technological change - invention and implementation of innovation are the most

essential. That although capital was important, without an entrepreneur, it may not occur. The availability of an entrepreneur is viewed as a function of future profits and a host of other sociological factors that determine personality traits. An entrepreneur would build an enterprise, organize the factors of production, take risks and innovates. However the social climate for the entrepreneur may change; the society may become hostile towards innovator's untraditional nature and ambition. This will slow down technological progress, capital investment and economical development will come to a stand still.

2.3.5 The Take-off Theory

The Take-off-into sustained growth theory was put forward by Roston in 1956 (Hailstone and Brennan 1970). The theory was prepared to fit all kinds of economies at any point in the history of development. There are three stages of the take-off which is compared to that of an airplane. The first stage of the take-off will take between 100 years or more. The second stage might take a few decades while the 3rd stage lasts very long, and its a period of sustained economic progress. During this period, short-run fluctuations occur. Certain conditions must exist in the second stage, which are:

- (a) Net investment must rise from 5% to over 10%.
- (b) The volume of investment must be high to overcome the increasing population pressure. The third element

consists of one or two substantial manufacturing sectors with high growth rates; and that the social and political climate to encourage the natural impulse to expansion in the most modern sector of the economy.

What makes the second stage possible is the first stage, comprising:

- (a) the primary growth sector favourable for technological progress and new resource discovery.
- (b) Supplementary sector which has to respond to the first sector which supplies raw materials, and transport. The third sector must be such that it copes with the rising national income and the overall demand for output. This is called the derived growth sector.

Development whose analogy is given by the take-off of a plane has been criticized by Hirshman and described as "a misleading image of the growth problems of underdeveloped countries". Hirschman (1958).

2.3.6 The Berlitz Theory

This was put forward by H.A. Simon and is referred to as the learning model. It supposes an individual who desires to learn a foreign language, and begins with a certain level of difficulty or ignorance. Constant practice reduces the difficulties. But if he begins with a bad rate of practice, the rate of learning and the rate at which he reduces studying will be witnessed. If he continues without giving up (as the

alternative is) his rate of studying will increase appreciably, and eventually learn. A third possibility is that he might start knowing that long hours of study bore, so he studies for short periods and does so continually until the language is learned.

This model teaches about development difficulties such as human suffering, social tensions and forced abandonment of traditional behaviour which arise in course of implementing development policies. Usually they make it abortive. But if profits and benefits of development outweigh the bitter experiences, then practice becomes pleasant and development goal will be reached.

According to Hirschman (1958) this appears to be the smoother path to development for the underdeveloped regions. Undertaking development should be in very small doses at first, so that unpleasantness is avoided from the start.

These theories treated in their substantive form are by no means exhausted. Argument about their defects and feasibilities have been kept from side tracking. The choice of course to follow in the development process is for the leadership and it will do so under circumstances which we cannot prescribe here, knowing too that development has several qualities, each of which stands the chance of been tackled first by any leadership. Some of these qualities as stated by Bryant and White (1982) include; major changes in social structures, popular attitudes and national institutions

as well as the acceleration of economic growth, the reduction of inequality and the eradication of absolute poverty.

In the same vein the theories too have not been exhausted. Among such that have not been reviewed here are: The investment theory, the import-substitution theory and the steady growth theory, to name a few. An examination of them will reveal that they are together integrated into those discussed above in one form or the other, where they have been used simply as concepts.

The succeeding paragraphs will be dealing with research works that have been carried out and which have relevance to the discussion of this research.

2.4 Spatial Impact of Growth Centres

Gusau was studied by Ibe (1978) under the topic that has been paraphrased above. He did so because he saw Gusau as an area or as a centre that was undergoing the processes of development.

The objectives of the research were to study the processes by which the spread effects of development takes place, and to determine the nature and spatial extent of such a spread. He put forward three questions as hypothesis, which are as follows:

1. What is the importance of channels of impact? e.g. labour market, backward and forward linkages, income distribution and innovation diffusion.

2. How much leakage is there to other regions?
3. What is the extent of the spread effects from the growth centre?

For his methodology, he employed a sampling technique and the questionnaire. The questionnaire was used to obtain information on population, schools, shops and health services. It was also used to obtain information on distances between Gusau and other centres. As for the questionnaires, they were served to the village-head, village council members, headmasters and the elders.

In the sampling of villages, Gusau was mathematically split into four parts from the centre. Several circles were made around the centre, each circle being 5km apart from the next. By this way, quadrants were created, and from each of them he took certain villages at random, up to a total of 42, out of 62 initially proposed. The people were randomly selected and interviewed. This he did within the 35 kilometers radius of Gusau, which he had identified as a region. His delineation of Gusau as a region was based on two concepts - planning (administration) and functional regions.

The research adopted the growth centre model as its conceptual framework, this was because the writer believed in the concept, that diffusion of economic prosperity into the growth space will occur from the centre, and reference was made to Harris (1966:577). The spread from the centre of

economic benefits is expected to take place through the backwash and spread effects processes.

The researcher identified certain characteristics among the people for his development indices in the growth space. They were:

1. average income;
2. attractiveness to migration;
3. diffusion of zinc and cement;
4. increases in farm holdings and
5. increases in priced possessions e.g. radio, and sowing machines.

To analyse the data that was collected, Ibe employed the flow and response pattern technique. From the results which he obtained, he drew the following conclusions:

1. That the spread of development from Gusau correlated positively with the factors of accessibility.
2. That diffusion of innovation constituted one of the main mechanisms of the spread of development from the centre.
3. Direct employment did not create growth centre impact for the rural areas.
4. As part of the conclusion, he urged the intensification of educational efforts in the rural areas.
5. That public intervention is one of the forms of the spread mechanisms. He urged that Government should make deliberate and effective action to promote the spread of

development from growth centres; and finally, he observed,

6. That for the growth centre strategy to achieve the objective of regional economic development, there must be a higher degree of deliberateness in the planning for the sequential location of economic activities, for which he quoted Mabogunje (1971).

There are several areas both of agreement and disagreement between Ibe's work and the present work. At the start, the applied concept of the region in his work is the same to the one this work has used; This is because it is the functional region that exercises both the centrifugal and centripetal forces, socially and economically in such a way that development is forced forward through the channels mentioned, which are labour, entrepreneurship, employment and adoption of innovation. These together constitute the spread effects and the backwash forces which Ibe's research confirmed. The formal and specific regions which refer to physical and non-existent (illusive) regions respectively can not apply to development concept, and thus are of null effect.

The objectives of Ibe's research are however at variance with this present work. Ibe's work was focused on the processes by which development spreads to other areas in the growth space. This study is concerned with understanding the nature of the spatial distribution of social amenities. This thus justifies why the methodologies must differ; and not only

these but the techniques of analysis, and eventually the conclusion will also differ. The flow analysis he used to evaluate the spread of development is seen as appropriate because of the interrelatedness of the flow technique and the principles of motion which are involved in transportation.

What raises doubt is the justification for selecting 6 villages from within the first circle, while from the 3rd to the 6th circle, a different number of villages is chosen among the four quadrants. While 42 villages out of sixty-two were chosen and used for sampling, the total number of villages within the thirty-five square kilometer radius of Gusau is not known; therefore, whether the number of villages chosen is a good representation of the total may not be known.

The conclusion of the work proved that the objectives were achieved. The processes by which development spreads were discovered to be accessibility and diffusion of innovation as well as government policies. Another aspect that was not clear was the omission in defining migrants, whether they were from within or without the research area; for when he had stated "attractiveness of migrants" as one of the development indices, he further claimed that direct employment did not create the growth centre impact for the rural areas. This makes one to wonder from where people came to be employed in the industries.

2.5 Infrastructures of the Rural Majority

The tittle is an abridged one upon which the Federal Department of Rural Development (FDRD) undertook a research work. The complete title was Rural Infrastructures in Nigeria: Basic needs of the Rural majority. (Idachaba 1981). From hence forth, FDRD and/or Idachaba, F.S. et al mean one and the same thing in this work. This research by the F.D.R.D is the second we are reviewing as part of the literature that is related to the study area of this present research.

The work by the Department was aimed at measuring the differential performance of all states of the federation, with regards to:

1. rural Social Infrastructure such as schools, health facilities, crop and animal protection services and public utilities; and
2. rural institutional infrastructures (Rural extension services, postal facilities etc).

The main body of the work consisted in collecting and tabulating statistical figures for the availability of these facilities named above. The work covered both the states and local government areas through out the country. At the time of the research, Jalingo L.G.A was part of Gongola State, which has, since 1991, been split into 2 different states - Adamawa and Taraba.

Major information provided in respect of Jalingo LGA at the time were:

1.	Land area	3824km ²
2.	Estimated population	199,460
3.	Number of hospital beds	102
4.	Number of doctors	4
5.	Population per doctor	49,865
6.	Number of Primary Schools	83
7.	Total pupil enrollment	16,883
8.	Number of maternity centres	2
9.	Number of dispensaries	8
10.	Population per dispensary	24,933
11.	Number of leprosy facility	10
12.	Population per leprosy facility	19,946
13.	Number of market facilities	22

The concluding statements about the work emphasized the need for rural infrastructure because according to it, the infrastructures constitute the substance of welfare; and that efforts to raise welfare must necessarily go beyond the traditionally narrow approach of raising per capita income, through agricultural development projects, to the provision of such diverse facilities as health and medical facilities, electricity, pipe-borne water and schools.

This work by the F.D.R.D may be described as an inventory research. They were concerned with the ordinary or mere availability of the social facilities. Having put all things

in order, the research described Gongola State as one of the most rural in the federation. Although many things could be said from their description of the state, but it still can be concluded that the level of development is quite below standard, in spite of its population size and several years of both military and civilian administrations.

Similarly, they also noticed regional disparities in the availability of these same social amenities. Some areas were badly in need while others were on the average more than satisfied. From their discoveries, several factors could be said to be responsible for the disparity. According to them, "historical factors and varying levels of seriousness and commitment of successive local government authorities to the issue of rural basic needs and rural welfare" were partly responsible for the under-development of the people.

This work by the FDRD has areas which are common to this present research. There are areas which are also not common. For example, since the work by the FDRD covered the whole of Gongola state, it is obvious that Jalingo L.G.A was also researched upon. However, the dividing line between this work and that of the FDRD is that the scale and magnitude at which the work was done and at which this research is being done are different. For example, this work focuses on every local settlement from a threshold of 250 people, thus making it to be more to the core. Moreover, the result of their work did not depict which villages are deficient or lacking some of the

facilities. But this work is going to show even the extent to which the deficiency exists. Besides, the work by the Department was centred on "differential performance" which was basically measured by availability of amenities.

Lastly, the gap in years between their time of research and this present one is note worthy. Because of the wide gap, in between, negative and positive changes may have occurred which need highlighting now, and which was mentioned previously in their research.

2.6 Development Patterns and Processes Through Policies

The most recent and relevantly related research to this present one is that done by Bashir (1997).

The research was aimed at understanding the spatial pattern of development; The work specified two objectives, which are:

1. to identify spatial pattern and structure of development and
2. to assess the locational efficiency of public utilities and services.

The researcher's hypothesis was stated in this way: that the more developed areas tend towards spatial concentration in favour of locations closest to Yola the state capital.

As to the methodology, in order to sample for the services in question, a table of random numbers was used, and five settlements were selected from each local government

area. The questionnaire was administered to households based on the Primary Health Care Units. This development indicators were determined through planning goals and objectives (depending on data availability), and hence the indicators included: income, educational attainment, communication, employment and clothing. Others were food consumption, recreation and human freedom.

The main sources of data for the research included the questionnaire and personal survey, which were meant to complement lack of data from other sources and publications of government departments.

For data analysis, four different types of techniques were applied. These were factor analysis, spatial autocorrelation, joint count technique and linear programming. Factor analysis was used to identify groups of variables that are interrelated (where they are) in order to give enablement in perceiving the patterns of development. Spatial autocorrelation was measured by use of the joint count statistics. This is a process to determine the factors that underlay in the relationship between places. The pattern so evolving led to the researcher deducing that the spatial pattern was due to geographical processes, relating to public policy. The linear programming technique was utilized for the purpose of determining the locational principle. The assumption of the principle is that if something is centrally located, there will be minimum cost to its utilization, thus

enabling the users to use the item in question at a maximum level.

Under conclusion and recommendation, the researcher's findings were that development had actually spread to other places with the exception that it was not distributed in a balanced or equitable manner. He then suggested that distribution of development indices should be done equitably but not at all meaning that this equity in distribution should be in an absolute way, affecting people, places and resources.

He observed too that development had spread as a result of the adoption of the growth centre model as a strategy in the state. As he earlier pointed out, the spread was unsatisfactory, and to correct this, he suggested that public policy should be relied upon to correct the existing potential causes of inequality in development.

Also, the research relays that some important aspects of development such as industry and health have been neglected. And worse still, agriculture, which is the life wire of the people has also been neglected; all of these, he judged to be the basics in development.

Finally, on a more serious note, a policy that needed to be checked, according to him, was the relationship between the state and the local government a relationship whereby the efforts of the local government for development are tied to the discretion and programmes of the state; this the researcher decrys in the following words "a system where the

development priorities, strategies and packages of every local government authority is tied to the state government's sectoral priorities and expenditure patterns without regard to their (L.G.A's) specific circumstances can not in all seriousness be regarded as attempt to achieve equity and justice in development".

2.7 Correlation Between Research Works

This aspect of the work is meant to depict areas of common interest and also from where the reviewed work and this research part ways. One way which puts the two works together is the fact that both are concerned with the provision of facility services. The works are also concerned with the efficiency of the facilities so provided to the people. Moreover, many of the services whose provision is a matter of concern to both researchers are common indices to both researches, for example health, education and housing condition. Similarly, both researches included Jalingo L.G.A as a research field.

In spite of these similarities, there are areas of divergence. This work seeks to emphasize the extent of the spread of facilities, thus particularly knowing where, and whether the needs of the people for such a facility is met. It seeks also to know the nature of the facilities and to seek for explanations to justify their availability at the locations. On the other hand, his work is concerned with

patterns and processes of development as determined or shaped by policy.

In addition, this work is covering a region in Taraba State, while Bashir's work covered the same area but under Gongola state and under a different administration, a political unit differing in both its nature and people. The date that terminated the Gongola state nomenclature turned round to give birth to Taraba state. Thus the gap in years between them is quite significant. This research is attempting to fill the gap between them. Presently, Jalingo is occupying the status Yola occupied during Bashir's work. We therefore expect a change in the social scene which only this present research can account for.

Finally, as a result of these differences, the technique of analysis for the derivation of interpretation and conclusion differ. This work has employed the multiple regression model as a statistical tool from which conclusion would emerge. It is obvious then that the two works can not be tied together completely.

2.8 An Obvious Ambiguity

It is not unusual that in academics there be found in one form or the other socio-political aberrations, which, in order to arrive at a more reasonable conclusion, must be challenged. This subsequent paragraph is devoted to a critique of Bashir (1997).

The researcher wrote that there was a spatial concentration in favour of the old growth centres, which he described as polarization of the benefits of socio-economic planning. The reason for the polarization was attributed to the different constraints and abilities including historical and political circumstances, which made such centres either growth centres or peripheries.

An ambiguous situation is portrayed here, where polarization is attributed to two opposite forces - historical and political inabilities and socio-economic planning. Historical and political forces which have led to the creation of poles naturally work undetected and work at will; while "economic planning" is a representation of conscious effort, not so much of the effort of a community but of the state. True, the state as a force in directing affairs and deciding which places may be created as poles or growth centres is more forceful than the natural force. This is precisely stated by Hirschman (1958) in the following words. "the provision of transportation and communication facilities, the production and distribution of electric power, the construction of irrigation and drainage systems are now widely agreed to be appropriate fields of governmental economic activity in addition to the traditional ones of law and order, defense, education, health etc".

Surely, it is not any society's will, to be at the periphery. The peripheral position is an evidence of a force

that willfully and forcefully placed the society at its status. Otherwise, why should there be social unrest and strife as Angelopoulos (1972.73) predicted when he said, "if the authorities of the developing countries fail to make use of the available domestic resources and thereby prove incapable of satisfying the legitimate aspirations of the people"

Further, the researcher accepted that at the micro-spatial level, some degree of inefficiency was at work, and that this was as a result of improper planning for facility location. Increasingly, we want to point out that historical and political forces must operate through people who then must plan in agreement with the government to have such facilities. So these forces on their own, that is, the socio-economic forces do not create polarization per se. All polarizations should be seen as government empowered and oriented. Finally, the researcher concluded that the spatial inequality with regards to having access to the facilities and even the maintenance of them be blamed on the government for its inefficiency in planning. This is why the core-periphery positions of places and people may not be caused by both government and socio-political forces at the same time.

2.9 POLITICAL CALUMNY

The researcher convinced himself about an idea which he failed to support with sufficient evidence; and as such stands

to be proved false. For example, he identified the larger ethnic groups in the state and certified it by the fact that they form local government areas. He named such groups as Fulani, Mumuye, Jukun, Jenjo and Chamba, Others were Kuteb and Mambila. According to him, "some of the smaller tribes are by the 1963 census, numerically so few that they pose the problem of political insignificance", (Bashir 1997:67).

This view is wrong and seems to be blended with political motivations. The Federal Government does not create local governments on the basis of tribe or tribal dominations. Wukari L.G.A. was called or referred to as Wukari Federation before the Local Government era. And the concept of 'Federation' means coming together of different groups or societies to form one state. If there are more than two ethnic groups in a local government area, and we name it after one of the ethnic groups as Bashir portrays, we promote strife.

Table two below seeks to correct the impression that if an ethnic group does not form a local government, it constitutes political insignificance.

TABLE 2: 1952 POPULATION BY TRIBE AND DISTRICTS

	FULANI	HAUSA	IBO	KANURI	NUPE	TIV	KUTEB	OTHER N/TRI BES	OTHE R NIG. TRIB -ES	NON- NIG.
Donga	368	593	119	73	16	7110	30	12874	5	1
Takum	155	748	82	138	8	14389	23902	3475	1961	8
Wukari	1476	3924	1174	812	290	31556	67	18016	314	29
Kentu	20	21	-	-	-	6	73	3239	23	-
Ndoro	46	10	-	-	-	-	7	3725	15	1
Tigon	10	3	-	-	-	-	6	5511	81	-
Wukari Div.	2076									
Total	2076	5301	1375	1023	314	53061	24085	46640	2399	39
%	1.5	3.9	1.0	0.8	0.2	38.8	17.6	34.3	1.8	-

Source: Community Concord (Gongola) Vol. 3, NO. 118, Pg. 8.

A careful observation of the table shows that the Tiv were the single most populated tribe in Wukari Division at the time of this census. Whether the population figure for a given year continues to increase or decrease stands to be supported only by acceptable evidence. Besides, the problems associated with population figures in Nigeria over their authenticity and correctness can not be debated here. With increasing years, since census began, figures have increasingly become unreliable and unacceptable in many quarters.

With regards to the 1976 period when the local government areas were being created, it is pertinent to ask the following questions relating to the Tiv:

1. how many towns could be identified as belonging to the Tiv in Gongola State;
2. who were their representatives at the decision table for local government creation;
3. what was their observed pattern of settlement?

The creation of local government areas does not spring merely from population figures. Density and level of concentration in identified settlements and alot of other considerations on socio-economic and political platforms come into play. So it may be substantially inadequate to describe as "politically insignificant" an ethnic group that does not have a local government of itself per se. Population may not be completely over looked. But the feeling and impression that people have when population figure of an ethnic group is quite high compared to their own figure in the neighborhood is unhealthy. It will be more appropriate to regard these figures in the light of what Akeredolu (1982) has said, that the most intriguing question is how many people live in Nigeria. This is because Nigeria can not boast of a valid population count, in spite of the age long exposure to census operations. According to him, "not only have the aggregate population census figures been faulted on different grounds (the pre-1963 figures were said to be underestimates, while the 1963 and even 1973 provisional figures are seriously suspected to be over-counts)". It is thus implicit that projects that have been planned and executed based on the

population figures have been a little shifted from the base-level of such a development project. Because of the cloudy nature of census figures in Nigeria, including the value people have tended to attach to it, Akeredolu seems to clarify the issues in these words:

Somehow Nigerians should be informed that a population census is not an exercise in ethnic rivalry for numerical superiority. Such census figures as we have had in Nigeria tend to reduce any serious public discussion on population matters, whatever the logic behind it or the scientific rigour involved, to a predictable ethnic or political position. The fact must be stressed that it makes a mockery of any government planning and policies when such plans and policies are based on census figures that are known to be false (Akeredolu, 1982).

CHAPTER THREE

3.0 METHODOLOGY

It is a common place in geography to find nodal points, and edges or routes leading to such points. The like of this is reflected in formulating objectives and properly stating how such objectives could be achieved. Methodology, in this research serves like the edges of the nodal points.

Thus, in seeking to establish the nature of facility distribution in the study area, data from the following sources were employed.

3.1 PRIMARY SOURCES

Of the primary sources, one of the most important is the questionnaire. A structured or fixed response questionnaire was designed and administered specifically to those employed in the former sector of the public service; the main reason being that they possess the ability to read and write and are in a better position to appreciate and know the things in question.

The questionnaire sought to obtain information on the availability of facilities, their number, their usability and as well, whether the people were involved in the siting process or are involved in the maintenance of such facilities.

A second type of questionnaire was also used, the unstructured or open-ended. This was particularly prepared for the people in the non-formal sector of the population, that

is, the private sector. It was administered through oral interviews and found to be useful to cover other details which could not be treated in the first questionnaire. The two questionnaires were to complement each other in the entire administration of the process.

3.2 SECONDARY SOURCES

These refer to sources other than the primary. Here we mean the use of text-books and journals which have relevant bearing to development studies. Others include theses of post-graduate studies directly or indirectly related; for example we found the thesis by Bashir (1997) and Amachi (1978) quite useful materials. Similarly, the work done by the Federal Department of Rural Development (FDRD) was also useful. Other sources were statistical figures and information provided by offices of various government departments. Newspapers and all other printed materials found useful were utilized.

3.3 FIELD SURVEY

During the field survey, the researcher went out to the villages and to the sites of the projects said to have been carried out. The aim was to 'see for oneself' the objects and subject of the research and to have a more current knowledge about them and to see in what state they were existing. This was found important in complementing the secondary sources of data collection especially.

3.4 SAMPLING PROCEDURE AND SAMPLE SIZE

3.4.1 Introduction

Jalingo L.G.A, according to the 1991 census population, had a population figure of 140,661. Jalingo the state capital in the same period had a population of 58,308; while the projected figure was estimated at 66,466. Other villages of our study during the 1991 census had the following population:

1.	Wuro Sembe	728
2.	Wuro Musa	333
3.	Kona	1,268
4.	Mile 6	732
5.	Nukkai	1,228
6.	A.T.C	341

Thus, the total population of the research area is 62,938 (58,308 + 4630) However, in 1996, the L.G.A, was split into two by the Abacha administration. But since no census has taken place after the split the exact population of the present Jalingo L.G.A. may only be guessed. Because of the state-capital factor, the proportion of people in Jalingo L.G.A may be more than the other L.G.A. (Ardo Kola).

3.4.2 Procedure

For an effective questionnaire administration, the capital city was split into five units close to the pattern created by the Independent National Electoral Commission (INEC) for their councillorship election. The units created

were. New Abuja, Mayo Gwoi and Sintali. Others were Majidadi and Dawaki. In the demarcation of the units, attention was paid to the concentration of population in order to avoid unproportional administration of questionnaires. See Fig. 2.

The selection of persons for the questionnaire administration was based on the simple random technique. This technique according to O'brien (1992) provides the most effective way of obtaining information.

Jalingo city was served with 500 copies of the questionnaire, while all the other villages were served with 120 copies. However, 520 were fully filled and returned. This then became the sample size of the research. This was counted as adequate according to Krecjie and Morgan (1970). According to them, a population size of 75,000 requires a sample size of 383. Similarly Blalock and Blalock (1968) stated that "a sample size of 400 will yield the specified confidence interval for 0.5. The surrounding villages were discovered from the surveys to have a few facilities, therefore, the number of civil servants in them did not help to change the number of questionnaire or type served to them. They were therefore served with the 120 questionnaires of the unstructured type.

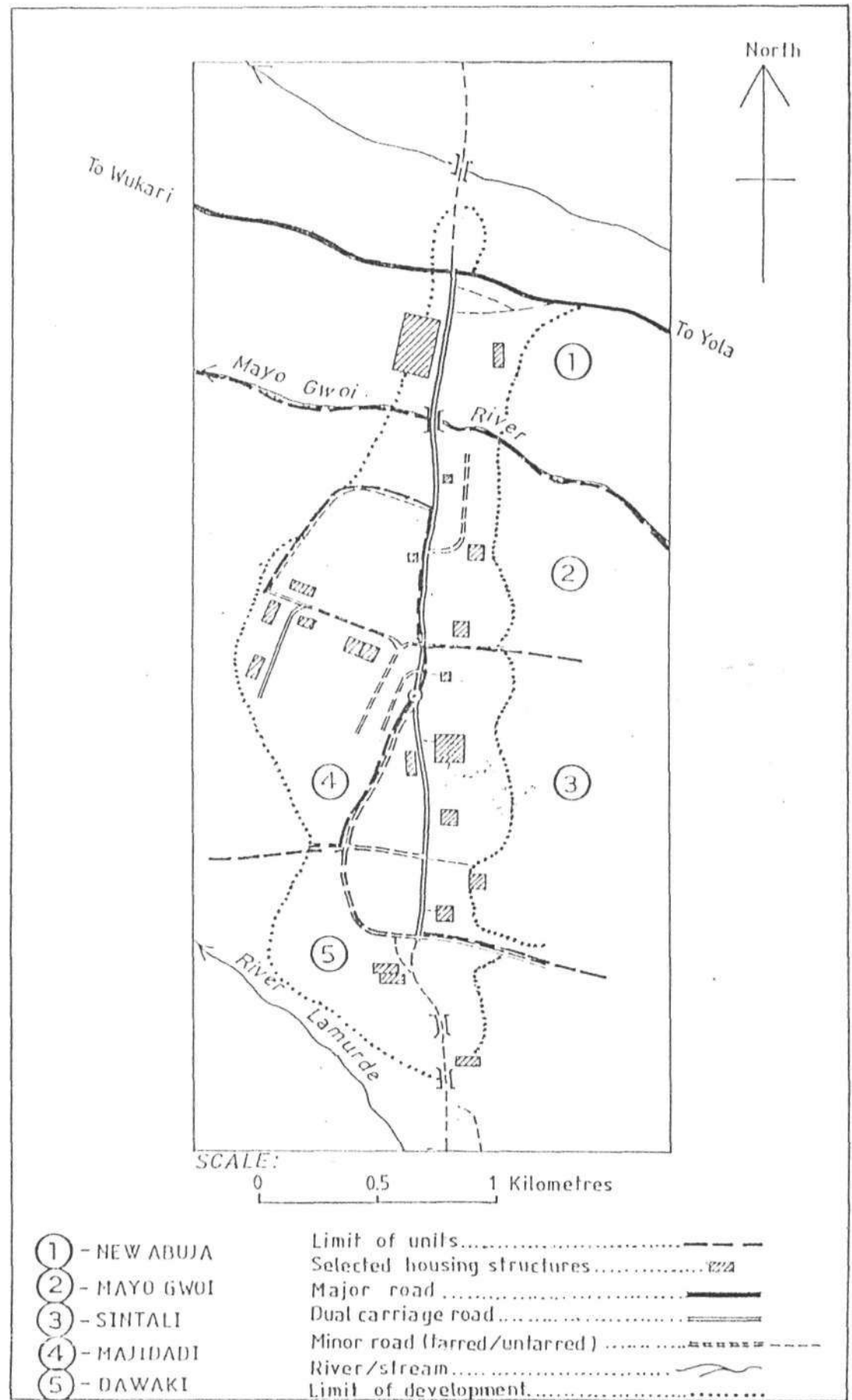


Fig. 2. A Map of Jalingo city: Developed and "Administrative" units. (Source : Survey, 1999)

3.5 THE QUESTIONNAIRE SURVEY

Jalingo L.G.A according to Bashir (1997) had an area of 3,871 square kilometres. The F.D.R.D (1981) however gave a varying area, as 3,824 square kilometres. Because of the split of this area into two L.G.A's Jalingo L.G.A. now has an area of 30 square kilometres from survey sources. Being a state capital, Jalingo and indeed the entire local government area has the advantage to develop and improve the social welfare of the people, considering too that the landmass has been minimized.

Our structured questionnaire covered seven major indices which have been named under the conceptual frame work. The questionnaire sought to discover what type of facilities were available in all the villages including the capital city. It sought information on the number of the available indices as well as whether such facilities were meeting the people's demand.

CHAPTER FOUR

4.0 ANALYSIS OF DATA4.1 INTRODUCTION

The analysis of data presented below is based on measurable parameters of the indices that are the subject matter of this research. From the outset seven indicators were selected, which generally speaking are the offspring of social basic needs. There are: water, education, markets and stores and electricity. The remaining are motor-parks, housing and health. Because of the difficulty of measurement, for example, water, some items or indices were not used in the statistical computation. Another of such 'omitted' indexes was the motor-park; for only one was found in the study area.

Table 3 below, shows the total availability and non-availability of the amenities within the study area in their various locations.

Figure 1 in in chapter 1 introduces us to the study area and the locations on which the research was carried out.

TABLE 3: AVAILABLE AMENITIES IN JALINGO L.G.A.

FACILITIES	LOCATIONS							Total
	ATC	Mile 6	Nuk- kai	Kona	Wuro Sembe	Wuro Musa	Jali- ngo	
Electricity	0	0	0	0	0	0	1	1
Motor-parks	0	0	0	0	0	0	1	1
Hospital	0	0	0	0	0	0	1	1
School:Tertiary	1	0	0	0	0	0	0	1
Secondary	0	0	1	1	0	0	11	13
Primary	2	1	1	1	1	1	8	15
Nursery	1	1	1	0	0	0	2	5
Housing	44	80	35	0	0	0	266	425
Market								
Stores	3	4	1	0	0	0	300	308
Boreholes	5	3	3	2	1	1	65	80
Medical								
Clinics	1	1	1	1	1	0	2	7
Wells	6	4	3	2	1	0	86	102
Total	63	94	46	7	4	2	743	959

Source: Field Survey Sources, 1998.

4.1.1 Analysis on Amenities Available in Jalingo L.G.A

Table 3 shows amenities available by different locations in Jalingo L.G.A. It shows twelve (12) indicators in all, but when regrouped into major components, seven main indicators emerge. The table also shows the quantity or the number of each amenity available. For example, there are 44 housing units at A.T.C. (in 1998) while at Kona, there is none.

The zero values are an indication that the facility in question is not available. The table also has presented the total number of social amenities for all the locations. This reads 959. The total number of these amenities for each location is also shown above. For example, the total number of facilities for mile 6 is 94, while for Wuro Musa it is 2. A comparison of these two locations shows the degree of disparity between them. Many factors may account for this, which for now may not be relayed. The essential question to ask is whether the disparity is justifiable.

Figure 4 below is a bar graph. It has in this form painted a picture of the general availability to simplify understanding. It has also shown the uneven distribution of the available facilities. In the subsequent discussions, individual centre's percentage of the available facilities shall be referred to, as a percentage of the total facilities found in the study region.

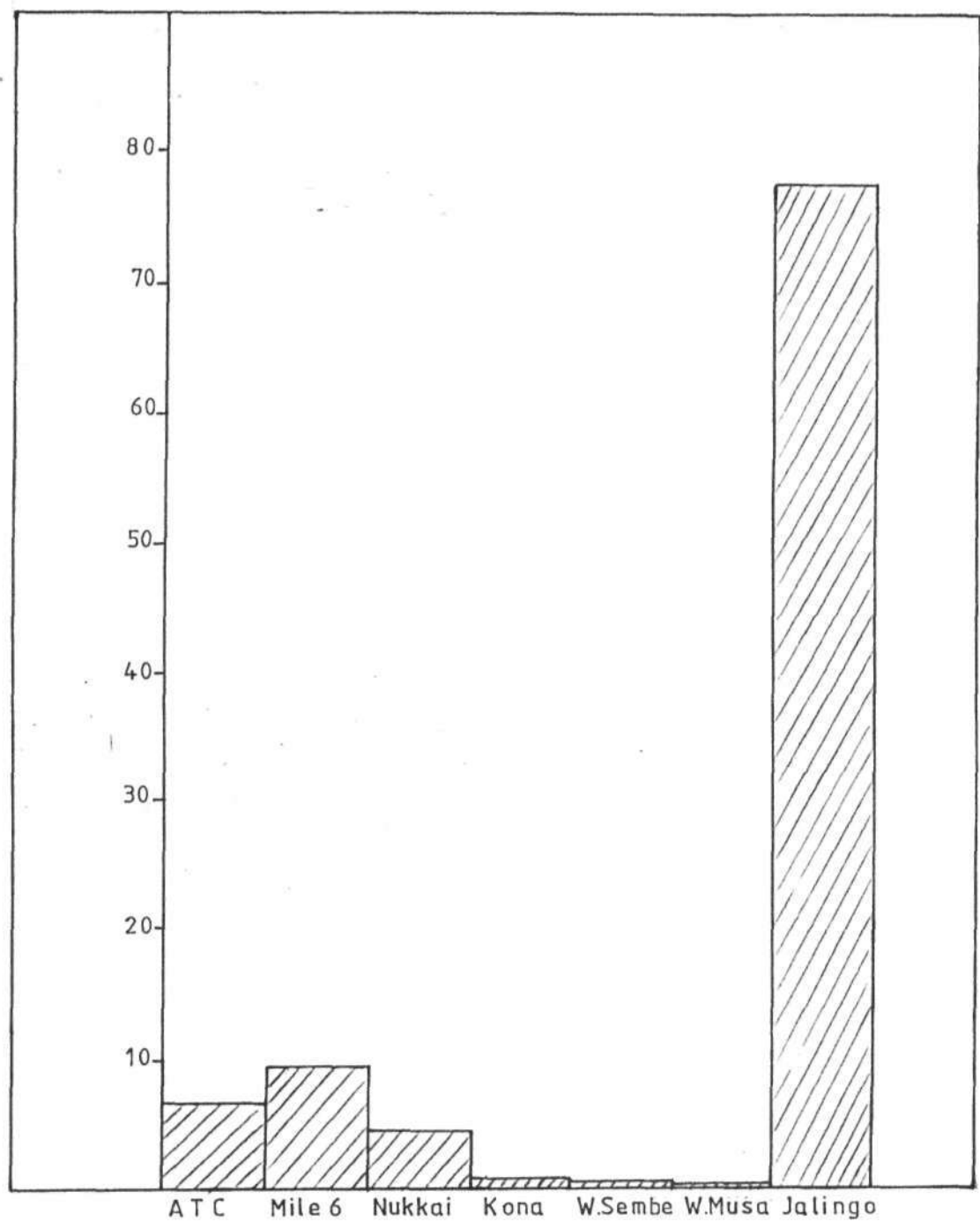
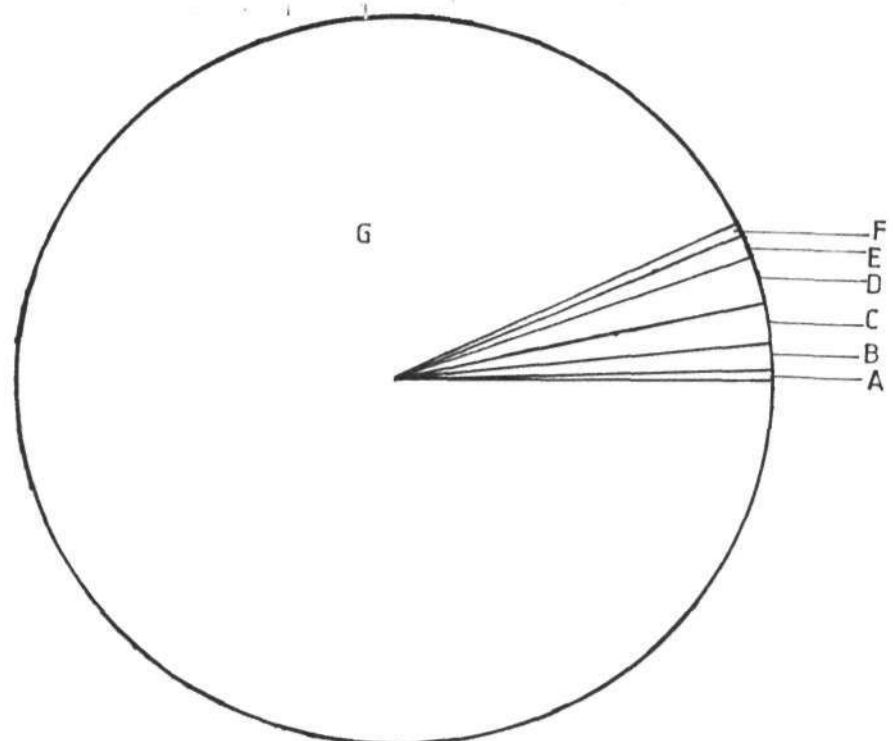


FIG. 4: AVAILABLE SOCIAL AMENITIES IN JALINGO L.G.A SHOWN IN PERCENTAGE OF TOTAL DISTRIBUTION ACCORDING TO CENTRES.



KEY					
A -	ATC	B -	MILE 6	C -	NUKKAI
D -	KONA	E -	WURO SEMBE	F -	WURO MUSA
G -	JALINGO				

FIG.5: A PERCENTAGE PIE CHART OF THE MAIN SETTLEMENTS IN JALINGO L.G.A. SHOWING POPULATION

This percentage pie-chart further illuminates the fact of disparity in the distribution of social facilities. This graphic method also reinforces what is presented in Fig. 4; and helps to emphasize the need for urbanization in order to increase the benefits accrued from the functions of a growth centre.

The Table 4 below is an attempt at explaining the situation and seeking to find the relevant causes.

Table 4: Standard Score Analysis of Facility Distribution among selected locations in Jalingo L.G.A.

LOCATIONS	POPULATION OF LOCATIONS AND PERCENTAGES	DISTANCE TO JALINGO CITY (KM)	NUMBER OF FACILITIES PER (00) POPULATION (X)	$(x_i - \bar{x})^2$	STANDARD SCORES
1.A.T.C	341 (0.50%)	6.0	18.475	170.354	+3.794
2.Mile 6	732 (1.08)	8.0	12.842	55.041	+1.225
3.Nukkai	1228 (1.83)	4.0	3.746	2.812	-0.062
4.Kona	1268 (1.89)	8.5	0.552	23.726	-0.528
5.Wuro Sembe	728 (1.08)	5.0	0.549	23.756	-0.052
6. ,, Musa	333 (0.49)	10.0	0.601	23.251	-0.517
7. Jalingo	62252 (93.07)	0	1.194	17.884	-0.398
	66682 (99.94)		37.959	316.824	
			$\bar{x}=5.423$	$\sigma=44.934$	

Source: Author 1998.

Because of the significance of population here in the standard score, in addition to the percentages attached to each location, the percentage i.e. Chart is here presented below. It further illuminates on the proportion of population distribution to the locations.

4.1.2 Inequalities in the Distribution of Facilities in Jalingo L.G.A.

Introduction

In the process of trying to identify locations in the

research area which are under-developed by the provision of the selected indices, the standard score model was adopted. The model was used because, while it checks for inequality in the distribution process, it also distinguishes between the disadvantaged and the advantaged areas or locations in a region.

Similar works of this type have used the same model for inequality studies; for example, Onyemelukwe (1978) used it in the study of Interpersonal income distribution in Nigeria.

In analysing Table 4 above each location will be taken and discussed. The analysis of results of the same table is given in subsequent sections and incorporates the facts obtained during the field work.

4.1.3 Analysis of Facilities of A.T.C

The guide to this analysis is table 3, where all social amenities have been tabulated. The table shows the existence of 44 housing units, six wells and five boreholes; These represent 10.3%, 5.8% and 6.2% of the totals respectively. Other facilities are three market stores, two primary schools, one clinic and one nursery school. This location is six Kilometres away from the city centre with a population of 341. It also has one tertiary institution.

All amenities amount to a total of 5.6% of the overall amenities in the study area. This location lacks electricity, a secondary school, a hospital and a motor park among our

selected indices.

In table 4, by the use of the standard score this location has 18.4 facilities per one hundred population. This figure is the highest in the region, and by the score, the number of facilities is sufficient. It has a score of +1.93; this positive sign is an indication for lack of deficiency.

With regards to the lack of electricity and a modern hospital, most people were of the opinion that distance was responsible. A large number of people also blamed the government for lack of care.

4.1.4 Analysis of Facilities at Mile 6

The location is about 8 kilometres from the capital, and has a population of 732. Mile 6 has a total number of 94 facilities out of the 959 in the region. This represents 9.8% of the total available in the L.G.A. It is second after the capital city, Jalingo. At its location are found 80 housing units (18.8%), four wells (3.9%) and 4 market stores (1.2%), three boreholes (.7%) and one each of a clinic, a primary and a nursery school.

Completely absent are a secondary school, a tertiary institution, a hospital, a motor-park and electricity. Table 4 which contains the analysis of the facilities shows that as for the number of facilities required for a location they are sufficient. The number of facilities being sufficient, it is next only to A.T.C. These two locations are the only ones that

have a sufficient number of facilities, including the capital city. Its standard score reading is +1.1075.

From our field report, we learned that during the dry season, between November and April, acute shortage of water is experienced. During this period, water-tankers come to sell water to people and to give aid.

Mile 6 has grown in size, and the need for a secondary school and electricity look quite obvious. The absence of some of the indices we worked on, was blamed on the government for lack of a proper policy on welfare.

4.1.5 Analysis of Facilities at Nukkai

Among all the locations in the region, Nukkai is the most deficient. It has a population of 1228 people, and is located at about 4 kilometres from the capital city. The number of facilities available is 46, representing 4.7% of the total. There are 35 housing units (8.2%), three boreholes (3.7%) and three wells (2.9%). It has one each of a clinic (14.2%), market store, nursery, primary and secondary school. None of these indices exceeds 20% of the total. According to this provision, there are 3.75 facilities per hundred population; this gives a standard score of -0.2478 level of deficiency.

Going by the size of the population in the region, Nukkai occupies the third position, and is the nearest location to the capital city. With the increase of population at the rate of between 2.5 to 3% (Osoba 1983) in Nigeria, the population

of Nukkai may have grown quite large. This situation throws light on the need for the location to have more than is available now. Because of its short distance to the capital its population and the schools available, it is obvious that electricity is highly required, among other social needs.

In an interview with the people at the location, most people stressed the laxity of the governments and their own poverty which has prevented them from availing themselves with the facilities through other ways.

4.1.6 Analysis of Social Amenities at Kona.

The total number of amenities at this centre is seven, out of a total of 959. These seven indices of that total represents 0.72%. Kona has a population of 1268, making it the second largest centre in the region; but it is next to the farthest location. It is 8.5 kilometres from the capital.

This centre has two wells, (1.9%) two boreholes (2.5%) and one each of primary and secondary school. It also has one clinic, which represents 14.2%.

Looking at the population, these two wells and two boreholes are not sufficient. The author's interview revealed that the boreholes hardly function, and that the wells do not retain water when they are needed most in the dry season. According to the people, such provisions by the government lacked maintenance, order and care. Their traditional well, because it is an inheritance to the community, was more

respected and handled with care.

In table 4 of our standard score analysis, Kona has 0.55 number of facilities per hundred population. This is quite low and is reflected as -0.7251 deficient level of the standard score. When the author interviewed them about the reasons for the deficiency, their opinion was that other facilities already made available did not come through bargaining with the government, but through government policy, and so they anticipated policy to correct it.

4.1.7 Analysis of Social Facilities at Wuro Sembe

Of the 959 units of amenities in the region, this centre has only four; this represents 0.4%. Specifically, the four units are one well (0.9%), one clinic (14.2%), one borehole (1.2%) and one primary school (6.6%). Wuro sembe has a population of 728, which differs from the population at mile six by four persons. By the level of its population, when compared to the population and facilities at Mile 6, the facilities at Wuro Sembe become quite insufficient.

On distance, it is only five kilometers from the capital city, but without any well, medical clinic, electricity or a secondary school. The number of facilities per hundred population is 0.54. This level of deficiency on the standard score is -0.72.

In an interview with the people, the author was made to know that it was the responsibility of the government to

assist them in providing such amenities. They did not accept that distance from the capital could be the cause for not having the required facilities; most of them opined that their own poverty was to blame, because they are on the receiving end. According to Dorner and El-Shafie (1980), participation of the people by mobilization of resources could generate and accelerate development. This means that in order to help such a deplorable condition, government could come to ask for the people's needs and also allow them to make personal donations.

4.1.8 Analysis of Social Amenities at Wuro Musa

This centre is the least in having the available social amenities. Out of the 959 units of development indicators in the region, it has only two, which is an equivalent of 0.2%. The population is small and numbers 333. Wuro Musa is also the farthest location from the capital, among all the others. It is 10 Kilometres away. Based on a population facility ratio, its population is worth five units of indices. From what it has, we know that its deficiency calculated in percentage is 60.

The available amenities are one primary school which is equivalent to 6.6% of the total, and a borehole that has not been in use. The only primary school they have, had the roof blown off and it remained this way for long, and the school was suspended.

The standard score model applied to determine inequality shows that the number of facilities per hundred population is 0.6, while the level of deficiency measures -0.71. The situation of Wuro Musa could be understood in this light, that poor road or accessibility, small population, long distance from the capital and many other physical and even market forces may have directly or indirectly influenced its backwardness. Also because of its small population, it may take a long time to have a reversed condition; although the need for a better life is obvious.

4.1.9 Analysis of Social Services in Jaling City

Figure 2 is a map showing Jalingo city and the extent of the built-up area, and the major roads. At the time of the survey, only this centre was supplied with electricity; and only Jalingo metropolis had a motor-park and a hospital. There are eleven secondary schools, eight primary schools, two nursery schools and 266 housing units. There are over 300 concrete market stores, 65 boreholes, two clinics and 86 wells (See Table 2) All the category of schools are owned by both government and individuals.

The housing units are concentrated at three main areas - New Abuja, Mayo Gwoi and Sintali wards. The boreholes sunk for public use are maintained by the public, and so people pay money to fetch from them.

This location has the highest number of facilities available (743 out of 959), but it also has the highest population concentration of 62,252. The number of facilities here represent 77.4% of the total available in the whole region. Unfortunately, this number is insufficient compared to the population (See Table 4) The number of facilities per hundred population is 1.19; the corresponding standard score for this centre is -0.62, indicating that the location is deficient in terms of facility location.

However, the following table 5 further throws light on the available facilities of the city though, the overall availability depicts deficiency.

Table 5: Percentage of total available facilities in Jalingo city.

Motor Park	100	Market/Stores	97.4
Hospital	100	Bore holes	81.2
Tertiary Institution	0	Medical Clinics	28.5
Secondary School	84.6	Wells	84.3
Primary School	53.3	Housing	62.5
Nursery School	40	Electricity	100

Source: Author (1999).

Jalingo as a centre stands to illustrate invalidness of distance, income and population as constituting hindrances or being causes for the deficiency of facilities. All the three spatial variables are quite available substantially. The

reasons for the deficiency may have to be sought for outside the three variables.

4.1.10 Summary of Analysis of Facility Distribution in Jalingo L.G.A.

This summary is based on the Tables 3 and 4; but it takes on the question of efficiency and the role of government, which hinges on policy and implementation.

In table 3, the zero values dominate. This generally indicates the none-availability of the index; and when it is considered that the indices of the research are on basic human needs, then the status-quo of the region with regards to development is perceived. The total number of primary schools is thirteen, while the total for the secondary schools is fifteen. But there is only one tertiary institution. (There is another tertiary institution within the region, but because it has been fragmentized and distributed, the author did not include it). The example taken here from educational institutions is because of the value usually associated with it. Peccei (1977) when talking about human resources, said, "I insist, however, that we must move more quickly from this concept of needs-oriented development to people-based development.." which is substantiated by Yahaya and Akinyele (1992) that "Education is the most important, if not the only real tool, for human resource development."

The standard-score model used in the analysis of inequalities has shown that only two, out of the seven locations in the region are not deficient in the number of facilities. This means that 71.5% of the region is deficient. Moreover, not only the suspension of primary education because the roofs of the classrooms were blown off-as cited at Wuro Musa, but, in the college of Education (ATC location) primary school pupils sit on the floor to learn. So, not only the question of sufficient number of facilities, but efficiency.

During the field work, the author discovered from interviews and questionnaire responses that people are relying on the government for a better social life. This is upheld in what Chisholm (1970) said about the influence of government, that, it is "a dynamic element in the geography of most countries..its effect lies in the enactment of laws that specify the limits of individuals and corporate freedoms, ranging from laws governing the location of industrial plants to those that insist upon the education of children".

Upon understanding the role of government and ability to do so, as well as knowing that the peoples expectations are on the government, it has become necessary to make this observation. During the field work of the reserch, the desperatness with which people sought for water was noticed. Students were seen fetching water during lesson periods. The struggle for the day started usually at 5 a.m and continued to 11 p.m. In the villages, most people who answered the

questionnaire were men. Women always went out to get water for domestic use. Of course, the universal need of water can not be overemphasized. In Jalingo city, Nukkai, A.T.C, and Mile 6, commercialization of water is a common feature; it has become an occupation and a money-making venture for many.

The state of water demand, its usefulness in agriculture and the question of food production, as well as the availability of water is hereby given by the institute for Scientific co-operation:

Sustainability of food production increasingly depends on sound and efficient water use, and conservation practices consisting primarily of irrigation development and management, with respect to rainfed areas livestock water supply, inland fisheries and agroforestry. Achieving food security is a high priority in many countries, and agriculture must not only provide food for rising populations, but must also save water for other uses.

The amount of water present on earth is estimated to about 1.41 billion Km^3 , of which only 2.5% is fresh water. The other 97.5% is sea or brackishwater unsuitable for human use. The greatest part of the freshwater 87%, is contained in ice caps or glaciers, in the atmosphere, in the ground or deep inside the earth. With a share of about 70% of the water exploited, agriculture is currently the largest water-using sector world wide. Within this sector by far the largest share is used by irrigated agriculture. World wide use will increase to 5189 Km^3 a year by the year 2000. Significant increase in demand for water is expected until well into the next century as a result of increase in population by 3.06 billion in the developing countries.

Based on this, we may conclude that the level of development is still low. This opens up to other opportunities like statistics in further analysing the situation. The tool

chosen for this is the multiple regression model, which has been carried out below:

4.2 MULTIPLE REGRESSION ANALYSIS

4.2.1 Introduction

Although the multiple regression model is the major one for this analysis, the simple regression is later incorporated. This is done to broaden the base of the final conclusion that could be made. The essential difference in the two models is that the multiple regression has combined the analysis of the three variables under investigation, that is, population, distance and the number of taxable adults, against the overall distribution of facilities.

The simple regression on the other hand has disintegrated all the variables into single factors to see their individual level of contribution to the general spread of the same facilities. So, it was adopted to examine the specific contribution of the individual variables.

The analysis is based on the variables shown in Table 6, below.

Table 6: Data Used in the Regression Analysis

LOCATIONS	NUMBER OF FACILITIES PRESENT (y)	TOTAL POPULATION (X_1)	DISTANCE FROM JALINGO (X_2)	NUMBER OF TAXABLE ADULTS (X_3)
A.T.C	63	341	6	80
Mile 6	94	732	8	160
Nukkai	46	1228	4	350
Kona	7	1268	8.5	350
Wuro Sembe	4	728	5	130
,, Musa	2	333	10	70
Jalingo	743	62252	0	6000

Source: Author's Survey/N.P.C 1998

Table 6 shows the village settlements which are the locations for the research, the number of facilities provided and the individual population of such locations. It shows also the distance to or from Jalingo the capital city, which is considered as the central place or dominant centre. The number of taxable adults per location is also shown.

The multiple regression analysis that follows is shown in Table 7.

Table 7: Multiple Regress Table of Results.

EQUATION NO. AND FACILITY	CONSTANT	POPULATION	DISTANCE	NUMBER OF TAXABLE ADULTS	SUMMARY		
					R ² (%)	F	n
1	28.7	0.0055 (0.21)	-0.0617 (-0.81)	0.062 (0.22)	98.6	72.19	7
2 Health	1.41	-0.000107 (-0.61)	-0.105 (1.41)	0.00121 (0.65)	79.5	3.88	7
3 Borehole	3.84	0.00148 (1.61)	-0.216 (-0.55)	-0.00514 (-0.53)	99.7	293.71	7
4 Wells	4.75	0.00225 (1.79)	-0.270 (-0.53)	-0.0096 (-0.72)	99.7	308.06	7
5 Nursery	1.25	0.000056 (0.19)	-0.107 (-0.83)	-0.00030 (-0.09)	82.2	4.62	7
6 Primary	1.74	0.000359 (1.60)	-0.0536 (-0.56)	-0.00252 (-1.05)	98.7	77.45	7
7 Secondary	-0.41	-0.000285 (-4.14)	0.0068 (0.23)	0.00486 (6.61)	99.9	1568.14	7
8 Housing	47.7	0.0090 (0.46)	-2.50 (-0.30)	-0.057 (-0.27)	90.5	9.53	7

Source: Authors Survey Source. 1998

NB: Values in bracket = t-ratios.

4.2.2 DISCUSSION OF MULTIPLE REGRESSION RESULTS

The table (7) presents eight equations. The first equation is rather a summary of combined results of all the other equations. Equations two to eight will be discussed before the summary is finally presented.

Two specific values are used in determining the significance of any of the parameters of the research, which are population, distance and the number of taxable adults. The values are the t-ratio and the R^2 . The tabular t-ratio is usually compared to the calculated t-value. If the calculated value is less than the tabulated value, then a given assumption is accepted as correct, and vice versa. The R^2 explains the relationship between the dependent and independent variables. This relationship is expressed in percentage; and the higher the percentage, the higher the relationship.

In this research, a confidence level of 0.05 was chosen, with a 5 degrees of freedom, using a two tailed test. The tabular value for the t-ratio was found to be 2.571.

Equation two deals with the health facility. It has a lower t-values than the tabular value, for example, t-value for population is -0.61, for distance, the value is 1.41 and for taxable adults, it is 0.65. Since these calculated values are less than tabular value, the independent variables are not statistically significant, hence the null hypothesis is accepted. However, the R^2 value shows a high value of 79.5%.

This shows a discord between the t-value and the R^2 value.

Equation three concerns boreholes. The t-ratios for the independent variables are 1.61 for population, -0.55 for distance and -0.53 for taxable adults. Here again, the values are less than the tabular value, and so they are insignificant in determining the location of amenities. But as in the previous case, the R^2 is high. It is 99.7%.

In all the other equations, the situation has not changed; only in equation seven which concerns secondary schools, is the t-value for population and taxable adults higher than the tabular value, though for population, the t-value has a negative sign. This change from insignificant independent variables to significant ones is also reflected in the R^2 relationship. It reads 99.9% and has become the strongest relationship between the dependent and independent variables in the whole of this regression analysis.

The summary of the relationships between the dependent and independent variables is presented in equation one of table 6. The equation concerns the situation where the total value for all the facilities is taken into account, here the t-values are 0.21 for population -0.81 for distance and 0.22 for taxable adults. This means that the independent variables are not significant, at 0.05 significance level in determining spatial distribution of amenities; even though the R^2 is 98.6%. Thus, on the grounds that the t-values are not significant, we accept the null hypothesis.

However, given the fact that the t-values are insignificant while the R^2 values are very high, we suspect collinearity in the independent variables. The presence of collinearity in the variables leads to insignificant t-values. Thus, collinearity in the variables is further examined through correlation analysis. Table 7 shows the correlation matrix obtained.

Table 8. The Correlation Matrix

	X_1	X_2	X_3
41	1		
42	-0.3386	1	
43	0.9837	-0.2638	1

$$X_1 \text{ Vs } X_2 = -0.3386$$

$$X_1 \text{ Vs } X_3 = +0.9837$$

$$X_2 \text{ Vs } X_3 = -0.2638$$

The similarity between population and the number of taxable adults implies that their individual contribution to explaining facility location can not be determined through the use of least squares regression. Thus there is significant collinearity in the data. This explain the insignificance of the indpendent variables in the regressed model. It is a statistical fact that the presence of high collinearity between variables results in insignificant t-values.

Given the presence of collinearity in the data and the insignificance of the t-values, it was decided to re-estimate the relationship using simple functions. Thus the individual contribution of each of the variables is further examined. See Appendix 1 for the table 8.

4.2.3 Discussion of the Simple Regression Results

The table of results shows 24 equations (See appendix 1) which have been grouped into 8, with each group composing 3 equations. The first three equations form the summary of all the other equations under the headings of population, distance and taxable adults. The next three equations deal with health, and we shall discuss each group, one at a time.

4.2.3.1 Equation 4 - 6 (Health)

The independent variables of the research-population, distance and number of taxable adults have each a t-value of 2.69, -3.81 and 2.77 respectively. The R^2 for the same variables are 59.4%, 74.4 and 60.6% respectively. The t-values are all higher than the tabular value at 0.05 significance level, which is 2.571.

This means that all the 3 variables are significant; and because the t-values are more than the tabular value, the null hypothesis is rejected.

4.2.3.2 Equation 7 - 9 (Boreholes)

The situation in these equations is quite similar to the one immediately above - a high degree of correlation between two parameters - population and taxable adults. There is a little slack in distance, as seen in the R^2 values.

The t-value for population is 35.71, t-value for distance is -2.90 while for taxable adults, it is 27.92. These values are all greater than the critical value set at 0.05 significance value. Similarly, the R^2 for the same variables in the order above is 99.6, 62.7 and 99.4. Here too, the t-values have not accepted the null hypothesis. Population, distance and taxable adults are therefore significant.

4.2.3.3 Equation 10-12 (Wells)

The t-values for the 3 variables are 35.32 for population, -2.91 for distance and 26.98 for taxable adults; while the R^2 value for population is 99.6, 62.9 for distance and 99.3 for taxable adults.

The high R^2 values show that these variable, are highly related; and the t-values too have all gone beyond the acceptance region of the two-tailed test. This makes it clear that the variables are significant and that the null hypothesis is rejected.

4.2.3.4 Equation 13 - 15 (Nursery Schools)

The distribution of nursery schools examined under the simple regression analysis shows that the hypothesis which says population, distance and taxable adults are not significant is rejected. The t-values for the variables are higher than the tabular value taken at 0.05 significance level. The rejection of the hypothesis means that an alternative hypothesis must be taken; implicitly then, population, distance and the member of taxable adults are significant determinants of facility distribution. The t-value for population is 4.22, it is -3.19 for distance and 4.23 for taxable adults. The R^2 supports the significance of the variables and reads 78.1% for population, 67% for distance and 78% for taxable member of adults.

4.2.3.5 Equation 16 - 18 (Primary Schools)

The degree of influence has continued to vary from facility to facility, depending on which variable is being examined. In the distribution of primary schools, the R^2 for population goes up higher than it was in the last equation; it is 98.2 for population, 62.5 for distance and 97.6 for taxable adults, which has also risen higher than in the previous equation.

In almost the same manner, the t-values too have risen farther than in the immediately preceding equation. Population has a t-value of 16.51, distance has a t-value of -2.88 while

taxable adults has a t-value of 14.29. From all indications the 3 t-values are significant and higher than the critical value. The obvious then is that the null hypothesis can not be accepted. It is rejected

4.2.3.6 Equation 19 - 21 (Secondary Schools)

The spatial distribution of this facility is much more influenced by population and taxable adults than the location of nursery schools is. The R^2 for population is 99%, for distance it is 62.7% and for taxable adults, it is 99.6%. This relationship is only comparable to that for boreholes and wells, where the R^2 is 99% for both.

The t-values for population, distance and taxable adults are 21.77, -2.90 and 33.66 respectively. From these values, it is observed that the provision of secondary schools has been influenced by population, distance and the number of taxable adults than the primary school has being.

Taking the varies of the parameters been considered and comparing them to the critical value (2.571), the conclusion is that the null hypothes is not accepted. The variables have continued to be significant.

4.2.3.7 Equation 22 - 24 (Housing)

Population has a t-value of 6.74; distance has a t-value of -2.71 while taxable adults has a t-value of 6.59.

The R^2 values for population, distance and taxable adults are 90.1%, 59.4% and 89.7% respectively. From the t-values presented for the three variables, it is clear that since the values are greater than the critical value, the proposed null hypothesis is rejected.

4.2.3.8 Equation 1-3 (Summary)

Equation 1 - 3 comes up last because it represents the summary of analysis of the simple Regression. These 3 equations have presented the R^2 values for the independent variables, when these variables are considered to act independently in determining facility location at the various centres.

Appendix I presents R^2 values for population distance and taxable adults as 98.3%, 4.9% and 98% respectively. It is observable that the values for population and taxable adults are quite high indeed; These values have surpassed all others except those for equation 7 - 9, 10 - 12 and 19 - 21, representing boreholes, wells and secondary schools respectively.

Similarly, the t-values in equation 1 - 3 are higher than all others except those values representing boreholes, wells and secondary schools. The R^2 value for distance which generally has been lagging behind for all the facilities except for health, has drastically fallen. This fall is also reflected in the t-value. Its t-value reads -0.51, while for

population it is 16.92 and for taxable adults, the t-value is 15.53. The drastic fall of the t-value for distance in this equation is not surprising; and the high R^2 values for population and taxable adults too is not surprising. The interpretation of the fall of the t-value for distance to -0.51 is that distance is insignificant in determining facility location. But population and taxable adults have given values that show their significance in determining facility location.

In conclusion, the results of the multiple regression analysis indicate that the independent variables are not significant in determining facility location. Except for the distance variable in the simple regression analysis, the results have shown that the null hypothesis is rejected. This means that the variables are significant in the determination of the number of facilities a centre may possess.

It should be added that researches in the human sciences may not strictly comply with statistical findings always. This is because human beings are imperfect in their methods. The influence of population and number of taxable adults apart from distance seems proper. Development, which is the subject matter of this research is people-centred. For example, Bryant and White (1982) defined development to mean "increasing the capacity of people to influence their future.." Similarly, Berg (1972) emphasises the role of man when he said "capital and natural resources are passive factors of production; human beings are the active agents who accumulate capital, exploit

natural resources, build social economic and political organizations, and carry forward national development".

Other factors that may account for distance not being significant in equation 1-3 may not be fully explained here. What is obvious too is that distance has been overcome by modern technology. But human numbers which are needed can not be absolutely eliminated, in any human endeavour.

CHAPTER FIVE

5.0 CONCLUSION5.1 Introduction

This thesis is written with the concept of development at heart; and for Jalingo Local Government Area, development indices were the main concern. The initiating point was from observations made on the changing character of the environment, both in the urban centres and in the countryside. The most perplexing questions about these changes were why are certain land surfaces of the same terrain still more preferable to people than the otherwise; And since within the same urban centre, other sectors tend to be more "favoured" than others what could be accountable for these?

At the regional, national and even international level these differences and preferences exist. People prefer one country for another, and so migrate. In development perspectives, why are certain urban areas more progressive or developed than their 'equals'?

Thus, this internally motivated phenomena, more forceful than motivations from without became the main stimulus to propel this work. By this, it is to be judged that sincerity and commitment became essential milestones in the research, especially during the field work. This attitude paved way for long-time endurance and enough sacrifice to accomplish the desired goal.

5.2 SUMMARY

This research set out to discover the general level at which development indicators have spread in this part of the state. But specifically still to the area of research, the aim was to come to the knowledge of the nature of the distribution of social amenities in Jalingo Local Government Area.

Central to the objectives of the research was to know what facilities are available in the area especially according to the settlement pattern in which villages are the most observable. The intention was to find explanations for the spread of the development indices from a geographical point of view. It was also to suggest what may be done to help alleviate the welfare condition of the people living in the underdeveloped areas.

In order to get at the objectives of the research, some indicators of development were selected from a list of functions given to both state and local government Areas which are permissible for them by the Federal Government (Oyediran 1981) The selected indices were health services, water, markets/stores, schools and motor-parks. Others were housing and electricity.

To be able to obtain reliable data on the study area, we contacted the National Population Commission. The Commission gave the names of the villages and their corresponding population figures. From the names of the villages that we obtained, we then selected seven. These seven were selected

because our threshold population was 250; this threshold number did not interfere with the choice of the number of villages.

The collection of data was through questionnaire, and personal surveys. The questionnaire was both structured and unstructured. The structured was served among those employed in the former sector. The unstructured was served to those employed in the private sector by interviews. A total of 520 copies of the questionnaires were utilized for computing and analysing the data. The multiple Regression was the statistical tool for the analysis. For the basis of broadening the analysis, the simple regression was also used. The survey or field work provided opportunity for verifying whether such amenities were not only available but were still useful at the time of the survey.

The multiple regression results has shown that except in equation seven all the other six equations representing other indices, have fallen short of the tabular t-value. This shows that the null hypothesis of the research is accepted. The exception in equation seven is that population showed a t-value higher than the tabular t-value but carried a negative sign. The number of taxable adults in the same equation showed a value higher than the tabular t-value and carried a positive symbol. The meaning is that this shows the rejection of the research hypothesis. The non-uniformity of results was explained by the correlation matrix which portrayed a high

degree of correlation between population and taxable - adult variables. The simple regression analysis was carried out, and showed that for all the 8 major equations, the distance variable showed a lower significance value, while the significance value for population and number of taxable adults were higher. This means that the null hypothesis must be rejected, and that the alternative hypothesis is accepted; which essentially means that population, distance and the number of taxable adults at each location are significant determinants in the spatial distribution of social amenities in the area.

5.3 RECOMMENDATIONS

As was described in our introduction of the study area, poverty is an overt characteristic quite general in the place. The market sites and drinking places apart from the quality and manner of dressing, and housing styles, are an evidence.

Both the significance and the place of agriculture in development, and particularly in increasing per capita income is clear. The following contribution from the African Development Review (PP. 68-69) is important, and it emphasizes what should be done. It says:

Economic stagnation, even decline has characterized most African countries over the last two decades. Poor performance in the main economic sectors, particularly agriculture which in most cases grew much slower than population has led to a decline of per capita income. Increments to income have to be widely spread for the growth multiplier process to assume importance. At the current level of

development of African economies, only agricultural based activities can bring about broad-based increases in per capital income.

Since agriculture is the main occupation of the people, improvement by supplying agricultural fertilizers and implements to increase production and hence income, will go a long way in helping the people out of the situation. The role of agriculture for development was stressed by Tims (1974) when he said "agriculture will remain a Key factor in Nigeria economic development as the largest employer of labour (about 72% of the labour force in 1970/71).

2. In table 3, we showed that Kona, Wuro Sembe and Wuro Musa lack market stores completely. Similarly, none of them has housing units; and that Wuro Musa does not have a clinic. It is evident that health is a necessary condition for every human endeavour. The lack of it is a pathetic state. The recommendation here is that there is high need for more infrastructures. Singer and Ansari (1977) emphasized the importance of infrastructure in this way, that, "for development effort to be initiated at all, it is necessary to make substantial investments in the socio-economic infrastructure". During the reconnaissance, we discovered that staff of the school at Wuro Sembe resided in the capital city and had to travel daily about five kilometres to work. Lack of infrastructural facilities has effect on the efficiency of services.

Such attitude by workers is liable to several interpretations. In this case, the available electricity in the capital city, the adequacy of water supply, the comfortable accommodation, and the ease of communication channels as well as the distance to the place of work has dictated such an attitude. To further substantiate, Spencer (1996) in Africa Development Review emphasized that "Government's role is critical for the creation of basic infrastructure such as roads, rural electrification and water supply, human capital formation and the creation of research and extension system." Government should accept the provision of such infrastructure not as luxuries to the people but as necessities if life is to be well lived; after all, the decision-makers in government themselves live under the provision of such facilities.

3. By the principle of growth centres, development is to spread from Jalingo, the state headquarter and spread to the surrounding. This demonstrates that the villages are in the lower order of centres. But as mentioned the spread depends on adaptation of innovation by such lower order centres and their ability to participate in the process.

Government should encourage the people by involving them in the decision and implementation processes. The boreholes at Kona village are in disuse because the people were not part of the process of planning and implementing the sinking of

boreholes. Resources may be wasted if participation is not encouraged (Livingstone, 1981).

5.4 SUGGESTIONS

There are several other indices of development that have not been taken into consideration in this research. Such indices include investment in education and agriculture. For a developing country like Nigeria, and a young state like Taraba (created in 1991) these are the areas through which development can be speeded. We suggest that these areas be further explored by future researchers.

2. During the data collection process, it was difficult and impossible to get certain documents released from government departments. This denotes to the author the depth to which research and its entire usefulness has not been comprehended in the area. We appeal for greater support and enlightenment of the public and the private sectors for cooperation with researchers, especially those of this category.

3. Except the capital city, six of the seven centres of the research area constitute the highest locations of population concentration. But their total population is just four thousand, five, hundred and are living faced with scarce social facilities. One option to this problem is clear - that a higher level of urbanization is required. In the absence of the higher levels of urbanization, Taaffe (1970) describes what happens in this way, that "centres decline in their

functions relative to centres at the next higher level, towns have tended to take over functions of villages, cities to take over functions of towns, and large metropolitan centres have tended to increase their dominance over surrounding systems of smaller centres.

This fact is further supported by Barbour and Prothero (1961) when they said that "today, the demand for schools and hospitals far exceeds the supply almost every where. There is a widespread realization that those who can profit most from the services available are generally those living in the towns where the facilities have been placed".

Viewed from this perspective, we suggest that the government should use all necessary resources to create awareness and support a more profiting level of urbanization in this geopolitical region.

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APPENDIX I

The table of Analysis of Simple Regression

EQUATION NO. AND FACILITY	CONSTANT	VARIABLES	SUMMARY R ² (%)	STATISTICS F	n
1	27.2	POPULATION 0.0115 (16.92)	98.3	286.21	7
2	161.0	DISTANCE -0.194 (-0.51)	4.9	0.255	
3	13.3	TAX-ADULTS 0.121 (15.53)	98.0	241.13	
4	0.818	POPULATION 0.000019 (2.69)	59.4	7.23	7
5	0.88	DISTANCE -0.149 (-3.81)	74.4	14.52	
6	0.792	TAX-ADULTS 0.000204 (2.77)	60.6	7.68	
7	1.72	POPULATION 0.00102 (35.71)	99.6	1287.15	7
8	44.6	DISTANCE -5.60 (-2.90)	62.7	8.40	
9	0.488	TAX-ADULTS 0.0107 (27.92)	99.4	776.34	

NB/ t-values are given in bracket.

EQUATION NO. AND FACILITY	CONSTANT	VARIABLES	SUMMARY R^2 (%)	STATISTICS F	n
10	1.69	POPULATION 0.00137 (35.32)	99.6	1243.87	7
11	59.6	DISTANCE -7.57 (-2.91)	62.9	8.45	
12	-0.05	TAX-ADULTS 0.0145 (26.98)	99.3	723.53	
13	0.469	POPULATION 0.000041 (4.22)	78.1	17.83	7
14	2.41	DISTANCE -0.261 (-3.19)	67.0	10.14	
15	0.419	TAX-ADULTS 0.000430 (4.23)	78.2	17.88	
16	1.07	POPULATION 0.000127 (16.57)	98.2	274.72	7
17	6.46	DISTANCE -0.705 (-2.88)	62.5	8.31	
18	0.918	TAX-ADULTS 0.00134 (14.29)	97.6	203.71	

EQUATION NO. AND FACILITY	CONSTANT	VARIABLES	SUMMARY R ² (%)	STATISTICS F	n
19	0.198	POPULATION 0.000174 (21.77)	99.0	474.87	7
20	7.55	DISTANCE -0.961 (-2.90)	62.7	8.42	
21	-0.021	TAX-ADULTS 0.00184 (33.66)	99.6	1131.29	
22	23.5	POPULATION 0.00389 (6.74)	90.1	45.43	7
23	191	DISTANCE -22.0 (-2.71)	59.4	7.32	
24	18.8	TAX-ADULTS 0.0410 (6.59)	89.7	43.49	

Source: Author, 1998

NB: The bracket values are t-ratios

APPENDIX II

QUESTIONNAIRE SURVEY FOR THE AVAILABILITY OF SOCIAL FACILITIES IN JALINGO LGA DESIGNED FOR THOSE EMPLOYED IN THE FORMAL SECTOR:

1. COMMON INFORMATION:

- (a) Name of respondents' department
- (b) Year the department was establish
- (c) Name of residential area (village/Ward)
- (d) Distance between your residence and Headquarters.

2. WATER:

Only tick (/) in the space Provided:

A single answer is needed for all questions.

Read all alternative answers before you tick.

(a) What main source of Water is available to you?

i) Well water [] ii) Borehole []

iii) Pipeborne [] iv) Motor-tankers []

(b) Who provides this available source?

i) Local Govt [] ii) State Govt []

iii) Federal Govt [] iv) Private []

(c) How old is the source?

i) 1 - 5 Years [] ii) 6 - 10 years []

iii) 11 - 15 Years [] iv) Over 15 yrs []

(d) What estimated population does the source serve?

i) Less than 100 [] ii) 101 - 200 []

iii) 201 - 300 [] iv) above 300 []

(e) Why is this water source provided here?

i) Nearness to the supplier [] ii) Govt's Offer []

iii) Our Populations Justifies it []

iv) We paid for it []

(f) How far are you from the Water source?

i) Less than 50 metres [] ii) 51 - 100m []

iii) 101 - 500m [] iv) above 500M []

3. EDUCATION

(a) Which of these schools is nearest to your residential home?

i) Nursery School [] ii) Primary School []

iii) Secondary [] iv) Tertiary Institution []

(b) Who is the owner of each school

SCHOOLS	OWNERS			
	Private	Local govt.	State govt.	Federal govt.
Nursery				
Primary				
Secondary				
Tertiary				

(c) What influenced the location of the School

i) Government policy [] ii) Available Population []

iii) Affordable fee [] iv) Proximity (Nearness) []

(d) How far are you from the school?

i) Less than 50 metres [] ii) 1 - 150m []

iii) 151 - 200m [] iv) above 200M []

(e) What is the average population of the school?

- i) 150 - 300 [] (ii) 301 - 450 []
 iii) 451 - 600 [] (iv) above 600 []

4. HOUSING FACILITY

(a) Who owned the houses?

- i) Local Government []
 ii) State Government []
 iii) Fed. government []

(b) Who owns them now?

- i) Local Government []
 ii) State Government []
 iii) Fed. government []
 iv) Private []

(c) When were they constructed?

- i) 1 - 5 Years ago [] ii) 6 - 10 years ago []
 iii) 11 - 15 Years [] iv) Over 15 yrs ago []

(d) Why were they located at this site?

- i) Nearness to the capital []
 ii) Some people influenced it []
 iii) Because of already existing population []
 iv) For an economic advantage []

(e) How many units were constructed?

- i) Less than 50 [] ii) 51 - 100 []
 iii) 101 - 150 [] iv) above 150 []

(f)

5. ELECTRICITY

(a) Which of these is a supplier in the LG Area.

- i) Rural Electrification Board (REB) []
 ii) National Electric Power Authority (NEPA) []

(b) Is there electricity in your residential area?

If yes, why is the area supplied?

- i) It generate income to the Organisation []
- ii) It is near the capital []
- iii) The population is large []
- iv) It has well known people []

(c) If no, why is the area not supplied?

- i) Few people live here []
- ii) Long distance from the capital []
- iii) Most people are poor []
- iv) None above: Specify []

(d) If you consider the distribution in the LGA not good enough which of these explains why?

- i) Political biasness []
- ii) Distance to other locations []
- iii) Inadequate population of settlements []
- iv) Their life of poverty []

(e) How many hours per day is electricity supplied?

- i) 1 - 4 hours [] ii) 5 - 9 hrs []
- iii) 10 - 14 hrs [] iv) 15 - 19 hrs []
- v) 20 - 24 hrs []

6. MARKET/STORES

(a) Who built the market stores?

- i) The individuals [] ii) The Community []
- iii) The L.G.A [] iv) The State govt []

(b) How many stores are ready for occupation?

- | | | | |
|--------------|-----|---------------|-----|
| i) 1 - 20 | [] | ii) 20 - 40 | [] |
| iii) 41 - 60 | [] | iv) 61 - 80 | [] |
| v) 81 - 100 | [] | vi) Above 100 | [] |

(c) Why was this site selected

- | | | |
|------|------------------------------|-----|
| i) | High surrounding population | [] |
| ii) | Has economic potential | [] |
| iii) | Not far from the headquarter | [] |
| iv) | Good and available land | [] |

(d) How far is the site from the Capital?

- i) Less than 1km ☐ ii) 1 - 5km ☐
- iii) 6 - 10km ☐ iv) above 10km ☐

(e) If the site is not built, why is it so?

- i) The attendance is low []
- ii) It generates low income []
- iii) It is in a remote area []
- iv) Government's delay []

7. HEALTH

(a) Which of these services is available in your surrounding?

- i) Health Clinic [] ii) Maternity []
iii) Dispensary [] iv) Hospital []
v) Others Specify

(b) Which of these do you most often attend?

- i) Health Clinic [] ii) Maternity []
iii) Dispensary [] iv) Hospital []
v) More Specifically.....

(c) Who is the owners of this Health facility?

TYPE	OWNERS			
	Private	Local govt.	State govt.	Feder govt
Health Clinic				
Maternity				
Dispensary				
Hospital				

(d) What do you think motivated the choice of the site?

- i) Large population around the location []
- ii) Short distance from the Capital []
- iii) Good possibility of revenue generation []
- iv) Easy access by land. []

(e) Is the facility satisfying people generally?

- i) Very Well []
- ii) Minimally yes []
- iii) Quite below expectation []
- iv) Averagely yes. []

8. MOTOR PARKS

(a) Who constructed the Jalingo Motor Park?

- i) The Transport Union []
- ii) The Local Government []

(b) How useful is the Motor park?

- i) Increases income for the LGA []
- ii) It offers employment to some People []
- iii) Makes transportation easier []
- iv) It's a place for marketing []

(c) Who located it where it is now?

- i) The community [] ii) The transport Union []
- iii) The LGA [] iv) ii and iii []

(d) How far is it from the main town?

- i) 1 - 500m [] ii) 501 - 1000m []
- iii) 1km - 1.5km [] iv) above 1.5 km []

(e) Why was it located at the present site?

- i) Because of available space []
- ii) It is near the main town []
- iii) Economic advantage to passers-by []
- iv) It helped to redistribute population []

APPENDIX III

QUESTIONS FOR INTERVIEW WITH THOSE IN THE NON-FORMAL
SECTOR, ON THE PROVISION OF SOCIAL FACILITIES:1. Personal data of Respondents:

- (a) His/her name.....
- (b) Name of the Village.....
- (c) Age of respondent
- (d) Highest educational level

2. Socio-Economic Data

- (a) Are you an indigen
- (b) Have you been present in the last 3 years
- (c) What is your estimated number of males/females....
- (d) Do people contribute money to support the provision
or sustenance of; Electricity, health, water, market
stores, School etc.
- (e) Do people pay community tax.....
- (f) For how many years have tax been paid.....
- (g) What is the current tax rate

3. Infrastructural Facilities

- (a) What do you think helps you get.
Water, Electricity, School, Health facilities etc.
- (b) Why are you not having the above facilities.....
- (c) Who located the facilities where they are?.....
- (d) Are the facilities in good condition.....

- (e) When were they established and
- (f) Who established them.....
- (g) What infrastructures do you feel denied, though
qualified for them?