REVIEW OF PAST ROAD DEVELOPMENT PLANS FOR BORNO AND YOBE STATES OF NIGERIA

BY

MAMMAN SABAN AUDU

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AUGUST, 1996

DECLARATION

I declare that the work done in this thesis is wholly my efforts. All materials used from other sources have been duly acknowledged.

M.S.Audu

MAMMAN SABAN AUDU

13/11/96

DATE

CERTIFICATION

This thesis entitled "Review Of Past Road Development Plans For Borno And Yobe States Of Nigeria" by Mamman Saban Audu, meets the regulations governing the award of the Degree of Master in Civil Engineering of Ahmadu Bello University, Zaria.

.....	13/11/96
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.....	13.11.96
MEMBER SUPERVISORY COMMITTEE	DATE
.....	.....
EXTERNAL EXAMINER	DATE
.....	96/12/04
HEAD OF DEPARTMENT	DATE
.....	24/10/97
DEAN, POST GRADUATE SCHOOL	DATE

DEDICATION

This work is dedicated to the people of Borno and Yobe States of Nigeria of the Sub-Saharan Africa Region for their good intention for their people.

MAMMAN SABAN AUDU

1996

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My thanks and gratitude go to the Almighty Allah, the Lord of the heavens and the earth and what is between them, for enabling me to complete this thesis successfully. By His grace, it is hoped that, this work will achieve its end result of uplifting the living standard of our rural populace.

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ABSTRACT

The problem focused on in this study is the assessment of previous road development plans which were supported by Governments' budgets in the two States of Borno and Yobe. Therefore, efforts are geared toward assessing the consistency in successively formulated development plans and to see the degree of success in plan implementation within the two States and to identify factors inhibiting plan implementation.

As a means of determining how much had been achieved in terms of road development in the study area, as a way of comparing, road densities for all the States in the Country were determined and found that the national average was 0.181km/km2, while in the study area Borno State has an average of 0.039km/km2 and Yobe has 0.042km/km^2. Thus, road densities of the two states in the study area were below the national average.

It was also found that all the tiers of government have contributed to road development in the study area but the state governments efforts appears to be most significant. There was a wide gap, in each plan period, between plan proposals on road developments and actual project execution. Political instability due to frequent changes in administration, demarkations into States and switching from military to civilian regimes, was found to have negatively impacted plan implementation. Political considerations were found to have biased plan implementation. Projected costs were generally lower than actual costs and thus earmarked funds could not match project costs. Road development

has generously been funded in the different development plans. A range of 15% to 22% of total expenditure found to have been earmarked for transport infrastructures from which roads gulped about 80%. Thus, considerable expansion of roads had been undertaken in the country, especially in the seventies and eighties when petroleum yielded huge revenue to governments' coffers. Lately, there has been a down turn in the economy with government resources much reduced. Since the massively expanded roads are now in dire need for maintenance intervention, a strong case has been made for maintenance.

A widened scope for planning with better skilled personel utilising improved methodologies, including public participation, has been proposed.

A case has also been made for the National Highway Authority to be established at both States and National level.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND OF THE STUDY

For rapid economic, industrial and cultural growth of any country, a good system of transportation is very essential. Transportation system should normally comprise of good network of Roads, Railways, well developed water ways and Airways. Airways and Water ways, generally help, to some extent, in facilitating transportation within a Country, but are the least utilized modes of transport within Nigeria.

In big Metropolitan cetres, reaching the working places requires a good system of transportation which may be in the form of urban railway system, or road system. A farmer can transport his product to nearby markets through a good system of roads. Nowadays, a good system of transportation has actually become a measure of a Country's economic and social development. Thus, while analysing the general effects of good transportation, it may be said that they increase productivity and enhanced efficiency. A good transportation system can lower the cost of production, since transportation cost is always an influencing factor on cost of Commodities.

1.2 PREAMBLE

Nigeria is a Country of Villages and more than 70% of its

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population is dependent on agriculture.

The most demanding fact for Nigeria is that proper road links should be established between villages and markets with better transportation facilities so that farmers can get better market values for their products. Similarly, education will reach the remotest regions and help remove illiteracy. If better road facilities are developed the present trend whereby people shift to cities and consequently over-stretch infra-structural facilities can be reversed and the incremental concentration of population in cities can be minimized. Infact, the root cause of draw backs in agriculture, commercial, and industrial sectors is attributable to the lack of good system of roads. Industry and agriculture are inter-dependent sectors to some extent- Industries requiring raw-materials from agriculture. However, industrialists would like to set up complexes outside the urban areas only if such places have infrastructural facilities and have well connected system of roads. In this way, they may not face difficulty in marketing their finished products. This aspect is very important for the decentralization of the industry.

Developing Countries including Nigeria, should plan their transportation system against higher demands in anticipation to the increased demand likely to be generated by implementation of development plans.

It will reflect improvement in the overall economy of the Country. Both the State and Federal Governments have over the

years made earnest efforts to improve the road system of the Country. Various new projects were undertaken and executed. Moreover, because Nigeria is so vast, that the effect of small developments is often localised.

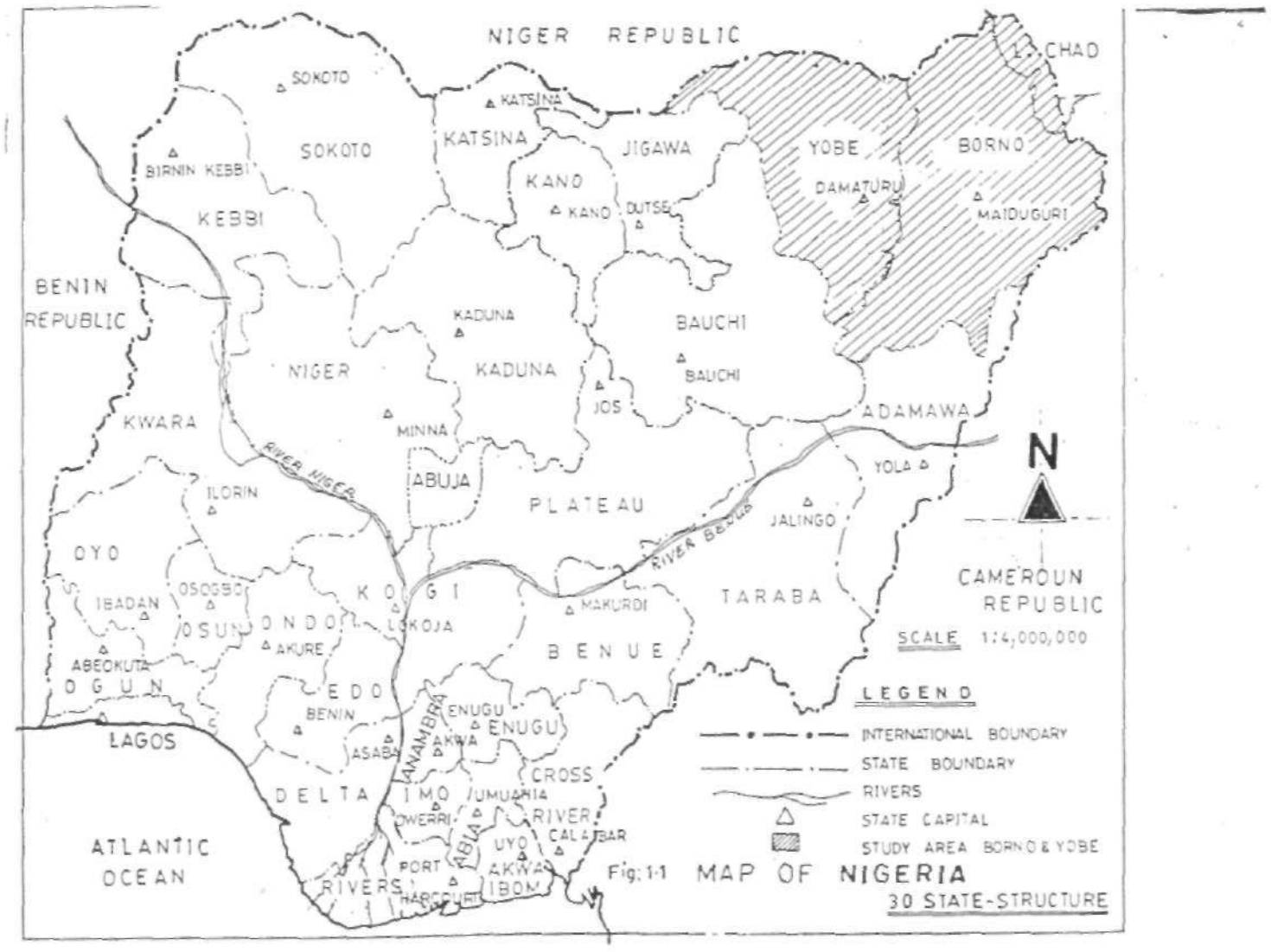
1.3 PROBLEM DEFINITION

There is a general concern that it is very difficult to reconcile presently available facilities with previously formulated development plans. Hence, efforts will be geared towards assessing the consistency in the previously formulated development plans at both the national and the local levels.

Therefore the problem focused on in this research work is the assessment of previous development plans enumerated by various development plans and supported by Government budgets in old Borno State (ie present Yobe and Borno States) of Nigeria. It is also to find the degree of success in plan implementation within the defined area. Other factors inhibiting plan implementation will be discussed, determined, examined and discussed.

1.4 DESCRIPTION OF STUDY AREA

Figures. 1.1 - 1.4 show the study area. Fig. 1.1 shows, in shaded portion, both Borno and Yobe States, while fig. 1.2 shows Yobe State only and fig 1.3 shows Borno State only. Fig. 1.4 shows tourists attraction of Borno State. The study area is


NIGER REPUBLIC
CHAD
SOKOTO
KATSINA
SOKOTO
KATSINA
JIGAWA
YOBE
BORNO
BIRNIN KEBBI
KANO
DUTSE
DAMATURU
MAIDUGURI
KEBBI
BENIN
REPUBLIC
KADUNA
BAUCHI
NIGER
KADUNA
BAUCHI
JOS
ADAMAWA
KWARA
MINNA
YOLA
RIVER NIGER
ILORIN
ABUJA
PLATEAU
JALINGO
RIVER BENUE
N
OYO
OSOGBO
IBADAN
OSUN
ONDO
KOGI
LOKOJA
MAKURDI
TARABA
CAMEROUN
REPUBLIC
AKURE
BENUE
SCALE 1:4,000,000
ABEOKUTA
OGUN
EDO
BENIN
ENUGU
AKWA
ENUGU
LEGEND
LAGOS
ASABA
ANAMBRA
CROSS
INTERNATIONAL BOUNDARY
STATE BOUNDARY
DELTA
IMO
UMUAHIA
OWERRI
RIVERS
ABIA
CALABAR
RIVERS
STATE CAPITAL
STUDY AREA BORNO & YOBE
ATLANTIC
OCEAN
PORT
HARCOURT
AKWA
IBOM
UYO
Fig: 1-1 MAP OF NIGERIA
30 STATE-STRUCTURE

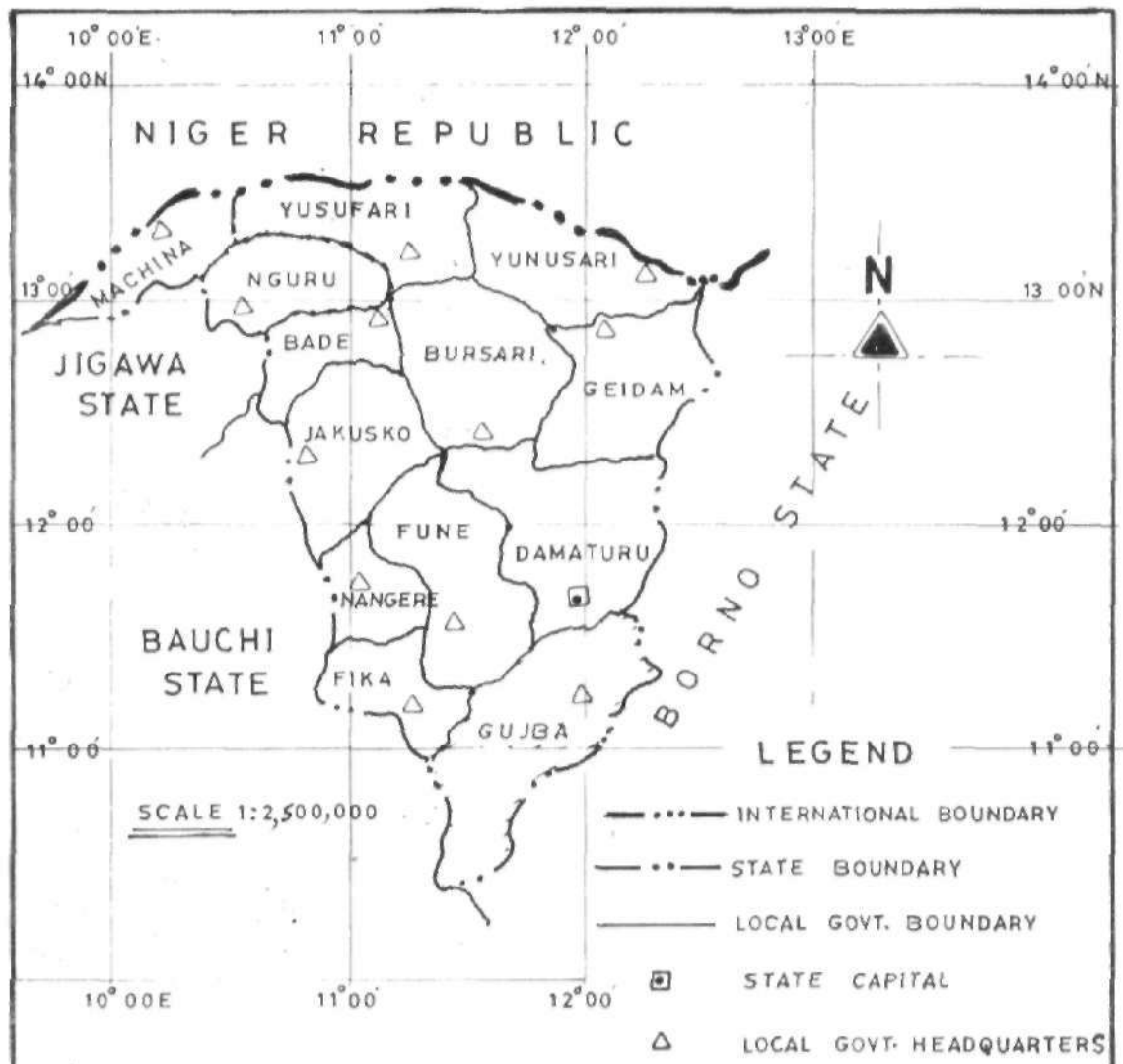


Fig: 1.2 MAP OF YOBE STATE STUDY AREA
13 LOCAL GOVT. AREA

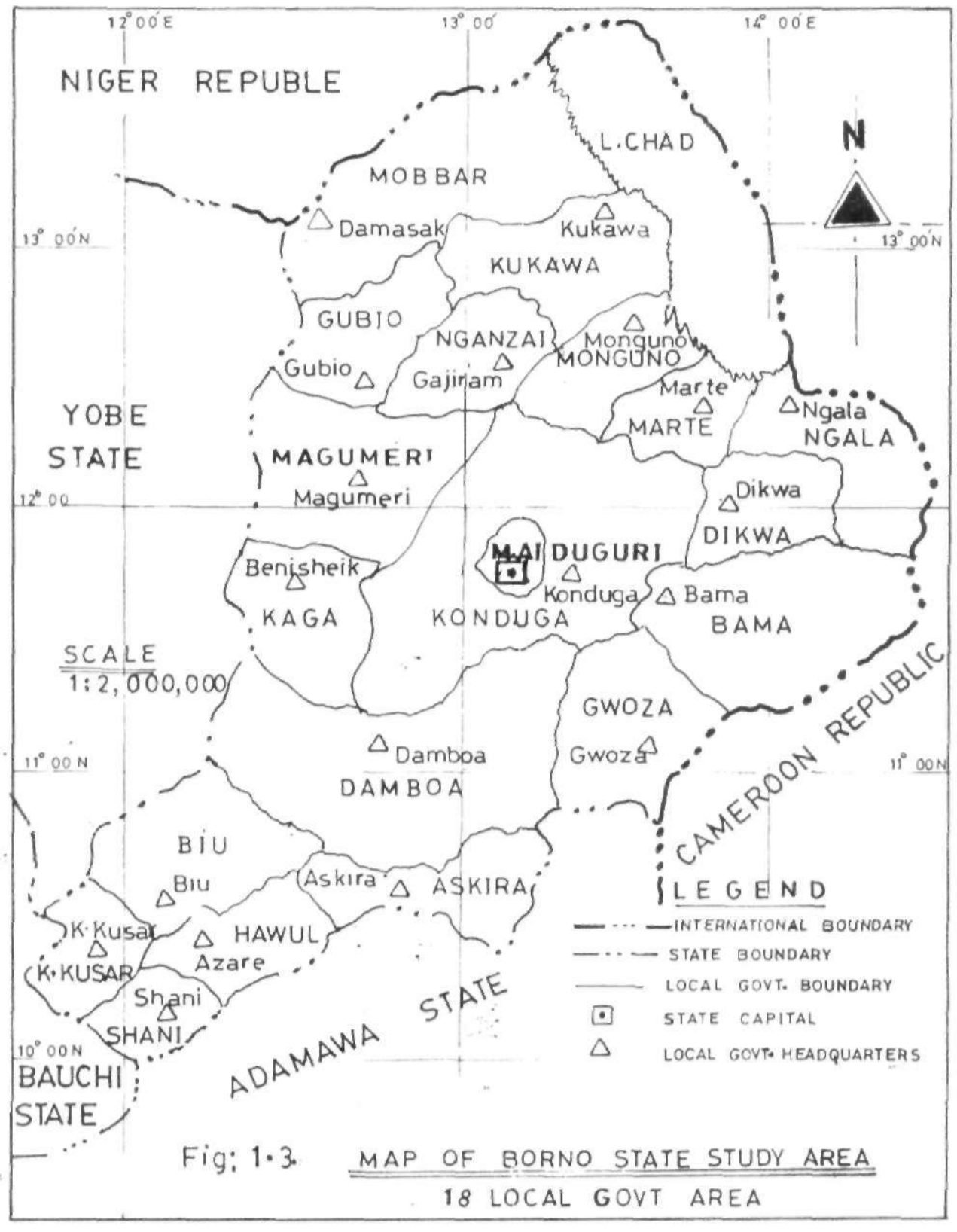


Fig: 1·3. MAP OF BORNO STATE STUDY AREA

18 LOCAL GOVT AREA



Fig: 1.4 MAP OF BORNO STATE
TOURIST FACILITIES AND ATTRACTIONS

located at the North Eastern part of Nigeria approximately, lies between latitude 10.41^{0} and 13.51^{0} North and Longitude 9.5^{0} and 14.5^{0} East. It previously had about eighteen (18) Local Government Areas, seven of which made up the newly created Yobe State. These Local Governments in both Borno and Yobe State have since been further sub-divided into 20 and 13 respectively. The area could be reached by rail, roads or air.

Maiduguri, its former capital, which is still the capital of Borno State is 434km from Yola, 464km from Bauchi and 598km from Kano (Borno State 1990 diary) Maiduguri had served as the Headquarters of Kannem Borno Empire after it's founders, the Kanuries migrated from Kukawa in 1903 and up to date is the Headquarters of Borno Emirate Council headed by his Royal Highness, the Shehu of Borno. Traditionally, Borno State has four Emirates comprising of Borno, Bade, Fika and Biu of which Borno Emirate is predominantly Kanuri's and in places like Damaturu, Fune, Geidam, Nguru and Gujba, which were carved out of Borno Emirate to Yobe State, had some tribes like Hausa/Fulani living side by side with the Kanuris. While in Fika Local Government now split into two Nangare and Fika have tribes like Ngzim, Karai - Karai, Ngamawa, Bolewa, Hausa and Fulani. And in Bade Emirate, we have the Badawas, with their capital in Gashua.

Presently, all other tribes of the Federation could be found living in major towns of the study area, engaged in Local trading with them. The major occupation of the people is subsistence farming and handcraft work involving leather works, dying etc.

There are traders of all sorts and Borno State is credited with producing most of the meat transported to the Southern Part of the Country.

The study area has twenty four hospitals and several private clinics. It has an international airport, Airforce base, seventeen motor parks, a University, College of Agriculture, four Colleges of Education, both State and Federal Polytechnics, Four Federal Government Colleges, School of Nursing and Midwifery, Federal Training Centre, College of Administration and Social Studies, etc.

There are cattle markets located at various local Government areas in the State. Maiduguri has two markets with a modern shopping complex and also catering. It also has rest houses located at all Local Government Headquarters. There is also an international Hotel, The Maiduguri Sheraton Hotel, which is completed now and a modern stadium complex which is under construction.

The 1992 Census gave the population of the States under study as 4,008,070 people and area of about 116,400 sqaure kilometre. It has some industries such as the Nigerian Bottling Company, Dalaram Soft Drink factory, Maiduguri Flour Mill, Nguru Oil Mill, N. N. P. C. Depot, Neital Shoe factory, Burnt Bricks Industry, etc.

The Traffic Control system available within Maiduguri are Automatic Traffic Signals, Road round-about etc. Also traffic Wardens are seen at busy places directing vehicles flow at

various places.

1.5 JUSTIFICATION FOR STUDY

Since the progress and well being of a nation depends largely on a good transportation system,the study area in particular, and Nigeria at large, should plan her transportation systems for anticipated demands especially in this changing society. With increase in speed of other aspect of development, speed of our movements must increase so as to cope with that pace of development. We should plan, therefore for, good transportation network within the study area. Thus, the question that needs to be answered here are; what is the position of road development in the study areas? Is there a convergence between the previously formulated road development plans and the actual road constructed? Is there a consistency in these plans? Are the plans logically developed? etc.

1.6 STUDY OBJECTIVES

The basic objective of this research is to identify, analyse and evaluate the various national and local trends on road development in Borno/Yobe States. Attempt is also made to assess these plans and identify the ancillary problems hindering the accelerated efforts of both Federal and State Government to the socio-economic development of the State.

1.7 STUDY METHODOLOGY

1.7.1 NATURE AND SOURCES OF DATA

In this work, time series data from 1962 to 1993 has been used. Also data had been collected on the following:

(a) Budget approval for transport sector of the economy, land transport and road development.

(b) Budget proposals for the transport sector of the economy, land transport, and road development by the federal Government on State basis as obtained from yearly budget estimate for comparison.

However this study is subject to at-least two limitations. One of such arises from the result of incomplete model of the process underlying the determination of the resources allocation for road development. Secondly, lack of complete data on actual resources allocation for road development has constituted a limitation.

There is a general apprehension that it is very difficult to reconcile presently available facilities with previously formulated development plans. Therefore, the effort here is geared towards assessing the consistency in the previously formulated development plans at both the national and local levels to see the degree of success in plan implementation within the defined area and major factors inhibiting plan implementation will be determined, examined and discussed.

The study made use of only secondary data got mainly from

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yearly budget proposals of the State Governments as well as Governments' Development plans pertaining to road development.

One of the objectives of the study is to propose steps needed to keep roads within the study effective. Since the road system has began to decline after decades of neglect, it is essential that this trend be reversed, as in any industry, it is more economical in the long run to develop or keep a facility in good operating condition than to put off needed repairs until much more expensive rehabilitations are required. Therefore, the study employed a means of determining the road density of the study area in particular, using [Ginsburg, 1961] formula which has similar application as in human geography as a measure of population density.

The number of people per unit area here is represented by the number of kilometre of rad length per unit area of a given place by (L/A) where (L) is the total road length, in kilometre and divided by (A) the area of the place in square kilometre. This is done for the study area to compute road length density of the study area, the road length in each Local Government Area, include both State roads, Local Government earth roads and Federal roads divided by the area of that Local Government to get the road density in km/sq.km. for that Local Government Area adding the overall result to compute the total result for the two states of the study area.

Similarly, for the country as a whole the total length of roads in each State of the Federation is calculated including

both Federal, States own roads and Local Government roads within each state and divided by the area of that state, and adding the total result to get the overall result for the country as a whole.

Other materials used are the provisional census figures divided by area of each State of the Federation to compute the population density. And this is also done for the study area to compute its population density by dividing the population figures of individual Local Government in the two States of the study area by the area of the Local Government and adding the overall results to get the average for the two states of the study area.

1.8 THESIS STRUCTURE

This thesis is divided into seven chapters. Chapter one deals with the background of the subject matter, Chapter two reviews available relevant literature. Chapter three contains the review of road development in the nation at large and locally within the study area. A summary of problems inherent in the process of plan implementation is also given. In chapter 4, the assessment of road plan development at both local and national level is undertaken with consequent problem arising from the assessment done. Chapter 5 analyses the road development pattern of the study area. Chapter 6 offers action plan for orderly growth on road development in the study area and finally, in chapter 7, main conclusion and some important policy implication are presented.

CHAPTER TWO

2.0 SOME PRELIMINARY OBSERVATIONS

2.1 HISTORY AND UNIQUE FEATURES OF ROADS

Man has always been curious for new findings. In the early days of civilization, it was thought that movement of any human being could be along the ground surface only. No one even thought of flying in the air or cruising in large oceans. Seeing birds flying, man thought of flying and that was the starting point of modern aeronautics. Similarly, seeing fishes in sea or rivers, man must have thought flowing in water and that may probably be a starting point in the development of water ways and designing of ships and boats. As far as highway development is concerned, there was no difficulty in movements on land. Later on, with the development of science, railways developed.

Broadly speaking, the modes of transport can be classified as follows:

1. Roadway or highway
2. Railways
3. Water ways.
4. Airways
5. Fluid transport through pipe-lines, Conveyors belt, cables, cars, Mono rail, which are used for some specific purposes.

The Science which covers designing, planning and maintenance and operation of the roads, for the convenience of the road traffic, is "Highway Engineering". Similarly, the science dealing with planning, designing, operation and maintenance of railway track, wagons, coaches, locomotives is called Railway Engineering. And finally, planning, designing, operation, control and maintenance of Water ways, air ways and their connected machinery are respectively called Harbour Engineering and Airport Engineering.

This study, is on Highway Engineering, with its development in Nigeria as our particular, focus. However, the history of road development as a whole is first reviewed.

According to [Singh, 1983], traces of early roads have been found since the recorded history of man kind. The first and oldest mode of travel obviously were foot paths. Before, invention of wheel, people used to walk on foot, thus creating foot paths. Man and material must have been transported either on backs of men or animals. After invention of wheel, animal drawn bullock carts continued to be popular mode of transport for quite a long time. This necessitated providing surface for wheeled carts. The first hard surface road was discovered in Mesopotamia at about 3500 B. C. According to Archeological findings in Mohanjodaru indicate that around (3500 B.C), streets were paved, [Singh, 1983] for construction of illustorious pyramids in Egypt between (300 - 2500 B.C), this is because

there are signs and popular opinions that for transportation of huge limestone blocks, roads must have been in use, and on the Island of Crete, in the Mediterranean Sea, Stone surfaced road was found. There to have been built before 1500 B. C. References have been given in Bible about a road constructed between Babylon and Egypt soon after 539 B. C. After this, the Romans developed an intensive system of roads radiating in many directions from Rome. Some of these roads are said to be of very elaborate construction. The Appian way, built about 312 B. C. illustrates the procedure adopted by the Romans for the construction of roads. Many of the Roman Roads are still in existence even after 2000 years. Romans were considered to be the pioneers in road construction, even after road construction continued to grow.

Nowadays, a good system of transportation has actually become a measure of a Country's economic, industrial and cultural growth. Transportation system thus comprises of a good network of roads, railways, well developed water ways, and airways as earlier mentioned. Of all the modes, however, the road mode has unique advantages on account of the following reasons:

(i) It is nearest to man because before going to any of the other modes it is the first which is going to lead man to these places.

(ii) It can be used by all sorts of vehicles like bullocks

carts, carriages, rickshaws, cycles, scooters, cars, big buses and trucks and are equally useful to pedestrians.

Other modes can move only on specific path, i.e, railwagons, coaches, locomotives can move only on rail track, while ships and boats can move in water and aeroplane in air.

(iii) Roads can lead to any remote places but railway will lead to railway stations only. Aeroplane to air ports and ships to harbors only.

(iv) Investment on road transport by Government is comparatively small. Road Vehicles are cheaper than locomotives, ships and planes. Maintenance of roads is also cheaper than rail-truck, docks harbors and airports.

(v) Trains moving on railway are mainly owned by Government Similarly, aeroplane and ships are also owned by Government and big Companies. Hence these types of transport are not totally seen as public transport system. On the other hand, a Government Vehicle or private vehicle,, can move on the road without any hinderance.

(vi) There is flexibility of movement of vehicles from one road to another or on lane to another according to ones requirements, which is not possible with railways.

(vii) Local Communication is easier on road vehicle from one

village to another but is not possible with others, such as railway or aeroplane which cannot move from village to village.

(viii) Movements are not time bound, with road transport as in case of railways and air ways which have time schedule of journeys.

(ix) Farm products are brought by road to the market, and remote places can only be reached by roads.

(x) Possibilities of accidents are more than other mode because of its flexibility of movements and secondly, due to mix traffic condition on the roads. But in case of railways, possibilities of accidents are very low. Similarly, in case of air traffic possibility of crash always persists.

(xi) It is the only mode of transport that offer itself for the service of the whole community alike.

2.2 ROAD DEVELOPMENT PATTERNS IN NIGERIA

A growing nation as stated earlier requires a good transportation system to move its goods and commuters to, from and within its boundaries. The importance of the transport sector as an engine of economic growth in Nigeria is reflected on the amount of its capital investment allocation in the three previous National Development Plans which average 20% of the total Public investment. The Federal Government's transport objectives as far back as 1960 was geared towards "co-ordinated

development", economic efficiency, and by implication of the support of national interest like the opening and binding together of the vast nation" [Nnama, 1989]. That is why a major objective of a National road development programme is the creation of a national road network of primary and secondary arteries which would cut across the existing trunks 'A' and 'B' network. A re-classification exercise has already been undertaken by [Kampsax Consultant, 1967] in their 1967 study entitled: "Highway Survey in Nigeria"; The Kampsax (1967) recommendations, now form the basis of the re-classification of our road system. This new network, which will be built to better standards, will offer the nation a well articulated set of highways geared to the needs of development. An important part of the network consists of new North-South highways to link the new ocean terminals at Warri and Calabar with the hinter land.

Road construction increased from 44,104km in 1945 to 71,870km in 1961 and to 116,421km in 1980. The bituminous surface roads increased from 11,053km in 1962 to 30,285km in 1980; while the earth/gravel roads also increased from 60,818km to 86,136km during the period. Details are given in (Table 2.1).

TABLE 2.1 ROAD CONDITION IN NIGERIA AND THEIR TOTAL LENGTH FROM 1946 - 1994

YEAR	ROAD CONDITION		TOTAL LENGTH (KM)	% CHANGE OF PAVED ROAD
	PAVED BITUMINUOSSURFACE	UNPAVED LATERITE/GRAVEL		
1945	858	39246	40104	0.0
1946	1135	39794	40929	32.28
1947	1224	38461	39684	42.65
1948	1291	40462	41753	50.40
1949	1508	40887	42395	75.75
1950	1648	43480	45128	92.07
1951	1793	42880	44673	108.97
1952	2021	43236	45257	135.54
1953	2625	43734	46359	205.94
1954	3254	48218	51472	279.25
1955	3930	53516	57446	358.04
1956	4326	52423	56749	404.19
1957	5454	52471	57925	535.66
1958	6284	52809	59093	632.40
1959	7647	58066	65713	791.25
1960	8745	57341	66086	919.23
1961	11052.80	60817.6	71870.4	1188.11
1962	12329.60	60467.2	72796.8	1336.94
1963	19299.20	115025.6	134324.8	2149.30
1964	22825.60	118953.6	141779.2	2560.25
1965	24044.80	117878.4	141923.2	2702.33
1966	24400	117878.4	142278.4	2743.82
1967	21528	113150.4	134678.4	2409.09
1968	24828.80	114347.2	139176	2793.79
1969	24772.80	119200	143972.8	2887.27
1970	creationof states	N.A	N.A	N.A
1971	27145.60	129421	156566.6	3063.82
1972	28374.40	123625.6	152000	3207.03
1973	27723.60	127367.6	155091.2	3131.18
1974	N.A	N.A	N.A	N.A
1975	N.A	N.A	N.A	N.A
1976	creationof states 28242	85696	113938	N.A
1977	N.A	N.A	N.A	N.A
1978	N.A	N.A	N.A	N.A
1979	30285	N.A	N.A	N.A
1980	N.A	86136	116421	3429.72
1981	N.A	N.A	N.A	N.A
1982	N.A	N.A	N.A	N.A
1983	N.A	N.A	N.A	N.A
1984	N.A	N.A	N.A	N.A
1985	N.A	N.A	N.A	N.A
1986	creationof states	N.A	N.A	N.A
1987	N.A	N.A	N.A	N.A
1988	N.A	N.A	N.A	N.A
1989	N.A	N.A	N.A	N.A
1990	N.A	N.A	N.A	N.A
1994	40918.39	96584.43	137502.82	4669.04

Source: Obtainable from the Documentation Unit of K.I.L, A.B.U.

Figures from 1945-1970 were converted from mile to kilometre.

Between 1951 to 1972, the road network was considerably improved in terms of total length and quality. During the first, second, third and fourth development plans, the transport sector had about, 21.28%, 23.01%, 22.34% and 15% respectively of the total planned public investment (see Table 2.2).

TABLE 2.2 PUBLIC INVESTMENT COMMITMENT OF ROADS DEVELOPMENT IN THE VARIOUS DEVELOPMENT PROGRAMS AND PLANS

PROGRAMS / PLANS	COST OF PUBLIC SECTOR PROGRAMES / PLANS (N MILLION)			RELATIVE COMMITMENT TO ROADS		
	TOTAL (1)	TRANSPORT (2)	ROADS (3)	(2) AS % OF (1)	(3) AS % OF (2)	(3) AS % OF (1)
1955 - 61 X Economic programmes XX	292.6	93.4	27.2	31.84	29.03	0.92
1962 - 68 1st Development plan XXX	1586.00	309.092	150.6	21.28	52.08	11.0
1970 - 74 2nd Development plan XXXX	2051.738	499.094	359.84	23.01	76.05	17.50
1975 - 80 3rd Development plan	43314.009	9679.541	6610.086	22.34	82.92	18.52
1981 - 85 4th Development plan XXXXX	70500.00	10707.61	7307.025	15.19	84.90	12.89
1985 - 90 Dep.Plan XXXXXX	12703.716	1700.613	1405.746	15.2	6.82	11.06
1990-95 Dep.Plan XXXXXXX	++ --	14178.96	9275.613	13.4	82.66	--

Source compiled from the following:

x. Ten years plan of development and welfare for Nigeria (sessional paper No. 24, 1945), (Lagos Govt. 1946).

xx. Federation of Nigeria, national development plan 1962 - 1968 (Lagos) Federal Ministry of Economic Development (1961)

xxx. Federal Republic of Nigeria, 2nd development plan 1970 - 1974 (Lagos) Federal Ministry of Information (1970) Table 10 P.201 and Table 20. P.207.

xxxx. Federal Republic of Nigeria, 3rd development plan 1975 - 1980, Vol 1 (Lagos) Residential Planning Office (1975) Table 14.1, P.200 and Table 29.6, P.348.

xxxxx. Federal Republic of Nigeria. Fourth National Development Plan for Nigeria (1981-1985) National Planning Committee, Lagos.

xxxxxx.Federal Republic of Nigeria National Rolling Plan for Computing for (1985-90) National Planning Office, Lagos, 1991.

xxxxxxx.Federal Republic of Nigeria National Rolling Plan for (1990-95). National Planning Committee, Lagos, 1996.

Note: ++ Data not available.

TABLE 2.3 HISTORICAL PROFILE OF ROAD LENGTH IN NIGERIA
1946 - 60

YEAR	TOTAL KILOM.	TOTAL LENGTH OF TARRED ROAD (KM)	% IN TOTAL KILOMETER CHANGE PER YEAR	% CHANGE PER YEAR OF TARRED ROAD
1945	40104	858	0.0	0.0
1946	40929	1135	2.05	32.00
1947	39684	1223	1.05	42.65
1948	41753	1291	4.11	50.45
1949	42395	1508	5.71	75.75
1950	45128	1648	12.52	92.07
1951	44673	1793	11.39	108.97
1952	45257	2021	12.84	135.54
1953	46359	2625	15.59	205.94
1954	51472	3254	28.34	279.25
1955	57446	3950	43.24	358.04
1956	56449	4326	41.50	404.19
1957	57925	5454	44.43	535.66
1958	59093	6284	47.34	632.60
1959	65713	70407	63.85	791.26
1960	66086	8785	64.78	919.23

x Source: Documentation Unit of K.I.L. (A.B.U), Zaria; data were converted from mile to kilometre.

Details of the current 1994 road lengths and their status as well as owner governments are summarized in Table 2.4 and 2.5

TABLE 2.4 A BREAKDOWN OF THE ROAD NETWORK AT BOTH FEDERAL, STATE AND L.G.C. IN NIGERIA (1994)

SURFACE TYPE	FEDERAL	STATE ROAD AND LOCAL GOVERNMENT	ALL CLASSES
Asphalt concrete	18249.32	17202.39	35551.71
Surface dressing	7877.40	13009.69	20887.05
Desert trucks	5970.04	83574.78	89544.82
TOTAL	32,096.76	113,786.82	145,883.58

Source: Obtained from Road Inventory supplied by the Federal Ministry of Works Higway, Division Igamu Lagos Nigeria (June 1994).

TABLE 2.5 ROADS DISTRIBUTION IN % BY TYPE AND OWNER AGENCIES AS REFLECTED IN TABLE 2.4

SURFACE TYPE	FEDERAL	STATE AND LOCAL GOVERNMENT	ALL CLASSES
Asphalt concrete paved	56.97%	15.70%	24.28%
Surface dressed paved	24.20%	11.4%	14.24%
Earth gravel desert trucks	28.90%	73.5%	61.48%
TOTAL	100%	100%	100%

Source: From table 2.4

During the three year Rolling Plan (1990 - 92) the allocation of the sector was reduced in the light of much reduced resources. This has informed the emphasis on rehabilitation and maintenance of existing infra-structure as against significantly embarking upon new ones. Problems that have characterised the development in the transport sector, including the road mode can be summarised as follows:

(a) In-efficient management of transport enterprises resulting in poor operational performance.

(b) Lack of effective rehabilitation and maintenance Programmes.

(c) Shortage of indigenous executing capacity for construction and maintenance.

(d) Lack of co-ordination among and within the various mode of transport which have led to im-balance in the overall development in this area.

(e) Problem of inflexible pricing, which has to be reviewed in line with existing market realities.

Therefore, in order to overcome the above identify

shortcomings, a major objective of Government Policy will be:

(a) To co-ordinate planning of all the transport development and the administrative regulation of their operation.

(b) To regulate the maximum axle loads permissible on highways and ensure that roads users pay more equitable share of the cost of providing/maintaining the road facilities especially haulers.

The above calls for a re-organisation and strengthening of the Federal Ministry of Transport in order to prepare it adequately for the new active role in policy formulation and programme planning; of which a new, technically competent and effective transport planning unit is necessary under a technical assistance arrangement.

As noted, Nigeria today is witnessing an unpreceedented and urgent need for improvement of existing roads. Unfortunately, political considerations seem to still influence government decisions and render economic analysis in-effectual. Therefore, sometimes with this political consideration, funds have been invested in providing facilities which are not being adequately utilized, or sometimes because such facilities are not related to the needs of the network as a whole. As a consequence of these ill-advised decisions, many roads face growing traffic which lead to fast deterioration. Also, a massive switch to road transport as a result of rail abandonment, a process greatly hastened by the impasse resulting from lack of finance to the railway system, poses a problem requiring quick rehabilitative intervention.

Given the above situation, more than ever before,there is now much greater need for co-ordination and rationalization in making investment decision in the transport sector.

It used to be the policy of Governments in other societies to allow mainly Market forces to determine investment and operational activities in the transport sector. In a developing nation like Nigeria where lack of transport facilities can prevent the citizens from enjoying other social services, such a policy only cannot be relied upon now that, we are faced with a near collapse of the transport system.

The situation calls for strategic development, but the concept of strategic road development plans whose un-impeded use is essential to a nation's well being is as old as recorded by history. The word strategic itself has such a power of Military connection, that equal important economic consideration can be over-looked. But sometimes, plan in the abstract may make sense, but it is development in response to urgent needs that produces progress. That is why in Nigeria today, the challenge of social demand for road development poses. Physical planning problems.

2.3 OBSERVATIONS ON ROAD FINANCING IN NIGERIA.

Historically, the bulk of roadway construction funds have been disbursed from capital expenditures over the past forty years. A feature of investment patterns in road development is that, capital disbursement have increased yearly, while disbursment for maintenance has decreased. The fact that construction needs are increasing relative to

other types of spending, may infact lead to a vicious cycle in our highway, financing. Construction of roads that were never built to meet even low design standards gobbles up higher percentage of the available funds and leaves small portions of funds for maintaining other roads of the country's highway system which carry higher volumes of traffic and in turn leads to faster deterioration of our roads system.

This road deterioration problem is highlighted in a resent [World Bank report, 1987] titled "The Road Deterioration problems in developing Countries" The report observed that most developing countries have not been spending enough or spending wisely on road maintenance. The report made a case study of what is obtained in 85 developing Countries and concluded as follows:-

a. That the cost of rehabilitating roads that have been allowed to deteriorate in poor condition warrant rehabilitation was put at $41 billion at 1984 prices. The cost of rehabilitating bridges was not included.

b. The cost periodic and routine maintenance need was put at about $4.6 billion per year during the period (1987-90) assuming these needs were met in time.

If, however, these needs are not met on time, the cost will be multiplied, the multiplier factor can be assessed when it is realised that the $41 billion worth of rehabilitation referred in (a) above, is the result of failure to do some $12.0 billion worth of preventive maintenance over a period of one decade. Furthermore, the increased user costs due to roughness of roads in fair and poor condition would add further to the economic losses. The

question to ask now is, what needs to be done in view of dwindling resources for road maintenance?.

2.4 BASIS FOR TRANSPORT PLANNING

The bases of any planning is to achieve the following objectives:

a. To create conditions fovaourably for a long term economic growth.

b. To decide on the best usue for the resources available for development.

c. To ensure balance of growth, so that one sector of the economy does not flourish while others to be stagnated.

d. To encourage aid, as most donor nation or agencies expect to see a development plan and will base their aid upon the requirement expressed in the plan.

It is against this frame work, that transport planning is required to ensure that thei\re is a well coordinated effort to identify either new roads needs or manage the existing ones. And from the above frame work lies the question of what to do with abandoned or the overlapping project that were never completed together with the thrust of today's problem of our local roads which are providing lower level of services year by year, for even if they were originally built to meet adequate design standard, they are now deteriorating due to in-appropriate funding. Also inflation and erosion of the high way have dramatically fueled highway funding problems of some state. This call for our planners to change from road construction Engineering to road maintenance Engineering. That is why, the Government should change decision for fund disbursement for roads,

because it is more economical in the long run to keep a facility in good condition than to put off needed repairs until much more expensive rehabilitation cost are required.

To this end therefore, the Area under study in particular, which State Government spent much of it fund on road construction every year which are not well adequate to cover the need of their people, should in-co-operated adequate and affordable funding level, whereby reversal of funds for road development, deterioration and keeping road development in pace with growth, should be the main objectives.

CHAPTER THREE

3.0 REVIEW OF PAST ROAD DEVELOPMENT PROGRAMMES.

3.1 INTRODUCTION

Road Investment in Nigeria has grown somewhat rapidly over the years in relation to other modes of transport. This has been due mainly to its greater relative popularity emanating from the fact that as mentioned earlier, it is about the only means of transport by which the remote towns or villages in the Country can be reached. This is a decisive advantage over other modes like Rails, Water and Air which provide access to a limited number of points. This special characteristics of road transport is perhaps the main reason for the high priority accorded to road development by Government.

Road development and expansion in Nigeria have progressed systematically since World War II especially from the early 'fifties' with a network increasing from a little over 44,000km in 1951 to about 152,000Km in 1972 (an increase of more that 100% in 1975). Of this network bituminous surfacing account for about 4.0% and almost 19% in 1951 and 1972 respectively. It increases by more than ten fold from just a little under 2,000km to about 28374km during the same period. (See table 2.1).

Road network in the country are of two major categories, namely, the trunk 'A' roads the construction and maintenance of which are the sole responsibilities of the

Federal Government and Trunk 'B' roads, for which the State Governments used to be wholly responsible but the responsibility is now being shared with the Federal Government. Roads in the former category are essentially inter-regional or inter-state highways linking up Southern parts with the Northern parts of the Country from the major sea port. The second category i.e. the While the second category i.e. the Trunk 'B' roads which connect the State and the divisional administrative centre to the other towns in the State and other divisions within these states. They also provide access to the Trunk 'A' roads and the railway system. The basic principles underlining the Federal road network describe above, is the establishment of the national grid of North-South, East-West trunk roads, together with a larger number of secondary roads falling within the following categories viz:

(a) Inter-state roads

(b) Road to major Federal projects.

(c) Roads linking Nigeria with her neighbours.

(d) Alternative routes to express where tools are charged.

(e) now roads resulting from the re-alignment of existing bituminus surface roads.

There are about over 67,000km of these Trunk 'B' roads still under the joint jurisdiction of the State Governments and their respective local Governments. To these also exist

new local feeder roads which are being constructed by the Directorate of Food, Roads, and Rural Infrastructure (DFRRI). Due to the important role played in the process of economic development by transport in general, and roads in particular, the Federal Government has always accorded very high priority to road development. This is quite evident in the level of investment; committed to road development in the various economic development programmes since the second World War.

Table 2.2 gives a clear indication of the general picture in terms of public sector expenditure. During the immediate post war ten years plan of development and welfare, (1946-1956) about one fifth of the total public sector investment amounting to some N1120.0 million went to transport sector, and a bulk of this is to road development. In the subsequence plans, the share of transport sector expenditure in the total capital investment allocation has fluctuated between about one fifth and one third. For example, in the (1955 - 61) programmes, the share stood at 31.84%. Thereafter it falls to 21.28% in the first national development plan (1962-68), only to rise again to 23.01 in the second national development plan (1970-74). Although the investment allocation to the transport sector was the largest ever in absolute terms running into exactly N10.7 billion, in the fourth plan (1981 -85), which represent just 15.19% of the total capital investment in the plan

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falling short of the share in the previous plans. The relative importance of transport sector and road development is clearly demonstrated by the fact that Government road programmes have been accounting for a rapidly rising share of the transport sector allocation over the various plan periods. Whereas it stood at 29.03% in (1955-61) economic programmes, it rose to 52.08% and 76.05% in the first and second national development plans respectively, then in the third national development plans, it rose further to 82.92% and 84.9% in the fourth plan. Road network development in Nigeria was initially considered as complementary to the railways. This was because they were meant to serve as feeders in the movement of farm products from rural areas to the rail heads or stations. It has now assumed greater importance in the movement of freight and passengers than railways. This is because it has the advantage of greater flexibility of service. Since numerous routes and destinations are possible, it also offer door to door services and cheaper overshort distances, thereby promoting more continuous movement of goods and people. Nigeria has since Independence, been un-equivocally committed to rapid economic development, therefore needs to accelerate her road development rather aggressively. The sore point of the commendable road development programmes have however, been the inadequate attention paid to road maintenance in successive development programmes.

Table 2.1 depicts the nation's effort at road building between 1951 and October, 1980. The table indicates that one phase of road development appears to have ended by 1976, when the total kilometres of road, had virtually stabilized. Emphasis thereafter shifted to improvement in quality so as to satisfy the objectives of safety and economic efficiency. Within the thirty year period spanning 1951 and 1980, the total road length has been increased by nearly 200% while length of good quality roads has gone up by 1,500%. A major policy decision with respect to the national roads network is the taken-over of selected few State roads by the Federal Government. This policy has made it possible to improve road design standard through the re-construction of such taken-over roads which was possible for the Federal Government in 1974, was it was not possible to re-construct many of these roads during the (1975 - 80) plan period, of which left overs were included in the fourth (1981 - 85) plan. The bulk of such roads have since been re-constructed. Perhaps, the latest features in road development is that of dualizing heavily trafficked links of the network and their general up-grading to higher design standards; like (Lagos - Ibadan, Enugu - Port harcourt, Kaduna - Kano, which were reconstructed to dual carriage way standard with toll gate for gate fees collection. Construction is also progressing on Benin- Warri, Kaduna - Abuja and Ibadan - Ife.

3.2 NATIONAL TRENDS IN ROAD DEVELOPMENT

There is a strong belief that if resource availability constraint is allowed for, Governments both at Federal and State levels have been relentless in devoting resources to road building [Adebisi, 1992]. This is evident in the substantial share of development funds consumed in road development. For example in the (1955 - 60) economic development plan, the total Capital Expenditure was 292.6 million Naira expended largely on Highways, Bridges, posts Telegraphs as well as other Capital Expenditure. Within this period, bridges alone accounted for about (71.67%) of the total expenditure in roads. Development plan spanning (1962 - 68) had actual expenditure on roads by all Government as 150.6 million out of a total Capital Expenditure of N1.3536 Billion representing about 11%. Activities within the 2nd National Development period, spanning (1970-74) were such that road development alone consumed a total of 17.5% of the total Capital Expenditure of N2.052 Billion. The percentages of total capital outlays consumed by road development or earmarked were 18.52% and 12.89% respectively during the (1975 - 80) and (1981 - 85) development plans out of the total outlay at N43.314 Billion and N70.500 Billion Naira respectively. These are summarised in Table 2.2.

The pattern of funds disbursement for road development makes an interesting study. It should be noted that formal

development planning in Nigeria predate independence. Actually, records show that there were two such plans before Independence. First, there was the ten years development plan expected to span (1946 - 56). Before the end of the plan period, however, the Federal system of Government was introduced in October, 1954. This event brought the first formal planning effort to a pre-mature end. Then came the (1955 - 60) economic development plan which, in 1958, was revised.

The (1962 - 68) Development plan, often referred to as the First National Development plan, had great impact on the transportation sector. The main objective of the plan was the achievement and maintenance of the highest possible rate of increase in the standard of living and the creation of necessary conditions to this end.

The (1970-74) second plan with an allocation of N332.6 million to roads out of a total capital expenditure of N2.051 billion by the Federal and State governments. Of which Federal Government's share alone was later revised to N643.7 million with states share as N240 million. Actually, many of the roads to be constructed in (1970 - 74) period and several more were included in the 4th Development plan.

However,during the (1975 - 80) 3rd Development plan period, the Federal Government committed over N5.0 billion to road building spanning a total length of about 17,000km. The State Governments spent a little over N1 billion on

their respective road programmes thereby keeping them within 20% of the Federal Government spending as in the second plan period. Within the period however the total actual capital outlay in the transport sector was ₦29.43 billion thus implying that about 16.9% was committed to road development. A total of ₦3.65 billion was earmarked for Federal road programmes in the (1981 - 85) fourth development plan while the States road programme was totalled as ₦3.26 billion. In aggregate, ₦6.91 billion out of a total planned capital expenditure of ₦66.5 billion, thus a total of 10.4% was devoted to roads only. This indicate a similar situation to that of the first plan period, where the Federal and State Governments were equally active in road building. However, a number of unexpected events did combine to distrupt the achievement of the proposals contained in the 4th plan, hence, some of the road development programmes contained in the plan are yet to be executed even by today.

3.3 LOCAL TRENDS WITHIN THE STUDY AREA

The State had made a proposal to construct about 923 kilometre of road during the (1975-80) plan period at total budgetted amount of ₦60.890 million naira of which it spent about ₦42.840 million Naira on roads with completion of only one project, i.e. Potikun-Jakurko at the cost of ₦16.927 Million Naira.

Between (1980-85) it continued with the road project

that were contained in the Budget proposals during the (1975-80) plan period, with addition of Eight new projects, totalling to 373.7 kilometre at cost of ₦288.982 million Naira, out of total budgetted sum of ₦338.622 million Naira.

From (1985-90), however, the State Government budgetted the sum of ₦84.0 Million Naira and continued with road projects that were started in the 1975-80 development plan viz: the road area Ngandu-Danboa road and Kwangu-Kusar-Shani roads at the cost the cost of =N=15.1 Million Naira and ₦9.50 Million Naira respectively. Also three projects were carried over from the fourth plan (1980-85) period, namely: Gabio-Damasok, Kakawa-Gudumbali-Zari-Damasak and bayamari-Kaliari bridge, at the cost of ₦16.15, ₦21.220 and ₦55.706 Million Naira respectivelly. Following to 483 kilometre altogether, and during the year rolling plan (1990-93) it continued again with two project that were stated in the (1975-800 plan period namely: Ngandu-Danboa-Gwaga and Kwarya-Kursan-Shari roads as of ₦15.1 Million and ₦9.505 Million Naira respectively. Also it included the Dikwa-Galumba-Barki road which had started in 1975 and stopped in 1985. Others are Geidan-Gubio, Askire-Kwajjafa and finally Watudu-Gabia with allocation of ₦16.125, ₦20, ₦3.0 and ₦8.0 Million Naira respectively. Three projects were added, when Yobe State was created in August, 1991 namely: Maidan-Gadakan, in Yobe State and Bita-Izge and Yiminshika, Sakwa-Marama in old Borno State.

Altogether the study area had budgetted the sum of N152.586 Million Naira during the plan period (1990-93) to construct total of 823 kilometre of roads in the area. Also the Federal Government road programme in the area is detailed in the table 3.1 below.

TABLE 3.1 FEDERAL GOVERNMENT ROAD PROJECT IN BORNO AND YOBE STATE FROM 1979 - 1981 PERIOD

S/NO	PROJECT	WORK DESCRIPTION	PLAN COST	ACTUAL COST	REMARKS
1.	Damaturu-Bayamari	Widening repair and Asphalt overlay 90km.	N. A	N. A.	To be completed in 1994.
2.	Maiduguri-Gamboru	Asphalt over lay of Maiduguri to Dikwa 80km and repair of Dikwa-Gulumba (53km)	N25,343,846	N25,345,846	Completed in 1990
3.	Bayamari-Geidam	Rehabilitation and Asphalt over lay 50km.	N68,487,00	N159,826,051.00	To be completed in 1994
4.	Dikwa-Marte Cross-Kauwa Spur Road.	Construction of 61km road with three bridges	N22,033,395	N18,114,500	Completed in 1980.
5.	Gashua-Yusufari	Construction of road with Asphalt over lay 27km.	N161,958,097	N184,136,254.32	To be completed in 1995.
6.	Maiduguri-Gubio	Construction of 84km new roads.	N12,190,438	N12,190,435	Completed in 1980.

TABLE 3.1 FEDERAL GOVERNMENT ROAD PROJECT IN BORNO AND YOBE STATE FROM 1979 - 1981 PERIOD (CONTINUED)

7.	Marte-Monguno	Construct-ion of 41km of new roads.	N15,202,231	N13,607,022	Completed in October, 1980
8.	Maiduguri-Potiskum	Maintenance of 230km existing road	N540,000	N540,000.00	Completed in 1982
9.	Maiduguri-Damboa	Repairs and Asphalt over lay	N8,296,190	N12,704,371	Completed in 1982
10	Maiduguri-Bama	Special repairs and Ashpalt over lay	N9,901,505	N4,872,632	Completed in 1993
11	Uba-Askira	Special repair and Asphalt over lay	N34,000,000	N. A	project is yet to be
12	Marte - Gulumba road	Repairs & Ashpalt over lay	N. A.	N. A.	completed at the end of report. Completed in 1994

Sources: President Laison Office in Maiduguri before (1979-81).
Note: N.A. = Data Not Available

The study area roads were developed during the (1975-80) period of which now required mainenance rehabilitation, both heavy and routine maintenance. Also, at present, the feeder roads under the Local Government Area are not getting

sufficient attention through maintenance by YOSADP and DFRRI and BOADAP of roads constructed by them.

The condition of the study area road network varies significantly overall and among the Local Government Areas and are mainly dependent on the State Ministry of Works and financial resources available for it. But the backing of road project in the study area is so large that direct borrowing with Federal support or concessional external assistance is needed to improve the study area road network in order not to be impediments to economic stability and growth. As proper maintenance of the proposed network of roads are essential if the capital investment is not to go wasted.

Underspending on rehabilitation strengthening and maintenance would result in increasing road user costs and increased re-construction cost in the future. List of roads proposed for construction in the 1994 budget in the study area of Yobe State and Borno State are tabled in 3.2 and 3.3 respective including both Federal Government efforts.

TABLE 3.2 LIST OF ROAD TO BE COMPLETED IN YOBE STATE BY THE END OF 1994

	FEDERAL ROADS		STATE ROADS
1.	Damaturu-Bayamari	1.	Bayamari - Kaliari Bridge Construction and access roads 11km.
2.	Bayamari - Geidam	2.	Gujba - Gabai - Buni roads
3.	Gashua - Yusufari	3.	Katarko - Goniri
4.	Geidam - Damasak	4.	Maidua - Gadaka

Source: Yobe State Ministry of Woks. & Housing Damaturu October 1994

TABLE 3.3 LIST OF ROADS TO BE COMPLETED IN BORNO STATE BY THE END OF 1994

FEDERAL ROADS	STATE ROAS
1. Waudeo-Lassa 2. Biu-Garkida	1. Beta-Izga-Yimirshika-Sakwa

Source: Borno State Ministry of Works & Housing Maiduguri (October 1994).

The study area when compared with other states in the Federation, such as Lagos, Kano and Kaduna are still not under-developed in terms of road network. There is however, no adequate and up to date, data on road network especially on total road length and types, in the region. As a result, it is not possible to back this claim with what is on the ground.

There are three broad roads categories in Borno/Yobe State. These are federal, State and Local Government roads. The Federal roads are further classified into trunk 'A' and trunk 'F' roads; whereby the trunk 'A' roads are roads which

connect the State Capital with other important Urban Cities or Centres in the Country. example is in the Maiduguri - Kano road and Maiduguri - Numan roads. While trunk 'F' roads are border roads or desert tracks within the state.

The second category is the trunk 'B' roads which connects the Local Government Headquarters within the state with the trunck 'A' roads and 'F' roads within the state.

The third category are the Local Government roads which connect the rural areas with the Local Government Headquarters. The table below shows details of the roads length in the two states of the study area and the National level according to their classification.

TABLE 3.4 SUMMARY OF ROAD CLASSES, LENGTH AS TYPE IN BORNO AND YOBE STATE.

SURFACE TYPE	LENGTH OF FEDERAL ROADS	LENGTH OF STATE ROADS	TOTAL LENGTH (KM)
Asphalt concrete	341	157	498
Surface dressing	317	15	330
Desert trucks	338	765	1103
TOTAL	996	935	1931

TABLE 3.5 SUMMARY OF ROAD CLASSES, LENGTH AND TYPE IN BORNO STATE

SURFACE TYPE	FEDERAL ROAD LENGTH (KM)	STATE AND LOCAL GOVT. ALLOCATION (KM)	TOTAL LENGTH OF ALL CLASSES (KM)
Asphalt concrete	721	562.2	1959.2
Surface dressing	369	352	1073
Desert trucks	855	225.8	1080
TOTAL	1945	1140	3085

Source: Tables 3.4 and 3.5 above are from Road Inventory of Federal roads in Nigeria; June, 1994; Highway Management Services Iganmu, Lagos.

TABLE 3.6 SUMMARY OF ROAD CLASSES, LENGTH AND TYPE FOR VARIOUS STATE IN NIGERIA (STATE ROADS).

	ROAD TYPE AND DISTANCE IN KILOMETRE				
ROAD CLASSIFI-CATION.	EARTH	GRAVEL OR SURFACE DRESSING	BITUMIOUS OR ASPHALT CONCRETE	TOTAL	PERCENTAGE OF THE TOTAL
Federal 'A' Trunk Route	184	797	592	862	17
Federal 'F' or Border Spur Routes	824	141	1146	2111	48
State 'B' or Branch Routes	858	-	259	1117	21
Local or Secondary Routes	1172.5	-	-	1172.90	22
Total:	3037.50	938.00	1997	5262.30	100%
Percentage of Total	44	18%	38%	100%	

Source: Compiled from tables 3.4 and 3.5

TABLE 3.7 SUMMARY OF ROAD CLASSES, LENGTH AND TYPEIN NIGERIA (FEDERAL ROADS).

Road Classification	Road type and Distance in kilometre				
	Earth (C.R)	Gravel (S. D.)	A. C.	Total	Percent-age Total
Federal 'A' or Trunk Routes	1,115.00	2,335.00	11,628.06	15,078.06	
Federal 'F' or Border Spur Routes	125.00	98.00	78.40	301.40	47%
State 'B' or Branch Routes	-	296.00	396.80	692.80	0.93
Level or Secondary Routes	4,730.04	5,148.40	6,146.06	16,025.50	2.16
TOTAL:	5,970.04	7,877.40	18,249.32	32,097.76	49.91
Percentage Total	18.60	24.50	56.90	100%	

Source: Compiled from table 3.4 and 3.5.

3.4 SUMMARY OF INHERENT PROBLEMS

Roads construction in Borno/Yobe is being undertaken by both the Federal, State and Local Governments. The State Government is responsible for feeder roads network in the State. These roads are all weather roads linking important villages, markets and stations together with the Federal tarred road network in the State, which will eventually embrace all local Government centres and virtually all the

services centres.

The lack of capital which is a prominent characteristics of the road development in the study area led to postponement of most toad project. Secondly, dependent on Federal Government for most of its capital resources, thirdly, priorities are wrongly set, because some projects are embarked upon for political and propaganda reasons, which are not profitable project as sum money spent on them are wasted. And fourthly, there are lack of statistical data, because reliable statisital data on when plan can be based, are base on guess work. And finally, there are political instability which hinders the implementation of developement proposals.

The lack of attention as a result of in adequate planning has left critical gaps in the study area road system, its institutional development and in the financial resources of its road administration under costing of road project had a result of increasing road user cost and would add another cost for its construction in future, which is the major characteristics of the development plan in the study area. Expected project saving in vehicle cost acrueing to the existing and generated traffic that is likely to exist as a result of the road network would constitute the major benefit of the completion of project.

Considerable road construction has taken place recently in Borno/Yobe State, the road network are still in adequate as

being discussed in Chapter four of this work. The major constraint to road construction is as a result of the total neglect by both the Federal and the State due to lack of funds and secondly, as a result of bad terrain.

An appraisal of the present condition of roads surfaces in the region shows that while some are still in good condition, failures have been observed on others, e.g. Damaturu - Bayamari - Geidam roads and Damaturu-Gujba - Biu roads; while settlement of fill material has resulted in complete deformation of surface, and even break down of the said bitumen base, given rise to pot-holes, and series of erosion of the embarkment.

The failure of these roads is evident and it would be cheaper to provide a capping of Asphaltic concrete in order to strengthen the road surface and prolong its life, than the re-construction in future when it collapsed. Assistance should be given to the Area Engineers by provision of shovel-loaders, tipper and wheel barrow so that they could borrow suitable materials for the regular maintenance of the road, and side slopes for the Federal and State Government roads.

The main agencies responsible for road construction in the state include both the State Government Ministry of Works and the Federal Government Minstry of Works which are in charge of Federal roads in the state. Construction is mostly done by Contract: but when the contract is by direct

labour it would have advantage of improving the skilled of our workers and save money for government on the contract in area of variation. But construction by contract had also the advantage of being executed by the contractor with his own money pending the time when money is made available to him by the client and can be executed in time.

TABLE 3.8 SUMMARY OF ROAD CLASSES, LENGTH AND TYPE OF BOTH FEDERAL AND STATES IN THE STUDY AREA OF BORNO AND YOBE.

ROAD SURFACE TYPE	FEDERAL ROADS (KM)	STATE ROAD IN THE STUDY AREA (BORNO AND YOBE STATES)	TOTAL ROAD LENGTH OF FEDERAL AND STATE ROADS (KM)
Asphalt concrete	1062	719.2	1781.2
Surface dressing	686	365	1051
Desert surface	1193	990.8	2183
TOTAL	2941	2075	501

Source: Computed directly by measuring from the study area road network map.

TABLE 3.9 YOBE STATE GOVERNMENT ROAD PROJECT (1991 - 1995)

S/NO	PROJECT	WORK DESCRIPTION	PLAN COST	ACTUAL COST	REMARKS
1.	Damaturu dual Carriage and Road about	Dualization of Road in Damaturu Township and Ashpalt overlay (8km).	N69,337,425.10	N78,404,790.10	Completed in 1995
2.	Maidua - Gadaka	Surface dressing and Construction of 11km road.	N13,240,975.	N17,161,106	Completed in 1993
3.	Gujba-Mutai Ngalda	Construction of an Asphalt overlay 100km.	N130,920,850.46	Amount paid so far N47,409,335.41	Dormant
4.	Bayamari-Kaliari bridge work	Construction of six span bridge concrete with 11km access roads.	N38,112,796.58	N49,893,530.86	Project to be completed in 1995.

Source : Yobe State Ministry of Works, Housing and Transport, Civil Division.

(a) Katarko Goniri
(b) Gujba Gabai Ngalda road where all in Yobe State are Beta-Izge-Yimirshika Sakwa road project in Borno State.

5.	Geidam Bailey Bridge	Construction of 10km laterite access road to Yunusari by direct labour.	N355,102.00	N300,000.00	Project is Dormant
6.	Katarko-Goniri	Construction of Asphalt concrete Access road 100km	N104,666.111	Amount paid so far N8,000,000.00	Project is Dormant
7.	Tarajio Bridge	Special repairs and stone pitch work by direct labour	N750,000.00	N745,000.00	Completed in 1993
8.	Access road to Govern-ment Quarters	Earth road by Construction by direct labour.	N1,085,036.50	N467,707.50	Completed
9.	Sani Mustafa & Ass.	Consultancy Services for construction of Bayamari Kiliari bridge.	N52,000.00	Amount paid N339,000.00	Partially completed
10	do	Consultancy Services for construction of Ngalda-Gabia Gujba road and three bridges.	N3,000,000.00	Amount paid N900,000.00	Dormant project
11	do	Construction of three bridges between Ngalda and Gujba.	N28,592,661.26	N7,144,169.50	Revoked

CHAPTER FOUR

4.0 ASSESSMENT OF ROAD DEVELOPMENT PATTERNS

4.1 INTRODUCTION

In Nigeria today the organised public road system are still managed by the three tiers of government namely: Federal,State and Local Governments. The total road network in the country today is about 145,783.50 kilometre. With Federal Ministry of Works and Housing administering 32,096.76 kilometre main trunk 'A' inter-state road. With the Thirty One (31) State Ministry of Works and including FCDA administering an estimated 5262.30 kilometre of secondary trunk roads which provide 32,096.96km. Important links to the Federal trunk roads and tertiary roads that serve as collectors and distributors.

The Local Government Councils administers an estimated 108,223.74 kilometres of feeder and access roads primarily constructed under (ADP's) and (DFRRI).

In Nigeria, during the First Plan period, 1962-68, had witnessed, the development of roads and other sectors such as establishment of light industries. The Second Plan, 1970-74, extended to March, 1975 experienced a lot of problems. Recovery from the Civil War delayed the implementation of the projects. The funds that were anticipated were not forth coming and there was lack of technical partner needed to carry out some aspect of the plan. Similarly, the Third Plan was launched at a time when not only was the price of crude

oil rising but Nigeria's out put was also increasing quite rapidly. So that total plan investment was N30 Billion Naira, this plan period 1975-80 was extended to the end of 1980, so that the fourth plan was to run from January, 1981 to the end of 1985. The Fourth Plan envisaged total investment of expenditure of N82 Billion Naira, of which over N70 Billion Naira is to be in the public sector. The idea of Five year Development Plan was abandoned in October, 1988, because it was felt that economic environment necessitated the use of shorter term planning investments for managing the economy. Since December, 1985, when the Fourth Plan expired, the traditional Five Year Planning was thus replaced with Three year Rolling Plan to be operated with (15-20) years perspective plan and the normal operational budgets.

TABLE 4.1 SUMMARY OF RESOURCE ALLOCATION FOR BOTH STATES AND FEDERAL ROADS DEVELOPMENT FROM 1962-1994

PLAN PERIOD	FEDERAL ALLOCATION TO ROADS ₦ MILLION	STATE & LOCAL GOVT. ALLOCATION TO ROADS ₦ MILLION	TOTAL ACTUAL PLAN COST TO TRANSPORT SECTOR	% OF FEDERAL TO PLAN COST	% OF STATE TO PLAN COST
1962- 68	70.8	79.6	309.092	22.90	25.75
1970- 75	187.72	198.82	499.094	37.61	39.83
1975- 80	4,355.96	984.48	9,678.541	45.00	10.17
1980- 85	5,295.00	2,678.33	10,707.62	49.45	25.01
1985- 90	2,006.530	1,643.367	3,944.757	50.80	41.6
1990- 95	5,466.834	3,808.78	10,025.30	54.5	37.9

Source: Federal ministry of Economic Planning, Lagos.(1992) [World Bank Report, 1987].

Table 4.1 above summarizes the expenditure plans. Some of the major key projects to be executed within 1991-93 include the following, which are World Bank assisted projects;

1. Tegina - Zangeru - Minna - Kukaki
2. Maje - Agunregu
3. Oleh - junction - Asaba - ASC
4. Badagry - Ishagu
5. Abakaliki - Afikpo
6. Oron - Eket - Ikot - Abaji - Port Harcourt.

Nigeria's transportation objectives were spelt out for the first term in 1965 in a Government White Paper on transportation development so as: to co-ordinate development and ensure economic efficiency which, by implication to support the National objectives. These objectives are relevant and valid as they were then. They

have not been completely realized as they are of a long term and continuing nature. Conditions have, however,changed since 1965, and the realization of this fact, had led to the addition of two more specified objectives, namely: ensuring to enhanced safety, and the provision of better quality service to the road users. These additional objectives are aimed at ensuring that the purpose of the heavy investment in facilities and equipment is not defeated by improper and un-regulated use of the facilities so created. Nigeria's transportation network has recorded an impressive growth in physical term and in terms of proportion of total Capital funds invested in the economy, can be observed from Table 4.1. Government policy on transportation was laid down, but was recently modified and formally adopted in 1992. In essence, this policy, provides that coordinated development of various forms of transport will be promoted by concentrating and developing those modes which are capable of carrying persons and goods at the lowest cost per unit service. In addition, Government policy stresses the importance of achieving this objective of co-ordinated development through a combination of measures which include administrative regulation, use of new technology and direct investment measures.

Due to a variety of circumstances, which owe their origin to the state of permanent crises, that existed in the Country between 1965 and 1969, transport infrastructures

suffered very severely both from negligence (in terms of insufficient maintenance) and actual physical destruction in direct consequence of the Civil War. In the two years after the War, investment in the transport sector in terms of maintenance of existing facilities, dropped very sharply with the outbreak of War in 1967, when resources had to be mobilized for its prosecution as number one priority. Thus, very little maintenance was carried out. Added to this, as a result of the closure of the transportation facilities in the Eastern States, the already over-worked and under maintained transportation facilities in the other parts of the Country had to bear excessive levels of load.

The stretches of the then selected roads were greatly in use and therefore it should develop programme with aim of constructing the non-existing stretches and generally, to up grade all the stretches for the same standards. Therefore, it had to maintain those that had deteriorated in the Eastern part of the Country during the war in 1970s when the level of road construction increased tremendously. The national road network as describe earlier consists of primary roads and secondary roads. The primary roads are those connecting prominent centres of the Country and with the ocean terminals (Lagos, Warri, Port-Harcourt and Calabar) and the main border crossing like Jibiya in Sokoto State with neighbouring Niger Republic.

To summarize it all, the Secondary road networks connect important centres within the primary network, with each other; and with the primary network. The States had concentrated periodically on minor roads within the primary and secondary road network and on the proper study and Engineering designs of potential state roads. Thus, one can rightly observe that most emphasis had been on constructing new roads. This strategy lead to spreading of limited funds for long distances of roads, it has resulted in fast deterioration with obvious implication for heavy maintenance cost for now. The roads that were constructed then have virtually become death traps, because of their poor conditions. A good example is the Biu-Numan-Wukari and Biu-Little Gombi road to mention but a few. Therefore, it is not surprising that emphasis has now shifted to rehabilitation and adequate maintenance of the existing work.

The World Bank, in collaboration with Nigerian Government, is presently working out strategies appropriate for the new innovations. As mentioned earlier, it gives priority to the rehabilitation of some roads in the Country under the World Bank assistance. As an illustration, currently the Federal Government had awarded the Damaturu - Bayamari and Bayamari - Geidam roads in Yobe State under the World Band assistance and is nearly in completion now. Others are Potiskum - Nafada - Bauchi border and Damaturu -

Biu - Little Gombi Adamawa border. And construction of drainage in Five major towns of Yobe State, namely: Potiskum, Nguru, Gosha, Geidam and Damaturu the First phase of the programme had already started in Damaturu and Potiskum of which contract was awarded to Mother Cat under the World Bank Assisted Programme.

4.2 ASSESSMENT OF ROAD DEVELOPMENT PATTERN AT NATIONAL LEVEL

During the first formal development plan period (1962 - 68), Federal Government budgeted the sum of N21.8 million on roads projects out of the total investment of N45.0 million and about 4,950 kilometre of roads were built. During (1970 - 74) Development plan, however, it budgeted the sum of N187.716 million for road development, while the State and Local Government had a total allocation of N198.820 million and about 3,502 kilometre of road length were constructed, at a cost of N183.2 million. Out of these roads 1,171 kilometre were Earth gravel roads, while 2,077 kilometre was bituminous surfaced.

In addition, work continued for 4,056 kilometre at a cost of N6,961.1 million Naira and this included 714 kilometre of Earth gravel surfaced, 1,507 was single lane converted to two lane bituminous surfaced and in the same year, 266 kilometre of road were constructed at a cost N47.5 million Naira. The latter included Ibadan by-pass, Kaduna by-pass, Zaria Pambeguwa road, Odo - Remo - Ibadan, the

bridges at Katsina Ala, Yola and Numan.

The total commitment of the Federal Government stood at N187.7 million Naira on 7,500 kilometre of roads. During the (1970 - 74) plan period, emphasis was on higher quality from the point of view of what is obtained in national economic terms. As part of the road rehabilitation effort, various narrow and weak bridges were widened and strengthened. And no major bridges were however, to be constructed unless they formed integral parts of the new road schemes.

In line with the above, some of the principal road projects undertaken are described below:-

1. *Continuing Projects:*

   (a) Eko - Bridge Extension - this bridge formally known as the second main land bridge, was extended so that is could employ part of its traffic direct into Western Avenue. This was to further ease the flow of traffic between Lagos Island and the main land. Work was already in progress on the N9.2 million Naira extension and only N4.482 million was required during the plan period to complete the project.

   (b) Apapa Road and Ijora - Causeway - this project was aimed at providing easy access to the nations main port of Apapa. The project included a vast parking area for produce carrying trucks which was to reduce congestion

on the port approaches. Before then, the area was clogged up by heavy trailers parked on the road sides. The project was completed at the end of 1972 - 73 at the cost of N14,906 million during the plan period.

(c) Calabar - Ikom-Ogoja - Katsina Ala. The Calabar - Ikom section of this road was already being constructed. It was to be further extended to Katsina-Ala during the plan period to provide back-up communication for the port of Calabar with the North-Eastern part of the Country. Construction of the road provided a third North-South highway. This road, formally a Trunk 'B' was re-classified as a primary road, was to be constructed at estimated total cost of N8,838 million.

(d) Warri - Benin-Iruwa-Auchi-Ososo-Okene-Lokoja-Kaduna. This constitute the fourth North-South highway designed to open the Central region of the nation to the port of Warri and provide economic impetus to the Northern parts of the Mid-Western State now Edo, ad Delta States. The Warri-Benin section was already under construction during the period plan and the Benin-Auchi-Okene Port-Hacourt road was to be constructed; while the Okene-Lokoja-Koton-Karfi-Kaduna South was studied and designed during the plan period. The studies also covered another Niger bridge crossing around Koton Karfe. The project also included the rehabilitation of Federal roads from Olagbo junction to

Koko port. The total cost of the road complex during the plan period was estimated at N14.4 million excluding N2.00 million Naira set aside for the study and design of the Auchi-Okene-Lokoja section.

2. *Road Rehabilitation*

For this project, a total sum of N65.6 million was set aside for the rehabilitation of various sections of roads in order to keep them open to traffic. This became an urgent necessity due to the damage and deterioration caused by the Civil War and neglect during the war years. A few of the most important roads falling into this category were Lagos-Ibadan-Ilorin-Kano; A produce evacuation route at the total cost of (N10.54 million Naira); Kano-Kari (N7.6 million naira); Kano - Katsina (N3.456 million); Benin - Asaba (N2.6 million) and Jos- Aliade-Otukpo (N7.8 million). Also featuring in this unit are replacement of sub-standard bridges on various trunk routes.

3. *New Projects*

(a) Road Bridges at Jebba and Makurdi - Because of the bottleneck constituted by the road rail bridges at Makurdi and Jebba, work began during the plan period with the aim of providing new road bridges to serve the nation's two most important evacuation routes. In (1970 - 74), the scope of work was to be limited to Engineering design and about 50% Construction at a

combined estimated cost of N8.2 million, was recorded period.

(b) Lagos - Ibadan Express - Construction work began on this N17.6 million Express way, which linked the two largest cities in Nigeria and shortened the distance between them by about 16 kilometre. And initial rehabilitation work was to be carried out to keep it open. Also, the sum of N8.560 million Naira was set aside in the (1970 - 74) plan period for necessary studies and designs, and for the initial phase of construction of the four lane express way.

(c) Western Avenue - Agege Motor Road: The construction of this road is a carry over project from the (1962 - 68) plan, was to receive top priority as otherwise, the full benefits of the expensive road works then in progress, and which opened upto the Apapa - Port would not be realized. Construction cost was said to be about N8.0 million Naira during the plan period.

(d) Feasibility Studies and final Engineering Design: About fifteen road stretches were studied and designed: during the plan period to prepare them for possible future construction. Important among them are the Ibadan - Kano - Daura evacuation highway; Kari - Potiskum - Benisheik and Maiduguri - Biu - Yola - Katsina - Ala road.

During the (1975 - 80) plan period, the Federal

Government road programmes included the construction of Primary trunk 'A' road at a total cost of N2,518.940 million naira, and to construct a total of 14,487 kilometre in length. The major highlights of this programme was as follows:-

(1) Asphalt Overlay of 2.993 kilometre of road at a cost N133,580 Million Naira.

(2) Continued project of 3,678 kilometre of roads at a total cost of N340.5 million Naira.

(3) And new project of 6,195 kilometre at a total cost of N2,044.86 Million Naira.

Together with the taking-over of some existing trunk 'B' road from the State Government involving 16,000 kilometre of road at a cost of N1,440,000 million Naira, Urban by-pass covering thirty six urban centres at a total cost of N87.4 million Naira involving 451 kilometre road length, construction of fly-over at rail-way junctions at 23 State capitals including Lagos at a cost of N53.870 million Naira, while other miscellaneous projects and training consumed N37.150 million Naira and N10.0 Million Naira respectively. Also, projects like road maintenance, studies and design took N138.600 million Naira and N60.000 million Naira respectively.

In the same years, the state governments road programme stood at N984.48 million, involving 19,166 kilometre of road length of essentially Secondary feeder roads, and about 9,796 kilometre were earmarked for full construction as main

feeder to the trunk 'A' road and 3,210km were to be improved by widening and to keep pace with the traffic demand. The remaining 6,160 kilometre were to be earth gravel roads with an allocation of N18.96 million Naira for plan and equipment while N6,000 million Naira was earmarked for weigh bridges.

In the fourth plan period, (1980 - 85) however, about 17,000 kilometre of roads were carried over from the third plan and were completed at a cost of N5,000,000 million Naira, while all the nineteen States had proposed N3216 million Naira for construction and rehabilitation of 35,000 kilometre of roads, varying from laterite/gravel road to bituminous Asphalt over-lay.

The Local Governments had all planned to spend N581,000 million Naira. This far exceeded the expenditures during the (1970 - 75) when only 13,000 kilometre length were completed at a cost of N5,295.00 million Naira. While all the States spent about N2,678.332 million for the construction of 35,000 kilometre of roads varying from laterite/gravel, bituminous surface and Asphalt over-lay. The total expenditure on roads by the Federal Government between (1985 - 90) stood at N1,734.946 million Naira This increased to about N5,745.633 million Naira by end of 1994. With the above, the total expenditure on road rehabilitation _ alone stood at N671.768 million Naira, while road construction consumed N1,550.788 million Naira. Asphalt

Over-lay at ₦661.580 million Naira, while World Bank assisted projects consumed the sum of ₦572.000 million Naira. With the various State Governments share of road projects from (1991 - 95) stood at ₦3,101.014 million Naira.

Another contribution to road development in Rural areas of the Federation came through the Directorate of Foods and Rural Infrastructure (DFRRI); which came into existence in 1987. Under this programmes, a total of about ₦130 million Naira was distributed to various states Governments in 1990, ₦137 million Naira in 1991, ₦140 million Naira in 1992 and ₦330.00 million in 1993. The total length of road constructed was 4,900.05 kilometre in 1990; 5,215.20 kilometre in 1991 and those newly constructed stood up as 5,622.3 kilometre in 1990 and 2,599.6 kilometre in 1991 - See table 4.2 below.

TABLE 4.2 LENGTH OF DFRRI ROADS IN KILOMETERS (TARGETED CONSTRUCTIONS) 1988-91)

STATE	YEAR									
	1988	1989	1990	1991	TOTAL	1988	1989	1990	1991	TOTAL
AKWA IBOM	1434	760	110	N.A	230.4	N.A	N.A	1461.8	N.A	1461.8
ANAMBRA	N.A	1627.2	330.8	1562.8	3520.8	N.A	316.9	1450	4712	935.1
BENUE	50	N.A	511	N.A	561	150	474	N.A	N.A	624
C/ RIVERS	5120	N.A	N.A	N.A	5120	791.2	234	N.A	N.A	102502
IMO	N.A	1440.5	371.3	N.A	1811.8	1311.12	1068.8	13061	N.A	3686.02
KADUNA	513.05	N.A	513.05	400	1026.10	N.A	N.A	N.A	N.A	N.A
KATSINA	300	200	154	N.A	1054	300	189	250	N.A	839
KWARA	2001.3	N.A	1745.5	N.A	3746.8	1336.1	N.A	N.A	N.A	1336.1
NIGER	N.A	N.A	135.5	N.A	135.5	1059.5	1059.5	N.A	N.A	2119
ONDO	872.6	N.A	92	N.A	964.6	58	13	N.A	N.A	71
OSUN	N.A	N.A	N.A	1191.2	1191.2	N.A	N.A	N.A	N.A	64104
OYO	N.A	1252.05	936.9	N.A	2188.95	N.A	624.6	834.7	641.4	1459.3
RIVERS	N.A	400.7	N.A	691.7	1092.40	N.A	311.15	624.7	N.A	2781.85
SOKOTO	N.A	N.A	N.A	1361.5	1369,5	1755.3	N.A	N.A	846	2196.3
									441	
TOTAL	10290.95	5680.45	4900.05	5215.2	36086.65	6661.22	4293.95	5622.3	2599.6	19177.1

Source: State DFFRI offices.
Note: N.A - not available.
Data include the newly created states (Enugu, Abia, Ogun & Edo).

The total allocation for all states (DFRRI) projects stood up at N3,675,923 million Naira between (1993-95) period. Which is as follow: In 1993 the total allocation for all state DFRRI was N1,461,22. Similarly, in 1994 total allocation for all state DFRRI stood up as N1,211,384 and finally in 1995 it gulped the sum of N1,003,317.

A total of 1,305.7km of new roads was constructed and 3,383.1km were rehabilitated under the Rural Infrastructure Development Programme activities of the (ADPs) in the Federation together with constructing of 33 bridges and culverts. The total allocation for A.D.P's and DFRRI between 1990 to 1992 are shown in Table 4.3 below.

TABLE 4.3 ALLOCATION TO GOVERNMENT AGENCIES FOR ROAD CONSTRUCTION (1993-95)

AGENCY	RESOURCE ALLOCATION (N MILLION)		
	1990	1991	1992
A.D.P's	147.394	203.00	200.00
DFRRI	210.00	192.50	189.70
NALDA	310.00	385	379.40

Source: Federal Yearly budget Estimates (1994).

In 1990 the total sum allocated DFRRI in the country was about N396.70million Naira and with the creation of Nine additional States in 1992.

4.3 ASSESSMENT OF ROAD DEVELOPMENT IN THE STUDY AREA

Efforts of Road Development undertaken at the Local Level have been influenced by several factors. for example, in 1967, with the creation of North eastern State from the Northern Region, the priority for road development changed for which it was no longer tenable to lay emphasis on feeder roads to Borno Railway extension alone. Priority has to shift to planning road development to run North South in accordance with the geographical structure of the new state i.e. North East.

And secondly, in accordance with the other objectives such as to open up new area and link other rich agricultural producing areas with the markets, the priority for road development was put on the following road development.

(1) Damaturu - Biu - Little Gombi (208km)

(2) Damaturu - Gashua - Geidam road (280km) and;

(3) Gashua - Nguru road (new surfacing (67km)

These roads were designed to open up the isolated hinter land of the state and to provide links to the major roads in the state like Maiduguri - Bauchi - Jos road and Maiduguri - Yola - Takum road which leads to Calabar and as well as the main feeder to the railway line passing through the state, such as:

(1) The extension of Maiduguri - Baga road to Mallam Fatori

(2) Bauchi - Dass - Tafawa Balewa, which provides out-let to Pankashin.

(3) Azare - Potiskum road which is intended to provide link with the North-South traffic toward the South-eastern State of Nigeria with Katagum Emirate and Misau.

(4) Kiri - Shellang - Deba - Dadin Kowa axis - this linked the agricultural area of the state with Biu - Gombi and Gombe - Yola to facilitate evacuation of agricultural products like cotton.

The road development plan for the state are listed in table 4.4 below

TABLE 4.4 THIRD NATIONAL DEVELOPMENT PLAN 1975-80 OF THE AREA

ROAD PRO.	LENG. KM.	RES. ALLO. (N) Mill					
		75-76	76-77	77-78	78-79	79-80	TOTAL
Abony-Nguroje	52	-	2	2.8	-	-	4.8
Bauchi-D-Tafawa-Bale.	46	0.8	1.83	1.2	-	-	3.83
Yank. Access road includ. bridge.	32	3.19	-	-	-	-	3.19
Gombe-Duku Darazo including bridge	130	0.3	4	3.616	3.7	-	11.61
Kanawwa-Shellen A345	128	0.2	-	4	3.8	-	8
Damboa-Gwoza	99	-	2	2.2	2	-	6.2
Nguruje-Kusuko-Gemtu	48	-	1	2	-	-	3
Nafada-Gabai	96	-	2.5	2	-	-	4.5
Bonu-Sony Soro Konu (Shanu) Yola	80	-	1	1	1.75	--	3.75

Source: North Eastern State, Third Development Plan, 1975 - 80.

TABLE 4.4 CONTINUED

ROAD PRO.	LENGT KM	ROS.	ALLO.	(=N=)	MIL.		
Zoll-Maijuju	67	-	0.84	-	-	-	0.84
Gashua-Jak.-Pot.	99	0.232	-	-	2.34	8	10.572
Ask.-Gark.	42	-	-	-	0.84	-	0.84
Kalt.-Jire-Tula	40	-	-	-	1.82	2	3.82
Tales-Jagol	149	-	1	0.75	-	2	3.75
Geidam-Gub.	43	-	2	2	2	-	6
Fika-Gash.-Siminti	72	-	-	1.89	-	2	3.89
Mis-Chinade	112	-	-	-	1.15	2	3.15
Bulk-Udubo	88	-	-	0.9	2	1.5	4.4
Ngamdu-Dam.	90	0.75	-	0.6	-	-	1.35
Seb-Bin.	24	0.125	-	-	-	-	0.125
Seg-Jada-Kojoli	80	-	-	-	-	-	-
Mag-Gumali	26	-	-	-	1.5	0.7	2.2
Nat-Mayo-Balwa	22	-	-	-	-	-	-
Gad-Sak-Kat	39	-	2	0.38	-	2	4.38
Sak-Gam-Jak	40	-	-	0.8	-	-	0.8
Dam-Jaj-Lan	80	0.7	-	0.15	-	-	0.85
Duku-Wawa-Wanda-Baj	80	-	1	-	-	-	1
Jal-Kona-Mutum-Biyu	67	-	0.5	1	-	-	1.5
Kwaya-Terra-Shani	51	-	1.1	1	2	-	4.1
Karim-Lam-Bomb. A345	56	-	1.1	1	2	-	4.1
Fan-Mang-Ndukka	35	-	0.6	1	-	-	1.6
Garb-Cha-Mutum-Biyu	136	-	1	0.75	-	1.5	3.25

TABLE 4.5 ROAD PROJECT TARGETED FOR 1975-90 IN THE STUDY AREA

Project Descrip.	Dist. Km	Res. Alloc. in Km				Remarks
		70-75	75-80	80-85	85-90	
Damb-Gwoza road	151km	6.2	-	-	6.2	compl.
Naf-Gabai	96	4.5	-	-	4.5	N/com.
Dik-Gulum. Banki-Kal	95	-	24.2	-	24.2	comp.
Gash-Jakus.Pot.	167	6.51	-	-	6.51	"
Asikra-Garkida	74	1.89	2.0	-	3.89	N/comp.
Geid-Gubio	112	4.90	20.9	-	25.8	compl.
Fika-Sim-Gashinge	67	4.0	3.5	-	7.5	N/comp
Ngam-Damboa	53.6	3.0	31.05	-	34.05	"
Dam-Jajere Jantewa	80	3.5	13.5	-	17.0	"
Kwaya-Ter-Shani	32	1.6	-	-	1.6	N/comp.
Studies & Designs for the fourth plant	-	0.5	-	-	0.5	
Plants and Equipment	-	1.5	-	-	1.5	

TABLE 4.5 CONTINUED

Geid-Main Soroa	44	-	0.750	7.0	7.50	Taken/FG
Geid-Yunusari	112	-	7.0	7.0	7.50	"
Geid-Dam-Mal. Fotori	182	-	-	-	Design stage	"
Kuk-Gudum-Gurande-Guza Damasak	140	-	33.8	21.22	53.020	"
Kauw-Arege-Mal. Fotori	92	-	-	-	desgin stage	Not Comp.
Nguru-Machi.	50	-	-	-	"	
Nguru-Meori Niger Border	55	-	24.10	-	2.410	Taken/FG
Maringa-Bum.	60	-	-	-	design stage	"
Maidug-Gomb.	35.5	-	0.775	-	"	
Baya-Kaliari	-	-	-	206.690	0.962 7.8	NotComp. "
Dikwa-Gulum. Banki	75	4.3	-	3.5	-	des.stage
Wandeo-Lassa Kwabchi	52	-	2.651	-	-	Completed
Pulka-Ngoshe Arboko	19	2.0	31.0	4.651	-	des.stage
Dam-Gubio	98	-	22.890	31.0	22.890	"
Gashua Yusu.	28.2	-	4.23	-	4.230	Taken/FG
Jak-Bauchi Border	4.5	-	13.820	-	20.82	NotCompl.
Kwaya-Kusa Shani	32	7.0		-		Completed
TOTAL	1913.8	49.4m	173.605	34.570	259.628	

With the creation of Borno, Bauchi and Gongola from the North Eastern State from 1975, emphasis shifted from the above plan reflected in Table 4.4 led to another development proposals to be adopted from the above plan as shown in Table 4.5.

And each of the three constituent states, namely Borno, Bauchi and Gongola began to carry out development works within their states and almost all the roads described above were taken up by the Federal Government. Moreover, each state had to develop its own plans. In particular Borno State's plan from (1975-90) are contained in Table 4.4 above, together with the road network as indicated in fig. 4.1, 4.2 and 4.3 below of which fig. 4.3 is the combine road network for the Borno and Yobe State.

And also, the State Government had taken over and was committed to construct about 596.8km of road (see Table 4.6) below. From the Local Authorities that are within the state from the former Northern region government for construction.

The following roads were taken over by the North-Eastern State Government from the Local Authorities.

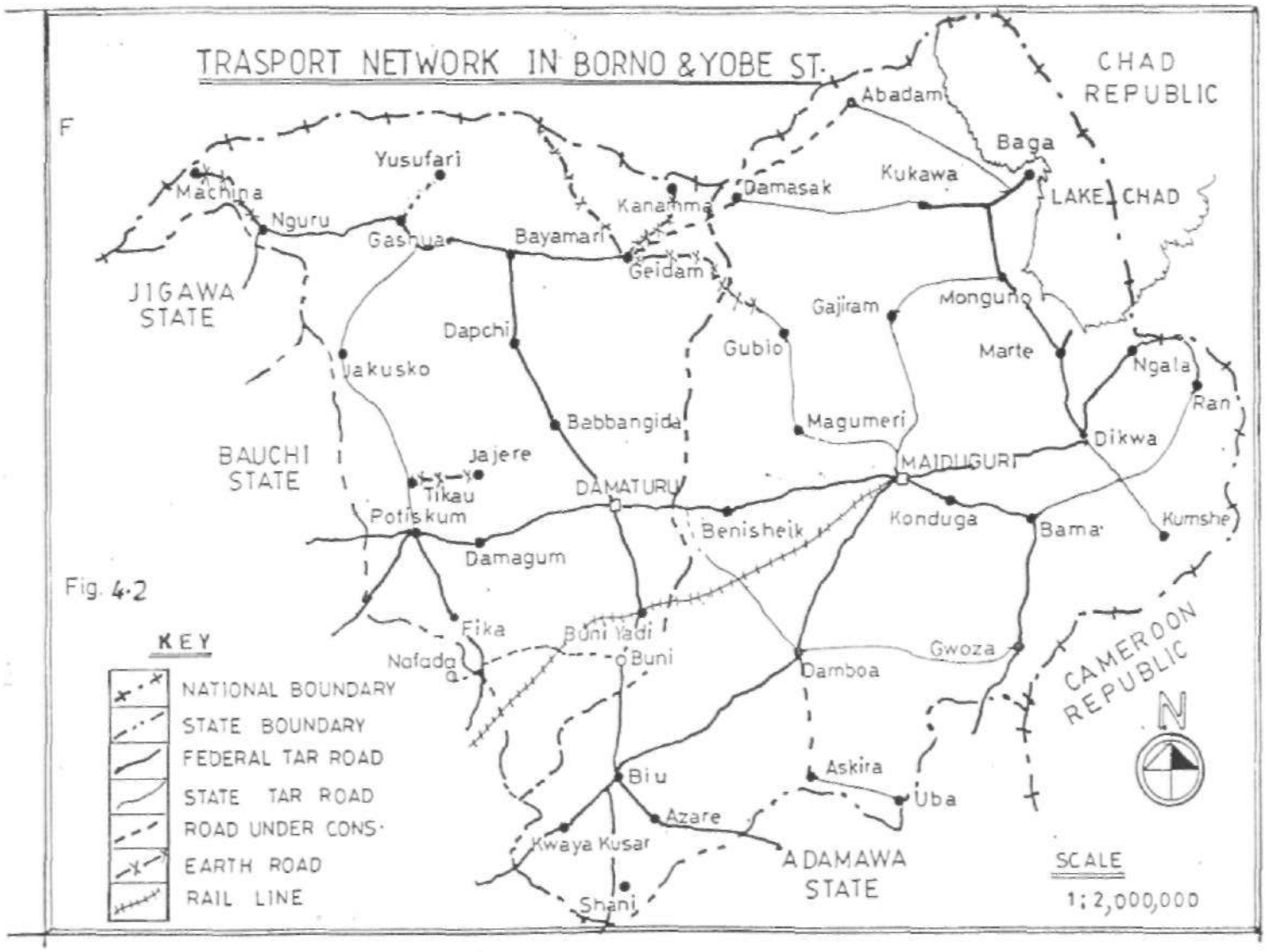

TRASPORT NETWORK IN BORNO & YOBE ST.
CHAD REPUBLIC
Abadam
Baga
Kukawa
Damasak
LAKE CHAD
Yusufari
Machina
Nguru
Gashua
Bayamari
Kanamma
Geidam
JIGAWA STATE
Dapchi
Gajiram
Monguno
Marte
Ngala
Gubio
Jakusko
Babbangida
Magumeri
Dikwa
Ran
BAUCHI STATE
Jajere
Tikau
DAMATURU
MAIDUGURI
Potiskum
Konduga
Bama
Kumshe
Benisheik
Damagum
Fika
Buni Yadi
Buni
Nafada
Gwoza
Damboa
CAMEROON REPUBLIC
Askira
Biu
Uba
Azare
Kwaya Kusar
ADAMAWA STATE
Shani
KEY
NATIONAL BOUNDARY
STATE BOUNDARY
FEDERAL TAR ROAD
STATE TAR ROAD
ROAD UNDER CONS.
EARTH ROAD
RAIL LINE
SCALE
1; 2,000,000

Fig. 4·2

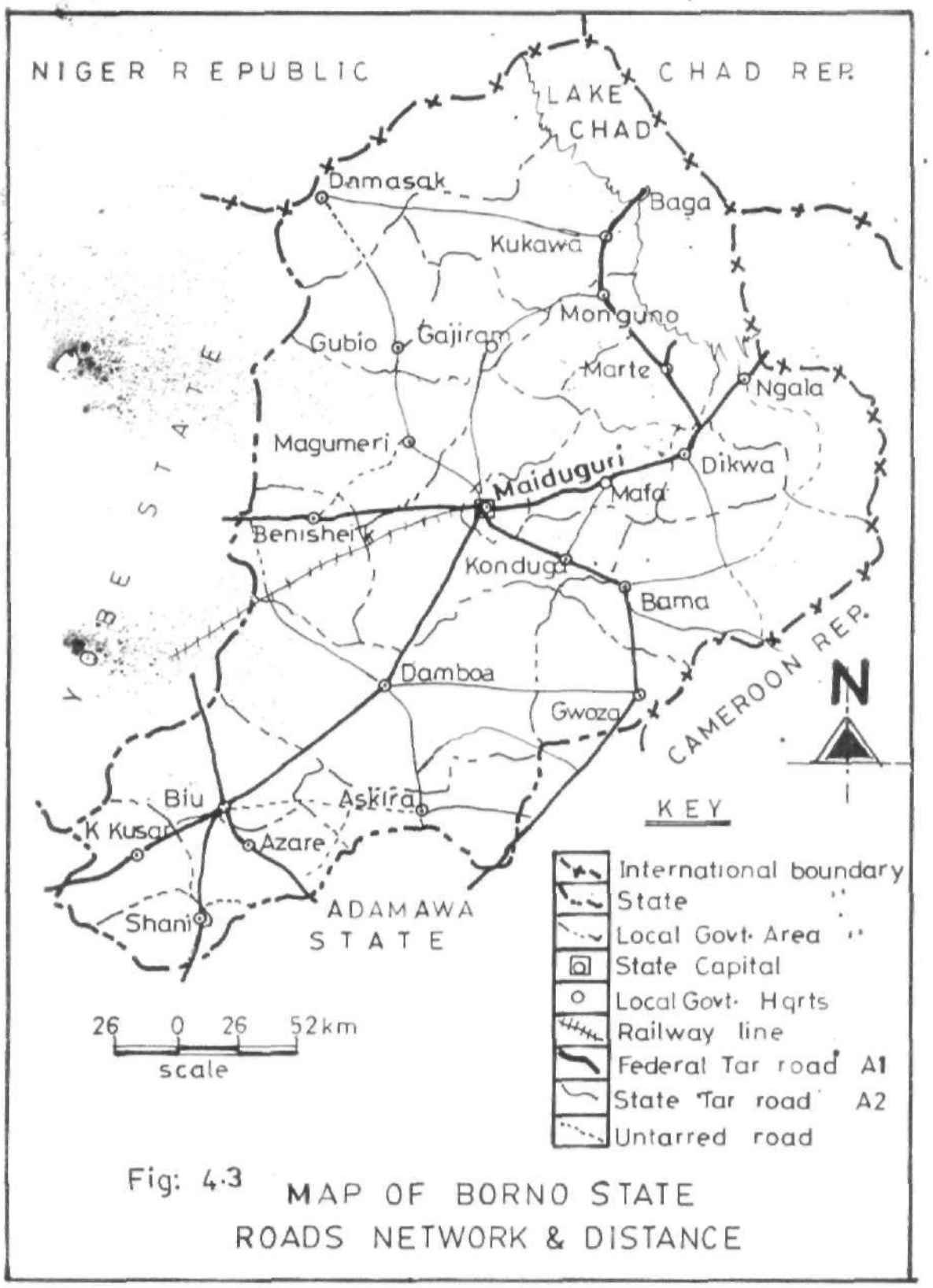


Fig: 4.3 MAP OF BORNO STATE
ROADS NETWORK & DISTANCE

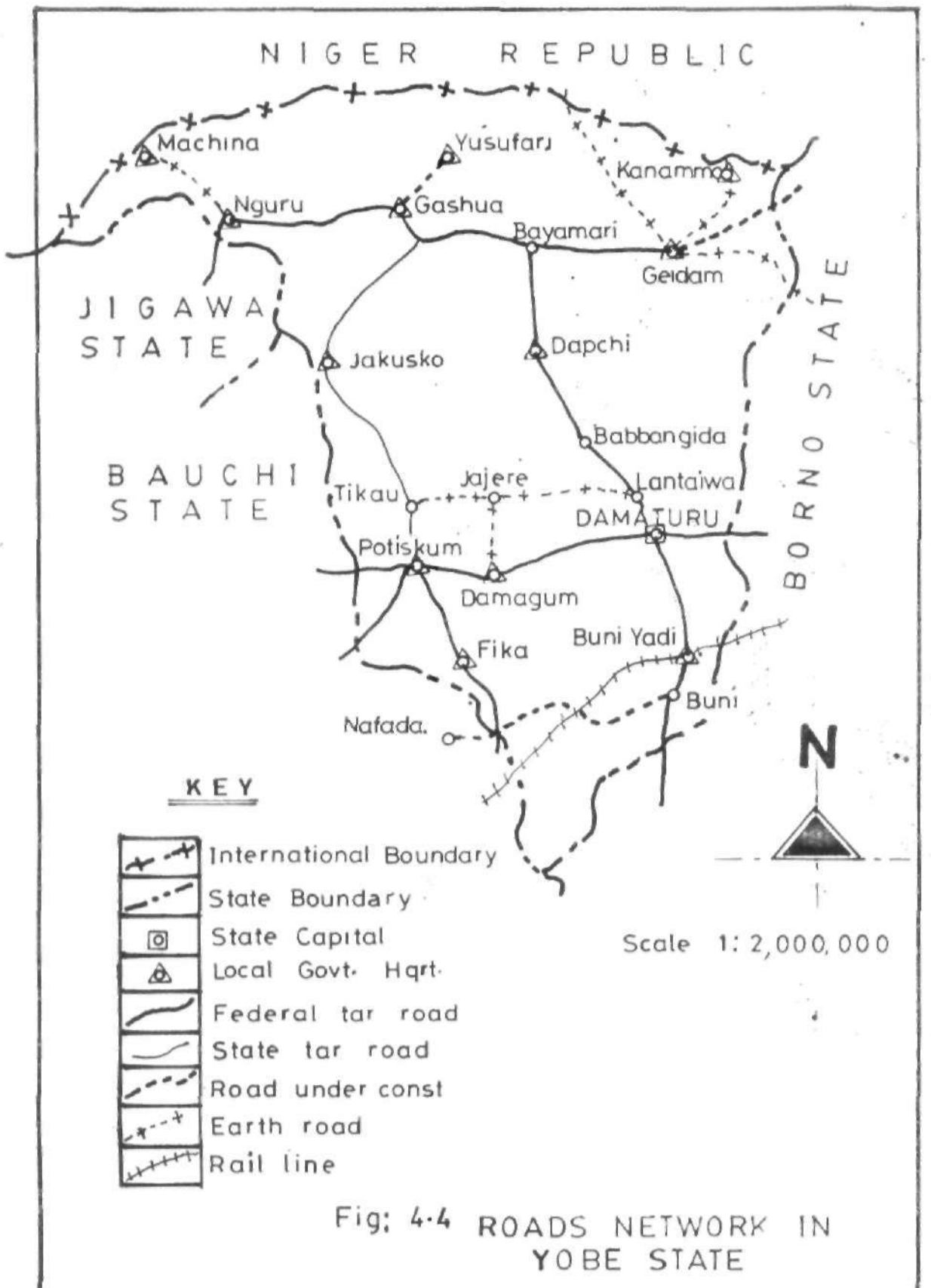


Fig: 4.4 ROADS NETWORK IN YOBE STATE

TABLE 4.6 LIST OF ROAD TAKEN OVER FROM LOCAL AUTHORITY BY THE NORTH EASTERN STATE GOVERNMENT IN 1970

1.	Azare - Potiskum road	-	91.2km
2.	from Junction with A17-Kiri	-	
	Shelleng-Deba-Hade-Dadin Kowa	-	128.0km
3.	Yola-Fafori - Junction to Karlahi	-	57.6km
4.	Fofori-Junction to Fofori-Guria	-	38.4km
5.	Adamami-Jama'are	-	32.0km
6.	Pulka-Kirawa	-	32.0km
7.	Wamdeo - Ashira	-	14.4km
8.	Karege-Wanfanyo	-	28.8km
9.	Sebore-Binyeri	-	240km
10.	Uba-Lassa	-	40.0km
11.	Kumo - Yola	-	67.2km
12.	Hadeja - Nguru	-	4.8km
13.	Misau - Azare	-	38.4km
	Total		596.8km

Source: North Eastern State yearly budget estimates 1970-1974.

From the Local Authority for improvement at a cost of N1,702,000 Million Naira in the plan period and the total cost of all project work was to be N21,940 Million Naira, with the following projects to begin at the end of the plan period;

1. Kauwa - Abadam - Mallam Fatori road
2. Kadeja - Nguru - road construction
3. Gombe - Bajoga - Ashaka road
4. Nguru - Gashua road.

And the allocation for project and local resources, for the (1975-80) plan period budgetted by former Borno State Government stood up at N49.4million Naira and is described in (Table 4.7) below.

TABLE 4.7 RESOURCES ALLOCATION INDEX OF GROWTH FOR THE STUDY AREA FROM 1970-90.

INDEX OF GROWTH 1970-76 PERIOD		
Development period	Resources allocation in NMillion	Resources allocation for Road Development as Percentage
1970-74	18,53million	100%
1975-80	49.40million	266.5%
1980-85	173.71million	936.90%
1985-90	34.56million	186.5%

Sources: from Table 4.5 above.

This was increased to N173.605million Naira in (1980-85) plan period but decreased to N34.578million Naira from (1985 onwards. It is also noted that the highest allocation of resource for road development in the state was in the (1980 - 85) plan period, when with a target list of twenty seven road projects, 14 are yet to be completed.

The State Government, after spending about N135.633million Naira on then as from 1975 do date, on the projects right from the creation of the North Eastern State, for example Pulka-Ngoshe, Wandeo-Lassa-Askira in Borno State and Fika-Siminti-Gashinge, Jakusko-Bauchi border in Yobe State; are not yet completed even today.

And secondly, it is particularly strange that despite the fact that most of those people were drawn up in 1980 during the political era, when they should have been quickly implemented, they were not undertaken.

Road development in the states is normally undertaken by three main bodies in the state. These are the State Ministry of Works, Housing and Transport, the Borno State Accelerated Development and Agricultural Programme (BOADAP) and the Directorate of Food, Roads and Rural Infrastructure (DFRRI). And with the creation of (BOADAP) from the Ministry of Agriculture in 1987, a total length of 881 km of Earth road were constructed in the State, which included the Tikau - Jajere road, a total length of 49km at a cost of N4,149,662.22 Naira, other roads include rehabilitation and maintenance of Buni Gari-Bumbsa road a distance of 76km and Ngelzarma - Jajere road, a distance of bout 40km at a cost of N16, 183,618.00 Naira.

In 1989, BOADAP constructed a total length of about 1,450 km of earth road. The list of roads constructed by BOADAP since its inception in 1987, in the state is given in Table 4.8.

TABLE 4.8 LIST OF ROADS CONSTRUCTED BY BOADAP

1.	Bakka - Arboko road	-17km	Askira-Uba	LGA
2.	Wandeo-Lass	-26km	"	"
3.	Wandeo-Mussa	-24km	"	"
4.	Maiduguri-Gongola-Limanti	-10km	Kondoga	"
5.	Maiduguri-Galtimari	-8km	Metropolitan	"
6.	Konduga-Mafa	-41km	Konduga	"
7.	Bama-Banaram	-65km	Dikwa	"
8.	Bama-Kio-Diguri	-25km	"	"
9.	Zari - Gazabure	-60km	Kukawa	"
10.	Ngala - Nambi - Sigma	-64km	Ngalda	"
11.	Ngalda - Ndafa	-29km	"	"
12.	Monguno - Damanki-Banki	-50km	Monguno	"
13.	Bita-Izge	-25km	Askira	"
14.	Lafiya - Bubabulin	-64km		
15.	Bama-Kashiri-Gulumba	-52km	Dikwa	"
16.	Musha-Abbari-Tumbulwa	-15km	"	"
17.	Damasak-Daji-Niger Border	-60km	Mukawa	"

18.	Kaita - Majingere road	-13km	Mukawa	LGA
19.	Yusufari - Maimalari	-12km	Yusufari	"
20.	Dapchi - Shetimari	-30km	Bursari	"
21.	Fika - Gadaka	-11km	Fika	"
22.	Maluri - Defulwe	-8km	"	"
23.	Gujba - Ngelburwa	-10km	Gujba	"
24.	Gujba - Wagir - Mutai	-50km	"	"
25.	Dogon-Kuka-Manuwachi	-37km	Fune	"
26.	Zaji Maji - Karsuwa	-19km	Bade	"
27.	Katarko - Bultaram	-50km	Gulba	
28.	Karaje Ajigim (Construction of Culverts) -	- 7km	Damboa	
29.	Wawa - lawanti	- 7km	"	
		892km		

Source: Borno State Ministry of Works and Housing.

Another body that is involved in road construction in the state is the Directorate of Foods, Roads and Rural Infrastructure (DFRRI) created in 1987. The primary target of DFRRI is to provide accessible roads to the rural areas as much as possible. In 1987, it constructed a total of 1,200km of roads at a cost of N10million Naira and another N10million Naira was spent on constructing 1,500km of roads in 1988. Then, with the creation of Yobe State in 1991, the DFRRI in the newly created Yobe State constructed a total of 300km of roads at a cost of N2.5million Naira under its phase 1 programme. And similarly, during its phase II programme it constructed a total of 741km of road at a cost of N4.691million Naira.

And finally, with the creation of Yobe State in 1991, the Yobe State accelerated development programme was created from the former BOADAP and on its inception in 1991 it had the following development proposals for (1993-95). Rolling Plan period as indicated in Table 4.8 as well as those for

BOADAP and DFRRI projects for former Borno State during the same period (1993-95). Rolling Plan period as given below.

TABLE 4.9 FUND ALLOCATION TO DFRRI AND ADP's FOR ROAD CONSTRUCTION WITHIN STUDY AREA BETWEEN (1993-95)

AGENCY	FUND ALLOCATED (N) IN YEAR		
	1993	1994	1995
Y.O.S.A.D.P (Yobe)	3.2million	5.0million	4.5million
B.O.A.D.A.P (in Borno)	4.5milliom	5.0million	6.0million
D.F.R.R.I (in Borno)	38.8milliom	50.0million	48.0million

Source: Yearly State Budget Estimate for Borno and Yobe States and as well as those for B.O.A.D.A.P and DFRRI projects for Borno State during the same period (1993-95 Rolling Plan.)

4.4 SUMMARY OF AUXILIARY PROBLEM

Like other part of the Federation, road development in the study area is greatly determined by the economic, political, social and cultural conditions within the state, it is in view of these tremendous barriers to economic development, that it would be in-realistic to imagine that infrastructural development in the rural area of the study area, can be achieved without problems.

The achievement of growth needs adequate formulation and evaluation of procedure and realistic implementation of roads development plans. This as said earlier is done with the intention of providing the study area and its rural area with employment and improved communication network.

As said above that the achievement can not be made without problems, is that first, there is problem of overlapping of project that characterised the development plans in the study, which can be attributed to under costing of the project, that is done mainly on arbitrary basis.

And secondly, the study area, the State Ministry of Works needs, an institutional development assistance to strong capacity to cope with required road rehabilitation work and more so, to provide any acceptable level of cost effective road maintenance. Also, another problem that arises is the choice to be made regarding the emphasis placed on other sector are many and complicated. One of the main decision that had to be made is the relative emphasis to be placed on roads development and its maintenance.

There appear to be more emphasis shift to maintenance rather than reconstruction or constructing new roads as find out from the assessment of the road development plan of the study area. And in order to preserve existing assets as well as to striking a balance between road expansion and maintenance in the study area on appropriate institutional arrangements for planning, management, resources mobilization and maintenance are necessary.

With the introduction of the Structural Adjustment Programme (SAP) in 1987, and the present Federal Government policy of prioritization of project for completion or construction of abandon project through the Petroleum Trust Fund (PTF) would support further improvement in Macro-economic performance of the state.

CHAPTER FIVE

5.0 ANALYSIS OF PAST DEVELOPMENT EFFORTS WITHIN STUDY AREA

5.1 GENERAL REVIEW

The study area was once part of the former North-Eastern State of Nigeria. This area before it breaking into three smaller states, namely Borno, Bauchi and Gongola States in February 1976, have passed through four year of planned development.

The planning period (1975-80), is linked with the first, 1970-75 in term of objectives, for investment and policies, which become necessary in order to relate the performance during that period to the future programmes, i.e. (1975-80).

This can be seen as done in area of adjustment of policy and policy measures recurring from the Third Plan, for example, is seen in terms of its plan size as it relate to the Second Plan period.

As a result of the mentioned break-up of the state into three, separate plan proposal with basically the same objectives was developed by each of the three states, for (1975-80), (1980-85), (1985-90) and the (1990-1993) rolling plan for continuity.

The fact that each of the three states had to propose, for their new development proposals, for the Second National Development Plan period (1970-75), with most of the projects previously initiated but were not completed, even before the

Second Plan itself. It is instructive to note that the Nigerian Civil War started before the Second National Development Plan which brought uncertainties, and political crises. The beginning of this plan (170-75) saw the end of the hostilities ushered in road rehabilitation, conciliation and the genesis of an era of road and the genesis of National Reconstruction.

However, the approval of the (1970-75) Development plan for State Government in Nigeria by the Federal Military Government was late. This delay accounted for the inability to execute most of the projects initiated in North-Eastern State road development.

In the (1975-80), Third Plan period, physical execution of the Development projects in the North-Eastern State programme did not even commence because of the creation of three new States from it in February, 1976; when the First year of this Third Plan development had started. This led to the set back in the implementation of the proposed development plan, as each States mentioned earlier namely; Borno, Bauchi and Gongola had to propose another plan with a carry over of the earlier proposed plans. Several administrative changes were encountered, and these further compounded the problems of the plan implementation. A number of Ministries were not adequately staffed. Thus, the newly created States had insufficient qualified personnel on Permanent basis who could initiate new programme and evacuate the effect of the existing

polity. Besides these, the excessive political intervention in the making of decisions on purely economic matters, such as according priorities, awarding of contracts, etc worsened the situation.

The study area had proposed to construct a total of 923 km of road in its (1975-80) Development Plan at an estimated total cost of ₦60.890million Naira, of which actual financial commitment was ₦35.440 million of road development (see Tables 5.2(a) and (b)).

TABLE 5.1 (A) SUMMARY OF ROAD DEVELOPMENT EFFORT BY STATE GOVERNMENT IN THE STUDY AREA FROM 1975-93

Plan Period	Amount for road Deve. Proposal	Total Kilo. to be Cons-tructed	% Road Kilo Growth Index	Performa-nce of total Allocat. 1975-95
1975-80	₦35.440m	923km	100	6.31%
1980-85	₦338.672m	1,173.2km	127	60.31%
1985-90	₦63.806m	581km	59	11.36%
1990-93	₦123.650m	429km	43	22.02%
TOTAL	₦561.568m	3,106.2km	329	100%

TABLE 5.1 (8) SUMMARY OF ROAD DEVELOPMENT EFFORT BY STATE GOVERNMENT IN THE STUDY AREA FROM 1975-93

Summary of *Budgetted* and Actual spending by State Governments in the Study Area on Road Development from 1975-93 ---------- Plan period	Proposed *plan* Allocation	Actual *Spending*		% of Total *for plan* period
1975-80	₦60.890m	35.440m		58.20%
1980-85	₦209.790m	338.672m		161.43%
1985-90	₦84.0m	63.806m		75.95%
1990-93	₦121.0m	123.690m		102.19%
TOTAL	₦475.680m	561.568m		

Source: Obtained from Borno State yearly Budget Estimate.

This shortfall arose from the shortfall in the expected revenue. Therefore, some of the projects had to be carried over to the next plan period in (1980-85); with additional eight new projects at a total estimated cost of ₦209.790million Naira being added. Unfortunately, only ₦33.672 million was actually spent. The reason for this is that, before the start of this development plan (1980-85); a change of government from the Military to Civilian wa effected in 1979 prior to its inception. Also, a reverse change of administration Civilian to Military was in 1983 at the peak of its implementation process. The net effects of these different

factors were massive disruption of implementation of the (1980-85) plan proposals. Thus, the carry over road projects from (1975-80) and new ones added were not completed. The only road completed was Potiskum-Jakusko-Gashua road, a distance of 157km at a total cost of ₦16.927 million Naira.

In the (1985-90) development plan, Borno State budgeted the sum of ₦840.0million for its road development proposals with continuation of two projects that were accorded priority, which were started in the (1975-80) plan period; namely Ngamdu-Damboa-Gwoza and Kwya - Kusar - Shani, with an allocation of ₦15.1million Naira and ₦9.505million Naira respectively, during the plan period. In addition, it continued with three projects that were started in the (1980-85) plan period which are Gubio-Damasak; Kukawa-Gudumbali-Zaria-Grinde-Damasak and Bayamari Kalari Bridge work at the cost of ₦16.19m; ₦21.20m and ₦55.706m respectively. The listed above are the major achievements of the plan period.

During the (1990-93) Rolling Plan period just after the rolling plan was approved by the Federal Government, the study area was splited into two states namely, Borno and Yobe. Therefore, in formulating proposals for this plan period, two projects were carried over from the (1975-80) plan period, namely Ngamdu-Damboa-Gwoza road and Kwaya Kusar-Shani road project with a total allocation of ₦15.1million and ₦9.505million naira respectively. The proposals also included Dikwa-Gulumba-Banki road which had been started in (1979-80)

period but stopped at the end of 1985. Others are Geildam-Gubio, Askira Kwajjafa roads all in Borno State and Nafada-Gabai-Buni road in Yobe State, with an allocation of ₦16.125million for Dikwa-Gulumba-Banki road, ₦2.0million Naira for Geidam-Gubio road; ₦3.0million for Askira Kwajjafa road and ₦8.0million for Nafada - Gabai - Buni road. Also, three new projects were added into the plan namely, Maidua-Gadaka in Yobe State, Bita-Izge, Yimirshik-Sakwa and Marama road in Borno State with a total of about 823km to be constructed at a total cost of about ₦152.586million Naira. For the various plan periods, the list of all roads proposed, with their resource allocation together with some remarks on them are given in tables 5.1 (a) and (b), 5.2 and 5.3.

TABLE 5.2 LIST OF STATE ROADS PROPOSAL FOR VARIOUS DEVELOPMENT PLAN IN BORNO/YOBE FROM 1975-93

Descrip. of Proj.	Dist. Kilom.	Resou.	Alloc.	(N	mil.)	Remarks
		75-80	80-85	85-90	90-93	
Potiskum-Jakusko-Gashua	144	6.510	10.407	-	-	compl. '85
Ngamdu-Damboa-Gwoza	205	6.200	59.05	8.10	7.0	part/comp.
Dikwa-Gulumba-Banki	98	4.34	38.70	7.125	4.0	not yet com.
Kwaya-Kusar-Shani	55	1.60	33.82	6.505	3.0	dormant
Geidam-Gubio	112	4.9	45.4	-	2.0	"
Askira-Kwajjafa	74	1.89	6.0	-	3.0	design
Nafasa-Gabai-Buni	84	4.5	3.0	-	8.0	"
Fika-Siminti Gashinge	64	2.0	4.5	-	-	"
Damagun-Jajere-Lantewa	82	3.5	17.5	-	-	"
Gubio-Damasak	94	-	26.845	6.15	11.0	"
Nguru-Mconi Niger Border	59	-	2.41	-	-	"
Gashua-Yusufari	28.2	-	22.81	-	-	taken over F.G. '92

TABLE 5.2 CONTINUED

Descrip.of Project	Dist. Km	Reso. Alloc. (=N=m)				Remarks
		75-80	80-85	85-90	90-93	
Geid-Main-Soroa	44	-	0.75	7.0	-	tak/FG 92
Kuk-Gud-Zari-Gur-Gaz-Damasak	118	51.8	1.22	-	-	Comp.
Baya-Kalairi	11	-	0.75	2.706	53.0	" '94
Maid-Gadaka	13	-	-	-	9.0	" '93
Yimir-Sak-Marama	40	-	-	-	14.0	des.stage
Bita-Izga	40	-	-	-	2.0	do
Marin-Gumsa	60	-	-	-	-	"
Mandeo-Lassa -Kwobchi	52	-	-	-	1.422	"
Maid-Gamb-withspur at lake Alau	39.5	-	12.0	13.35	-	tak/FG '82
Jakus-Bauchi border	4.5	-	-	4.23	-	Compl. '92FMN
Geid-Yunusari	112	-	-	-	-	FG.Proj
Pulka-Ngoshe -Arboko	19	-	-	2.0	2.65	"
Bama-Gul-Kal Ngala	137	-	-	-	-	compl.
Kauwa-Arege-Mal.Fatori	92	-	-	-	-	"
Nguru-Mach.	182	-	-	-	-	notyet compl.
Geid-Damsak	50	-	-	-	-	tak/FG

TABLE 5.2 CONTINUED

Descrip. of Project	Dist. km	Res. Alloc. (Km)				Remarks
		75-80	80-85	85-90	90-95	
Studies and Design	80	-	-	-	-	
Purch.of plants/Equi	-	-	2.64	4.92	-	
Rehabili-tion of States roads	-	-	0.23	0.5	-	
TOTAL	2190.2	35.44	338.672	63.806	123.65	

Source: Borno State yearly budget estimated from 1975 - 90

TABLE 5.3 SUMMARY OF FUND ALLOCATION FOR ROAD DEVELOPMENT FROM 1981-1985 IN THE FORMER BORNO STATES.

Descrip. of Project	Year Allocation. Mn				
	80-81	81-82	82-83	83-84	84-85
Pot-Jak-Gash.	1.93	0.491		-	-
Ngam-Damb-Gwa.	12.0	22.0	17.55	0.5	2.0
Dikwa-Damas-Banki	6.0	12.0	16.20	1.5	2.0
Gubio-Dams	6.0	13.8	7.20	-	-
Kwaya-Kusar-Shani	7.0	11.0	13.320	0.9	-
Geid-Gubio	6.0	20.5	18.90	-	-
Askira-Kwaj.	4.0	-	2.00	-	-
Nafada-Gab	3.0	-	-	-	-
Fik-Sim-Gashi.	3.0	-	1.5	-	-
Dam-Jaj-Lant.	4.0	-	13.5	-	-
Purch.ofPlant/ Equip.	0.954	0.910	0.90	-	-
Studies & Des.	-	-	0.450	-	-
Rehab. of other roads	2.0	0.8	4.23	0.3	0.2
Geid-Mai-Sor.	-	0.75	-	-	-
Gashua-Yusufari	-	0.75	10.89	-	-

TABLE 5.3 CONTINUED.

Jak-Bauchi-Bor.	-	12.0	10.890	-	-
Nguru-Meori- Niger Border	-	-	-	1.500	-
Maid-Gomb- road with spur at lake Alau	-	-	-	-	-
Pulka-Ngoshe-Arbokko	-	-	-	-	-
Baya-Kailiari	-	-	-	0.790	-
Nguru-Machina	-	-	-	-	-
Kauwa-Mal.Fatori	-	-	-	-	-
Geid-Dams-Mal Fatori	-	-	-	13.8	-
Kuk-Gul-Gur-Gaz- Zar-Dams	-	-	18.0	13.8	20.0
Bama-Gul-Banki	-	-	-	16.6	-
TOTAL	315.641	55.880	94.251	126.710	22.2

Source: Borno State Yearly Budget Estimate from 1980 - 85.

For tables 5.4 to 5.6 which are given below the data for population density was obtained from the National Population Commission office in Yobe state; while the road length for both the State in the federation and the study area local government was computed from measuring directly from the Road Map of Nigeria.

TABLE 5.4 ROADS LENGTH AND DENSITIES IN BORNO STATE

Loc. Govt. Area	Area km/sq	Pop.'92	Dens. per/ km_2	Lengt of Fed. Roads	Lengtof State Roads	Road Density km/km/sq
Askira Uba	2404	244,640	101.8	80	100	0.075
Bama	6176	307,244	49.7	170	110	0.045
Biu	8766	171,987	19.6	150	70	0.025
Damboa	8500	260,852	30.7	NIL	80	0.009
Dikwa	1663	107,881	69.9	140	240	0.228
Gwoza	2689	119,043	66.6	80	90	0.063
Kaga	2713j	211,804	78.1	80	130	0.077
Konduga	5825	281,402	48.3	135	25	0.027
Kukawa	6750	201,514	29.9	95	NIL	0.014
Maiduguri	542	522,345	96.7	60	40	0.185
Magumari	4950	145,699	29.4	200	NIL	0.040
Mafa	2175	100,471	46.19	60	125	0.085
Mubbar	6650	208,281	31.3	195	40	0.029
Monguno	2840	182,178	64.2	65	20	0.037
Marte	2825	208,618	73.9	90	15	0.038
Gubio	3200	137,316	42.9	85	40	0.031
Kwaya kursar	1875	118,589	63.3	110	NIL	0.080
Nganzai	1500	102,189	68.1	90	NIL	0.059
Hawul	1925	188,869	98.1	60	NIL	0.060
Shani	1075	94,149	87.6	NIL	15	0.031
Ngala	3729	250,683	67.2	NIL	NIL	0.000
TOTAL	**78772**	**2596589**	**329.6**	**1945**	**1140**	**0.039**

Note: 1. Length of Federal roads are measured directly from road map.
2. Length of State road are State Government proposed laterite and bitumenuous surface treated road.

TABLE 5.5 ROAD LENGTH AND DENSITIES OF YOBE STATE

Loc.Govt. Area	Area km^2	Census 1992	Density km^2	Fed.Roads KM	State Roads KM	Den. KM. Per M^2
BADE	1711	181,726	106.210	111	90	.117
DAMATURU	6646	62,064	9.066	162	40	.029
BUSARI	3637	100,000	27.495	100	-	.027
FIKA	2108	130,353	61.837	81	60	.067
FUNE	4699	135,567	28.850	64	215	.059
GUJBA	5552	144,470	26.021	64	170	.042
GEIDAM	4335	85,150	19.644	46	100	.034
JAKUSKO	3600	3,000	0.833	60	80	.039
MACHINA	1229	50,000	40.683	20	-	.016
NGURU	2416	137,402	56.872	74	-	.031
NANGARE	1453	251,001	172.745	126	80	.142
YUNUSARI	4434	73.769	16.637	70	30	.023
YUSUFARI	3466	56,971	16.437	18	70	.025
TOTAL	**45456**	**1,411,481**	**31.031**	**996**	**935**	**.042**

Note: 1. Length of Federal roads are obtained directly from the road map attached.

2. Length of State roads are State Government proposed earth roads.

TABLE 5.6 ROAD DENSITY IN STATES OF NIGERIA AS IN 1991 POPULATION DENSITY.

STATE	AREA KM^2	1991 PROJ. POP.	POP. DENS/ PERSON KM^2	LENG. OF FED. ROAD IN STATE	LENGT. OF STATE ROAD INCL. LGA RD	TOTAL LENGT. OF ROAD KM	DENSKM/ KM^2
ABIA	6884	2297978	333	230	3649.9	3879.9	0.56
ADAMAWA	57526	2124049	37	750	1250	2000	0.04
A/IBOM	5821	2359736	405	360	6271	6631	1.14
ANAMBRA	4662	2767903	594	180	1892.9	2072.9	0.45
BAUCHI	64605	4294413	66.5	1214	3216	4430	0.07
BENUE	45174	2780398	61.5	900	2796	3696	0.08
BORNO	78772	2596589	37.5	2025	2208	4233	0.05
C/RIVERS	19750	1865604	94.5	540	6575.8	7115.8	0.36
DELTA	10488	2570181	156	195	4049.6	4245.6	0.26
EDO	21714	2159848	99.5	410	6044.3	6454.2	0.30
ENUGU	12493	3161295	253	440	4082	4522	0.36
IMO	5524	2485499	450	210	7038	7245	1.31
JIGAWA	9464	3969252	299	540	1150	2190	0.23
KADUNA	45163	5632040	87.9	977	5061	6038	0.13
KANO	33118	3878340	170	920	3175	4095	0.12
KATSINA	24232	2062226	160	770	5858	6625	0.27
KEBBI	27825	2094046	74	1340	1979	3319	0.12
KOGI	19054	1566469	110.2	720	2480	3200	0.17
KWARA	26783	5685781	58.5	1460	4853	6313	0.24
LAGOS	3535	2482367	160.8	480	5141	5621	1.59
NIGER	67469	2482367	136.8	1660	3007.6	4668	0.07
OGUN	17223	2338570	135.8	400	7657.5	8057.5	0.47
ONDO	20895	3884485	185.9	640	11539	12179	0.58
OSUN	4526	2203016	486.7	395	3385	3780	0.84
OYO	31867	3488789	109.5	740	9740	10480	0.33
PLATEAU	49840	3283704	65.9	1380	6586	7966	0.16
RIVERS	19750	3983857	182	540	2706.	3256.3	0.17
SOKOTO	65556	4392391	67	680	6150	6830	0.10
TARABA	33863	1480590	43.7	1520	457	1997	0.06
YOBE	45456	1411481	23.9	930	119	1049	0.024
ABUJAFCT	7315	378671	52	170	N.A	222	0.03
TOTAL	862,339	88,161,935	10,317.1	23,702	130,701.48	159,403.5	0.181

It is interesting to note that most of the roads network completed went through a series of development proposals before they were eventually undertaking while some are yet to be completed or partially executed and others were abandoned as indicated in table 5.2. Which occurred as priority shift among roads earmarked for development as enunciated by successive governments. Factors enumerated above and also because of changes in priority among roads earmarked for development as enunciated by successive governments . As seen from Table 5.2 above, project like Ngamdu - Damboa-Gwoza road which started in 1975 and was scheduled for completion in 1983, was carried over in 1983 and 1984 and was not completed up till 1933 when Yobe State was created, which now lies as interstate road to be taken over by the Federal Government. Total distance of only 205km after spending a total sum of about =N=85.390 million. But a project like Potiskum-Jakusko road, a distance of 149km, was started in the same year 1975 and was completed in 1983 at only a total cost of N16.927million. Others like Dikwa-Gulumba Banki road and Kwaya Kusar-Shani road where scheduled for completion in 1982 and 1983 respectively, but are not completed uptill now and they are of the length of 98km and 55km respectively. They have consumed a total of N59.165million Naira and N49.925million respectively.

Other projects that need mention from this Table 5.2 are projects that their design had been completed, but contract

had not been awarded, these are Askira-Kwajjafa, Fika-Siminti-Gashinge, Damagum-Jajere Lantewa, Nafada-Gabai-Buni road, Nguru-Meori-Niger border and Jakusko Bauchi border. The last two projects were carried over since the former North-Eastern State; but were at design stage only. This explains why, as mentioned earlier, that several projects are yet to be carried out to their logical conclusion, instead they are carried over. Also one major high light is that the bulk of spending on road had occurred during (1980-85) plan period when the State Government spent over N338.672million Naira which constituted about 60.31% of the total amount spent from 1975 to 1993. Also, this period is the one when road construction in study area is said to have reached its highest peak. It started with about 923 kilometre in (1975-80). To 1,173.2 kilometres in (1980-85) period, 581 kilometre in (1985-90) then declined to 429 kilometre in (1990-95) plan period.

The government's spending on road from (1975-93) was N561.568million Naira out of a total budgeted sum of N475.680million naira (Table 5.1 (b)) which shows that government had recorded an over spending of about N85.888million, this is a result of over spending in (1980-85) plan period and (1990-93) rolling plan which all occurred in the political era. In (1980-85), the government budgeted the sum of N209.790million but it spent about N338.672million Naira, on road development which is about 161.43% of its total budgeted expenditure for the plan period. In (1990-93 plan

period the two State Governments exceeded their budget targets proposals by N121.0million Naira representing an excess of 2.19% through out the three years rolling plan.

Many reasons had been advanced for the determination of the growth and pattern of road network through government resources allocation. Perhaps, a basis for this can be determined by assessing the relationship between flow of government funds and population density and the degree of road network development.

An examination of the realised resource allocations for the road development programmes shed some light on some of the important issues. For example, if there was not policy shift or unexpected bottlenecks, the plan proposals could had been achieved. The physical achievement should have correlated positively with the financial plan fulfillment. This strongly suggests that funds availability and the other identified bottlenecks were the main impediments to the implementation of the development proposals and it is therefore not surprising to see that various conclusion. The area, Borno/Yobe, had a population of about 4,008,070 people according to (1991 Population Census Provisional Results) The distribution of people over the land of each Local Government Area of the two States is given in table 5.4 and 5.5 together with the distribution of road lengths over area of the study area, namely Borno/Yobe and within each of the Local Government Areas of the two States.

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The road lengths considered include the Federal Government roads in the States and the States own road lengths, some of which are of Directorate of Foods, Roads and *Rural Infrastructure roads (DFRRI). A crude comparison is then* made of distribution of road lengths over areas of the two states with that obtained in other states in the Federation as given in Table 5.6. It is seen from Table5.4 that the distribution of road length over area in Borno State varies *from 0.000km/square kilometre in Ngala Local Government Area* to a maximum of about 0.228km/square kilometre in Dikwa Local Government Area. Other areas of low kilometre density of road are Damboa, which is as low as 0.009km/square area and Shani which has a value of 0.041km/square kilometre, while the *overall total of the State is bout -.039km/square km.* Therefore, it can be said that, on average, these Local Government Areas which have lower values than this figure of 0.039km/sq.km are poorly developed as far as the state is concerned in terms of road density coverage. But on the whole, when the states figure of 0.039km/sq.km is compared with the National Average of about 0.181km.sq.km from Table 5.6 this represents a lower value than the National Average. As such, the state is not adequate in terms of road network.

Similarly, from Table 5.5 the least developed Local Government of Yobe State in terms of road network is Machina Local Government Area with a figure of about 0.016km/sq.km and while the more developed Local Government Area in term of road

network is Nangere Local Government Area with figure of about 0.142km/sq.km. The average State figure is about 0.042km/sq.km which is much below National Average of 0.181km/sq/km. It can be said further that. DikwaLG, the highly developed Local Government Area in Borno State with a figure of about 0.185km/sq.km is more adequate as this figure exceeds the National Average figure of about 0.181km/sq.km. Similarly, Nanagere Local Government Area of Yobe State is close to the National Average as it represents a satisfactory figure value of 0.142km/sq.km.

While a National Lvele from Table 5.6 the least developed State in terms of road network in Nigeria is Yobe State. While the highly developed state in terms of road network coverage per square kilometre of land area is Lagos State, with a figure of about 1.590km/sq.km, closely followed by Akwa-Ibom State with a figure of about 1.139km/km^2 then by Imo State with a figure of 1.312km/km^2.

5.2 SUMMARY OF FINDINGS

This study also revealed a few important factors that have constrained road development in the state.

For one, the political instability in form of government as brought about by frequent switches from military to democratic rules have disrupted plan implementation. However, it appears that the highest levels of expenditure were recorded during civilian regimes.

Secondly, it appears that projects have generally been undercosted at planning stages, with the result that even when planned projects were implemented. Thus, projects carry-over from one plan period to the next and beyond are a constant feature of road development in the study area. This tendency to undercost projects has contributed, in no small measure, to the apparent non-implementation or partial implementation of plan proposals.

Political instability brought about by the Nigerian Civil War and abrupt breakup of states in to smaller states as in 1967, 1976 and 1991 have also disrupted plan formulation and implementation. The exercises have led into reduced executive capacities into fragmented units and brought about loss of focus in plan development. The fact that successive political leaderships have brought their biases in prioritisation amongst projects have further accentuated the effects of political instability. It has not been possible to establish any rational basis for selecting projects for implementation.

5.3 ROAD SAFETY CONSIDERATIONS

Road developments should facilitate safe and economic movement of persons and goods. Similarly, developments must consider implications on safety and economic efficiency. So far, the latter has received attention in this review. The former requires that accident records also be examined but accurate and consistent kept records are not available but the

scanty data is now reviewed.

From data collected mainly from (1976-1989) which is specifically on former Borno State. (see Table 5.7 and 5.8) shows that road accidents rates are generally high in the country as well as in the study area. The major accident causes are mechanical, human and road surface condition.

TABLE 5.7 ROAD ACCIDENT STATISTICS SUMMARY OF MOTOR VEHICLES INVOLVED IN ROAD ACCIDENT IN BORNO STATE OF NIGERIA BY TYPE MOTOR VEHICLE, 1979-1984

TYPE OF MOTOR VEHICLE	1979	1980	1981	1982	1983	1984
TAXIS	254	290	410	342	156	429
PRIV. CARS	181	215	224	204	83	317
BUSES(OMNI)	341	364	461	358	157	397
LIGHT TRUCKS & PICK-UPS	276	230	89	240	55	28
KIT CARS	99	138	92	97	12	25
LORRIES	141	128	190	146	59	153
TRAILERS	60	61	51	59	18	13
TANKERS	29	20	9	21	8	3
SPECIAL PURP.	1	2	2	N.A	1	1
UN-SPECIFIED	57	24	416	62	6	9
MOTOR CYCLES	344	227	214	318	64	276
PEDAL CYCLES						
TOTAL	1,783	1,699	2,158	1,847	614	1,651

Source: Motor Traffic Division, Nigeria Police Headquarters, Maiduguri, Borno State.

TABLE 5.8 ROAD ACCIDENT STATISTICS REPORTED CASES OF ROAD ACCIDENT IN BORNO STATE, 1976-1984.

YEAR	TOTAL	LEVEL OF SEVERITY			PERSONS KILLED	PERSON INJUR.
		FATAL	SERIOUS	MINOR		
1976	1,469	245	632	592	310	1,553
1977	1,752	238	895	619	310	1,678
1978	1,665	243	765	657	319	1,157
1979	1,678	335	629	629	452	1,399
1980	1,659	391	676	592	465	1,696
1981	1,093	376	880	837	588	1,699
1982	1,690	431	725	534	543	1,355
1983	1,012	234	403	375	329	759
1984	1,233	367	491	343	895	1,708
1985	1,177	240	541	396	275	805
1986	1,958	278	372	308	557	1,058
1987	799	265	306	203	350	734
1988	1,770	282	502	925	932	1,618
1989	941	262	376	280	356	1,007

Source: Motor traffic Division, Nigeria Police Headquarters, Maiduguri, Borno State.

Cases of Hit and Run inclusive of 32, 25, 61 and 32 of 1984, 1987, 1988 and 1989 respectively.

And also that of the country (Table 5.9) from (1981-1986) below.

TABLE 5.9 ROAD ACCIDENT STATISTICS REPORTED CASES IN NIGERIA FROM 1981-1986

YEAR	TOTAL CASES	LEVEL OF SEVERITY			PERSONS KILLED	PERSONS INJURED
		FATAL	SERIOUS	MINOR		
1981	35,906	8,637	13,690	13,579	10,683	29,754
1982	37,094	8,820	14,839	13,435	11,383	28,539
1983	33,029	8,715	12,591	11,723	9,971	25,715
1984	28,888	6,992	11,495	10,401	8,830	23,321
1985	28,976	7,036	11,414	10,526	9,221	23,583
1986	25,193	6,112	9,654	9,427	8,154	22,176

Source: Nigeria Police Force Headquarters, Maiduguri, Borno State

And also summary of newly registered vehicle in the study area and Nigeria in (Table 5.10 and 5.11).

TABLE 5.10 SUMMARY OF THE NEWLY REGISTERED VEHICLE IN BORNO AND YOBE STATES OF NIGERIA, FROM 1976-1990

YR.	S/C	S/W	LOR	P.UP	TRAC.	TRAI.	TANK.	BUS.	MCY	O/UNS	TOTAL
'76	849	1023	39	246	-	41	29	25	193	1373	2795
'77	1023	718	69	455	-	56	68	38	299	1891	3899
'78	718	1096	93	504	-	82	93	42	289	779	2550
'79	1096	-	150	689	-	121	130	78	389	2242	4895
'80	975	-	139	642	-	101	124	145	264	1127	3517
'83	1736	-	58	1260	-	110	40	48	372	5186	8820
'84	2741	-	104	1260	743	129	51	62	117	2301	6248
'85	2067	-	158	743	711	117	32	26	34	1383	4528
'86	990	-	40	444	444	30	-	1	30	557	1091
'87	281	-	24	246	216	13	1	7	24	282	848
'88	290	-	41	256	151	30	7	-	66	291	876
'89	118	-	9	155	35	15	1	9	25	119	331
'90	354	-	38	87	-	41	6	8	77	161	772

Source: Motor Licensing Authority, Board of Internal Revenue, Borno State.

Table 5.11 ROAD VEHICLE REGISTRATION BY TYPE OF VEHICLE REGISTER IN NIGERIA NEW REGISTRATION 1992-96

TYPE OF VEHICLE	YEAR				
	1982	1983	1984	1985	1986
COMMERC.	55,281	39,666	25,056	22,418	9,279
PRIVATE CARS INCLUDI. TAXES	104,191	77,379	73,878	63,941	21,572
TRACTORS AND TRAILERS	4,026	3,307	3,141	6,740	3,198
SPECIAL PURPOSE	5,186	1,632	3,030	363	105
MOTOR CYCLES	159,060	147,011	48,665	28,939	N.A
OTHERS	3,106	28,242	8,486	6,040	6,629
TOTAL	359,360	297,237	162,256	128,441	40,783

Source: Federal Office of Statistics, Damaturu

Note: * Include others not specified N.A. not available.

In the study area, for example, in 1984; human error was found to have contributed alot to cases of road accident in the states. Out of the total cases of that year alone, 724 cases or 58.7% were due to human factors. This was followed by mechanical faults of which accounted for 284 cases but considering the high cost of spare parts this could be understood. And out of the total deaths in 1984, and again the major contributing factor was found to be human which was during that year 522 cases. This was again followed by faults

relating to machanical and road suface condition which accounted for 127 and 198 cases respectively.

Out of the total figure of 1,283 road accident cases recorded in the state in 1984, the highest number of 633 cases were recorded in the State Capital, Maiduguri which represented 51.5%. This was then followed by Buni Yadi with 13 cases, Ngala with 20 cases, then cases and finally Monguno with 24 cases. Of the total number of motor vehicles involved in road accidents in 1984 that totalled 1,651 vehicles, taxis topped the list with 429 vehicles involved, followed by buses with 397 vehicles and private cars 317. And the lowest number of vehicles involved came under vehicle for special purposes such as school buses with only one vehicle involved, followed by Tankers with 3 and finally with 13 number of trailers involved.

The above result shows that commercial vehicles are more frequently involved in road accident compared to other types of vehicles. At the National Level, during the same year, 1984; the country's total was 29,247 of these 7,145 cases were fatal road accidents, 11,631 serious accident and 10,439 were of minor cases. Of this, the highest number of road accident in the country was recorded in Bendel with a figure of about 2,213 cases and Kano 2,125 cases, while the lowest was recorded in Abuja with 94 cases, then followed by Niger 731 cases and Bauchi 1001 cases of these; the study area figure was 1,233 cases which represented 4.2%. Which is rather higher

considering the number of states and low road density in the study area.

CHAPTER SIX

6.0 ACTION PLANS FOR ORDERLY GROWTH

6.1 INTRODUCTION

In order to find out what action is needed for an orderly growth of road development in Nigeria in general, and the study area specifically, one needs critically review the present situation of development and patterns of resources allocation for roads.

Resources allocation for road development in Nigeria has generally not specifically incorporated funding for maintenance. In the study area, for example, form 1976 to 1985 the various governments that took charge of the affairs spent a total of N124,348,582.39 Naira on road maintenance for that time see Table 6.1 below:

TABLE 6.1 RESOURCE ALLOCATION FOR ROAD MAINTENANCE BORNO STATE, FROM 1976-1992

YEAR	AMOUNT SPENT (N)	REMARKS
1976	8,426,300	former North-Eastern State
1977	27,970,000	Construction of Truck'B'
1978	36,811,000	Roads.
1979	28,700,000	
1980	17,988,000	
1981	2,887,867	Construction of State road
1982	408,847	maintenance.
1983	479,255	
1984	21,000	
1985	655,913	
1992	1,076,000	
TOTAL	124,348,582	

Source: Borno State Ministry of Works and Housing, Maiduguri; Civil Division, 1992.

And the federal Government in the State, with the largest number of road spent =N=7,857,070.00 only (see table 6.2 below) on its road maintenance.

TABLE 6.2 RESOURCE ALLOCATION FOR ROAD MAINTENANCE FROM 1979-1992.

YEAR	AMOUNT SPENT (N)
1984	294,000
1986	931,600
1989	1,300,000
1990	1,681,600
1991	2,167,790
1992	1,481,320
TOTAL	7,857,070

Source: Federal Ministry of Works and Housing, Maiduguri, 1992. Maintenance section.

Unit cost, calculated from construction cost per kilometre length of road has also varied substantially. This can easily be seen from the fact that within 1962-68 plan period. The total length of tarred road in the country stood as 12,499.20km, with resources actually allocated during that period to be ₦150.4million Naira as can be deduced from (see table 6.3 below).

TABLE 6.3 RESOURCES ALLOCATED TO ROAD DEVELOPMENT FROM VARIOUS DEVELOPMENT PLAN FROM 1962-1995 IN NIGERIA

Plan period	Total sectoral allocation to transport (₦)	Actual alloc. to road development (₦)	Percentage of allocation to road development to the transport sector sectoral allocation
1962-68	309.092m	150.6m	48.6%
1970-79	499.094m	359.840m	72.1%
1979-80	9,678.54m	5,340.44m	68.3%
1980-89	10,707.62m	7,307.023m	68.2%
1989-90	3,944.757m	1,734.94m	39.6%
1990-95	10,025.309m	9,275.615m	92.5%

Source: Obtained from National Planning Commission Office, 1994, Lagos.

TABLE 6.4 TOTAL KILOMETRE OF ROAD CONSTRUCTED AND THEIR CONDITION FROM 1962-95

	LENGTH OF ROAD CONSTRUCTION AND SURFACE IN THE COUNTRY FROM 1962-95. AND WITH THEIR CONDITIONS		
PLAN PERIOD	TARRED KM	UNTARRED KM	RESOUCE ALLOC. Nm
1962-68	12,479.20	53,880.00	=N= 150.6m
1970-79	3,469.20	33,504.00	359.81m
1979-80	2,043.00	440.00	5,340.44m
1980-95	10.633.39	10,448.43	7,307,023

Source: Computed from table 2.1 and 6.3.

In (1984-1992), the fact is that road construction funding in Nigeria, s reflected by resources allocation in various development plans, bears no relation to the basic fact of highway development. This is so, from the fact that between (1962-68) plan period, the total length of road constructed in

the country was 66,379.20km (table 2.1) with resources allocated during that period to be N309.092million Naira (table 2.2). And between (1970-74 plan period, the total kilometre. of road constructed was 36,973.20 kilometre with resources allocation of about N499,094million Naira.

Between (1970-75) plan period, the total kilometre of tarred road in the country stood as 3,469.20km with resource allocation of about N359,840million Naira.

In (1979-80) plan period the resource allocation for road transport to be N9,340.44million Naira with a total kilometre of tarred road in the country stood up as 2,043 kilometre. And between (1980-95) the level of tarred road in the country stood up as 10,633.39km with resource allocation for road development N7,307.023million Naira.

In (1975-80) plan period the resources allocation for transport is N5,340.44million Naira with a total kilometre of road in the country stood up as to be about only 2,483 kilometre. This clearly demonstrates that as the total length of road to be constructed decreases the resources allocation get higher, indicating an increasing unit cost per kilometre. This clearly underlines the need to accord emphasis on maintenance rather that building more stretches of road. This is why there is need to incorporate maintenance work right into the rolling plans rather than concentrating on stretches of the road to reduce high investment needed in maintaining them.

It has also been seen that, in several instances the resource allocated to road development, because of the huge amount involved are diverted to other heads. It wa observed that less than the budgeted amounts actually was committed in most plan periods. There has, therefore, been overlapping of projects, as they are being deferred due to lack of funds.

In some cases contracts awarded had to be terminated when funds are not available to continue with the projects. With the high inflation rates in the country, there is often appreciable upward review of the contract sum when it has to be re-awarded in future.

Most of the road projects now being undertaken in the study area were first primarily the projects that were undertaken by the Civilian Administration, but latter were awarded and abandoned by the Military Administration or being deferred. If the trend in the change of government continues like as been experienced so far, with a lot of spill-over project, it would lead to an un-even development of roads in the area; while some areas in the country had good network of road.

Political considerations have also unduly influenced decisions. In the old Borno State, a project wa embarked upon and given to a contractor to construct Geidam-damasak-Mallam Fatori road (a part of road project wa later handed over to the Federal Government). Because of certain political reasons, this project has not taken off up to now. It wa felt that if

this project is undertaken, it would divert traffic from Mallam Fatori - Cros-Kauwa-Maiduguri routes, to Geidam-Geishua-Potiskum-Kari-Jos-Markudi-Onitsha route in the east which is shorter for motorist carrying smoked fish from Baga.

It was when Yobe State was created that the Federal Ministry of Works got the State Government to rehabilitate it, at least, on direct labour basis. The route could act as an inter-state route. Similarly to the sited case, many projects were deferred e.g. Tikau-Jajere road, Damagum-Kwaibula-Lantaiwa road, Fika-Siminti-Gashinge, Jakusko-Bauchi border, Damboa-Goniri Ngamdum road and Gujba-Gabai-Buni road with spur at Bumsa, which were awarded by the Yobe State during the political era in 1992, but were deferred to 1993 when a military regie came about.

6.2 SUMMARY OF NATIONAL NEEDS

A major problem that has surfaced in high-way development at that National level is that of maintenance. This is because high inflation rate in the country meant that cost of increasing the road length is getting higher and higher with time. Obviously, conserving what has been acquired is important and appears a logical strategy, especially in light of shrinking resources available to government. Apart from inadequate funding, effective administration of road maintenance and availability of sufficient number of professional and Engineering staff needed for the maintenance

task have proved elusive. A case in point is that a number of arrangement for maintenance of Federal roads have been raised, but so far only the recently concluded arrangement whereby the maintenance task are contracted out seems to hold much promise. The general preventive maintenance of road has largely been ignored.

Fortunately, the Federal Government is, by policy decision lately, demonstrating an appreciable awareness for the need for improved effective maintenance of both the Federal and State roads. The purpose of maintenance is to preserve the huge investment, already made or being contemplated in highway development throughout the country. Unlike the situation in the past when policy somersaults on maintenance by the Federal Governments response to maintenance of roads, there appears to be a definite focus, now a World Bank Assisted Scheme on maintenance is being contemplated on a well founded basis. A number of seminars have been held and many more are being planned on in this regard. It has been observed that, for road maintenance to be effectively achieved, the three stated components, all its sub-components, must be fully institutionalised. Such components include:

a. ROUTINE MAINTENANCE: Which is performed on a regular basis: Activities like clearance of ditch, grass cutting, bridge inspection, etc. fall into this category. A unique feature is that, this is expected to be undertaken irrespective of the level of traffic on

the road.

b. PERIODIC MAINTENANCE: Which is performed as a result of routine problem induced by the impact of traffic and is *therefore subjected to analysis and can* be predictable, and programmed in accordance with the level of traffic and original construction standards.

c. MAJOR REHABILITATION: Which is unexpected and is often due to either natural forces such as erosion, land slide, *earth quake, etc. or human* factors e.g. cumulative effect of neglecting other maintenance sub-components. Its unique feature, is that it is relatively more expensive and requires instant action if normal service is to be restored through asphalt over-lay.

It is evident that for objective attainment, maintenance must involve the following activities:

i. Monitoring/data collection

ii. Research

iii. Physical response or action

There is need also to have adequate funding along with an effective institutional frame work. The earlier defined sub-components of maintenance and the scope of works as well as associated costs clearly indicate that an optimum level of funding also exists, at least conceptional.

Both the routine and periodic maintenance should be planned on a kilometre basis and it is reasonable to expect

that the optimum funding required for them would be dependent on the initial construction costs. Major rehabilitation is largely unpredictable but provisions must be made for it, all the same. The fact that maintenance funding requirement has some correlation with the initial construction costs of the roads involved or so, evaluation of their current worth should make budgeting less complicated. For an investment of the magnitude earmarked for road maintenance, it is essential that a high powered maintenance organisation be set up to maintain these roads to high standard it if the huge investment is not to be wasted.The existing procedure whereby State Ministry of Works carry our maintenance of federal trunk roads on behalf of the Federal Government on an agency basis has been found to be un-satisfactory. Also the reliance on contractors to maintain Federal roads has not been too successful. The proposed maintenance organisation will be sufficiently equipped to optimally strike a balance between labour based and machine assisted techniques, including application of quality control to all aspects of material and work, and provision of modern logistic back up services in the field of supply and cost accounting and the traditional intensive machine techniques.

Thus, an improved strategy involving the activities of monitoring/data collection and research need to be developed. Similarly, other aspects of maintenance functions such as routine and periodic maintenance need to be institutionalised.

And institutionalised road maintenance to required level, executing agencies need to be considerably strengthened and funding provided. It would be un-realistic to expect that direct subventions from governments would be sufficient. Rather as suggested by one observer on National Council of Works meeting in Yola 1995 that it would be necessary to do the following:

- Identifying other sources of funding and develop methodologies for tapping such funds
- Design an institutional framework for effectively managing the funds so generated so ensure objective. attainment.

In other to an orderly growth and meet national needs, efforts should be geared toward mobilising more funds. Theoretically, the following are additional sources of funding for highway development and maintenance.

i. Direct road user taxes, e.g. fuel tax, tolls, parking fees etc.
ii. Vehicle licensing fees
iii. Import duties on items relevant to road transport
iv. Property tax on developed land parcels adjacent to roadways.

Hence, given the restively advantageous position of road mode in relation should be to generate at the minimum, sufficient funds for the maintenance and management of the road system. Some of the listed sources are already being

tapped but the proceeds directly go to general government coffers. Reference was also made earlier to the Federal Government policy measures intended to improve road safety and protect investments on roads and bridges. These measures should include the enactment of uniform traffic regulations and their enforcement through the provision of effective patrol on the roads. The more widespread use of vehicle weighing stations, establishment of more traffic courts and more vehicle inspection stations, and the institution of standard specifications for locally build vehicles bodies. In addition, mobile break-down unit should be established to patrol the main express-ways which will also have proper lay-byes for the comfort of motorist.

Furthermore, the various Ministries of Works should, in consultation with appropriate agencies, initiate actions to ensure:

a. On the job training by private firms for Nigerian professionals in the construction industry.
b. The establishment of training institutions for middle and lower manpower for the construction industry; and
c. Intensification of public education on road safety including establishment of driving schools with qualified staff.
d. Also, all roads are to be constructed to a design speed of 100km per hour. The features of which are right way width measuring 91metres; a 7.3 metre wide pavement; 2.75

metres wide shoulders on either side (giving a carriage way width of 12.8metres); 144.8 metres stopping sight distance; about 640 metres passing sight distance; 304.8 metres minimum horizontal curve radius; and 5% maximum gradient.

e. And all bridges should now be built to at least two lane standard with two pedestrian lanes giving an overall width of 10.35 metres. Bridges across the major rives - Niger and Benue should as a matter of priority, be built to at least for lanes standard.

Hence, in order to plan and execute a viable road project and maintains it to its original design condition, there is the need to take into consideration all or most of the issues given above. This is bound to reduce the increasing alarming rate of road deterioration in the state in particular and Nigeria in general.

6.3 SUMMARY OF NEEDS AT THE LOCAL LEVEL

In Borno/Yobe States, just as many other states in the Federation, road maintenance operations are carried out on the basis of political objectives and almost purely on arbitrary basis. This only go to compound the situation because the maintenance funds are not been used efficiently apart from being inadequate.

The studied states have also lately intensified their efforts toward road developments, in appreciation the role it

plays in the socio-economic development of the area. However, there is still the need to provide sufficient funds to carry out all the maintenance works required within any period. This requirement, itself, should be rationally evaluated from extensive field data. Objectives decisions which maintenance activities can be deferred so as to be at least damaging in the long term need not be taken. In this process, the effects of variable such as soils topography and climate will also be taken into consideration.

It would, however, be necessary to produce a network inventory to provide the basis for the inspections, to develop optimum intervention levels, to train an equip staff to carry our the inspections and to introduce a system for recording and analysing the data collection.

Borno and Yobe States, in particular, being relatively political enclaves within an under-developed country; and being an agricultural region, it is apparently clear that the state need to execute state road projects to link all the Local Government with most of its major rural areas that has market, so as to be able to transport their agricultural product to the nearest market before they can parish or be wasted. The federal Government and International Agencies should render all necessary financial and technical assistance for the Infrastructural development of the state. The State Ministry of Works and Housing need to train and re-train its technical staff; buy enough plant and equipment and deal

seriously with contractors that have " wrong attitudes as regards to handling of roads projects. However, the present existing roads should be adequately be maintained and be kept to original condition.

It is known that construction of roads in Borno State is very expensive because of lack of good materials. It is therefore, proposed that the construction of farm to market roads be approached in stages. Local Government needs to be more involved through training of their local technical staff for undertaking construction of culverts, bridges, etc. and ancillary works needed to attend to their farm-to-market roads with a view to making them accessible all the year round.

There are few road projects which are considered extremely urgent for development of the State, but they fall under the jurisdiction of the Federal Government. They are:

i. Nguru - machina road - 48km

ii. Kauwa - Arege-Mallam Fatori - 92km

iii. Beneisheik - Damboa - Askira Uba - 186km

iv. Bama - Gulani Kalo Kauwa - 137km

Most of these roads have already been investigated and their designs have been completed. It is envisaged that all of the above projects would be taken for consideration by the Federal Government during the next plan development period, and thereby allow the States and Local Governments to concentrate on other equally important road projects which are vital for opening the region's hinterland.

CHAPTER SEVEN

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 GENERAL OBSERVATIONS

In terms of resource allocation, it has been found that the study area from its inception as separate political unit in 1970, spent for the sum of N18.53million Naira between (1970-75) and between (1975-80) it embarked N49.40milliom Naira, then between (1980-85_) it budgeted the sum of N173.71million and finally between (1985-90) it proposed to spend only N34.56million Naira which was a drastic reduction from previous plans, targeted expenditure, even though it represents about 186.5% of what it started with in (1970-75).

The highest resource allocation was between (1980-85) which represents about 936.90% of what it started with from (1970-75). The period also had the highest number of road projects, numbering about 27, to be constructed. In terms of resource allocation, one finds that it has peaked in (1980-85) and began to decline from there. Unfortunately, the road network is not yet adequate, as the road densities for Yobe and Borno States are 0.942km/km^2 and 0.034km/km^2 respectively which when compared with the national averages of 0.181km/km^2; can be said to be quite low. In this instance, road densities in states like Lagos and Akwa-Ibom where about 1.590km/km^2 and 1.139km/km^2; respectively are recorded make, the inadequacies of the study area glaring. Of course, these figures have to be related to population density and geographical extent of

each state. It is also significant that the State Governments of the study area proposed to construct a total of 923km of roads between (1975-80); 1,173.2km between (1980-85). Thereafter, it declined to about 581km of road between (1985-90) and finally it declined further to 429km in between (1990-93).

This trend in total length of road earmarked for construction also tends to have reached its peak in (1980-85) with about 127m percent that of what it started in (1990-93). This factor is due to the reduced resource availability to government and increasing construction cost per kilometre of road length.

The above situation puts the study area in a sort of dilemma as emphasis has now shifted towards maintenance and rehabilitation instead of construction of new roads, but it is not yet adequately alright in terms of road network. There are still some roads projects in the study area that were started but not yet completed. Also, are other Local Government Areas that are not even connected with good roads. Thus, in other to achieve good system of road there is the need to make strategic development proposals, not just for government to make proposal that it will construct so many kilometre of roads without considering the priority first and the resource allocation available. There is the need to study the situation and carefully determine where and which priority is needed, not for political reasons, to embark on projects which are not

of priority to the road network requirement.

For example, in the study area the construction of Ngamdu-Damboa-Gwazo road which is yet to be completed is only good for subsistence farming in that it passes through rich agricultural land of Borno and Yobe States but little development if any had occurred along it since inception. Another road is the Tikau - Jajere road, which, if not for political considerations, should have passed through more highly subsistence farming areas from Potiskum - Danchuwa - Kolore - Jajere which link various villages and hence encourage development of this area. However, since [Smith, 1976], argued that "the division of labour is limited by the extent of the market" people have stressed that improved transport extends the market, which increased the division of labour (specialisation) and which raises productivity of the area as well as State.

Also, as the rapid deterioration of our road system is aggravated by un-usually large percentage of heavy vehicles, as well as vehicles exceeding design axle loads including the effects of Public Computer Services and School Buses and the concentration of Urban Traffic on few of the main arteries poorly served by feeder. These problems require planning, regulation, enforcement, and investments, in rolling stocks besides the identified maintenance issues for them. At the urban level, carefully planned and efficient road network is required. In this regard, it is commendable that Yobe State

Government had planned to convert way standard. This is because of the existing immature radial road patterns that pass through traffic in to a few central intersections and are characterised by inefficient traffic distribution system.

Considering the present low general level of purchasing power, public mobility will depend upon the development of efficient metropolitan bus services, which will need to be heavily subsidised for the movement of people in the State Capitals, and other large urban centres.

Given the above review, it is now necessary for investment in road infrastructure to evolve from comprehensive transportation plans at the urban and regional levels both properly integrated. The implementation of such plans would require continuous monitoring with a view to incorporating needed changes in the physical and socio-economic environment takes over.

7.2 SUMMARY OF FINDINGS

The review undertaken in this work has brought focus to the inadequacies of past efforts in road developments in the study area. Money expected to carry out the plan are very often not obtainable of which many project were carried over sometime abandoned. Wide gaps have been noted between plan proposals and actual projects execution. Actual project costs have far exceeded projected costs largely on account of the long time lag between project conceptualisation and project

execution.

In spite of substantial investments in road development, the study area still lags behind other regions in Nigeria in terms of road density. The densities in the study area are 0.039km/km^2 and 0.042km/km^2 for Yobe and Borno States respectively, while the national average is 0.181km/km^2, unfortunately, the reduced resources available for development make it impracticable to recommend massive of road development. However, it has been found that judicious mixture of investments in maintenance and new roads guided by comprehensive transportation plans would uplift the study area to desired levels.

Among the reasons found to have contributed to non-implementation of planning proposals are political instability wherein rulership have alternated between civilians and military as well as the frequent creation of states. The undue prominence given to political considerations in resolving a largely economic issue of road development has also not helped matters.

7.3 RECOMMENDATIONS

Government are unwilling or unable to have appropriations for highway expenses on the associated accelerated prices index and are faced with a widening gap between their highway revenue needs and their sources of such revenue. In connection with above, the following principles are to be adopted as our

highway finance measure suggested by [Marshall,1961].

That as a sound highway finance measure, a state should assess its highway needs clearly by funding plan based on up to date information and technically accurate evaluation needs. This is because capital programme for road construction, including rehabilitation of existing roads to accommodate growth in vehicle fleet and reduce travel time, is the most expensive element of social development programmes. It, therefore, calls for a sound decision base for our engineering need analysis that can identify current and future deficiencies and accurately estimates the cost of eliminating them. Responsible officials would then prepare and evaluate a state wide road development plan that is based on road works and land development within the plan proposals. And also, there is need to consider the following:

a. That the state engineering needs should be assessed using accepted engineering design and performance. Standards to each highway class, also including access road way and bridges and adequate cost scheme so as not bias the analysis. Existing characteristics and performances should form the basis for the identification of deficiencies and generation of improvement options and, improvement costs and priorities would then provide the basis for setting of the road development programme. The assessment should include Local Government earth roads, and township roads. Except that the scopes of work would

differ, projects involving new constructions should be assess along with those involving maintenance or rehabilitation.

b. The planning process should be broadened and made comprehensive in scope and should involve the public in defining needs, funding levels and taxes because virtually all citizens use roads and are affected by their condition as well as level of use. Thus, everybody affected one way or another can help in defining highway needs, identify necessary actions programme, and provide support for them. Conversely, the chances for positive action and public support are remote when the public is not involved. State and Local Governments road network users group like the various Road Transport Association will like to be able to supply useful information and view points because they represent a wide range of people, including interest groups directly affected by highway condition and services such as Road Safety. Similarly, the regulatory agencies like Vehicle Inspections Units can be of good use in contribute meaningfully.

c. There is a strong need to isolate the processes of plan formulation and implementation from policies as these factors have done considerable harm in the past. It is hoped that the country matures political and institutions are strengthened by having highly qualified and

experienced staff to man sensitive positions, the influence of politics on planning issues will be minimised.

d. It is hope also, that the setting up of a National Highway Authority, as had been advocated for more then a decade will bring improvements. For one, coordination or transport matters, including policies and development, will become easier. All modes, will by then, be under government bodies and be freer to execute programmes and initiate policies. Hopefully too, broader revenue base will become available to the Highway Authority.

e. A sound highway plan for the state should provide for legislative reviews on the conditions of contract, and reviewing of programme with a view that when conditions alters the amount of highway fund available or the purchasing power of the highway funds, the government must re-examine its funding objectives. This is necessary particularly in this period of rapid changes, flexibility will be built into programme to facilitate the periodic government review necessary.

f. The situation of road development in the study are is far from being satisfactorily. The area is far behind the National Average, in terms of road density and, therefore, is deserving of special efforts by all tiers of government to accelerate the pace of development. In doing this, the need for effective maintenance cannot be

overlooked. The rapid development of new roads in the late seventies and early eighties has now brought about the need for massive maintenance to projects investment.

7.4 CONCLUSION

Approximately three decades after the First Development Plan was launched (1955-61) with the traditional fanfare, the story of Nigeria Rural Sector remained a pathetic one. It is a story of neglect, economic stagnation, hunger, depreciation and poverty that still characterise the rural dwellers. Nigeria, which was flourishing with agricultural products, is now reduced to importing massive food items on a large scale. This consequently leave the masses to suffer in the society.

Borno/Yobe States are not exception to these sufferings. To alleviate such sufferings, there is an urgent need for the government to develop the rural area through the provision of rural infrastructures, like roads. Road development has contributed tremendously to socio-economic development of the country especially since the Second Half of the 1970's till date. Road construction increased from 57,925km in 1957 to 72,796.80km in 1962 to 116.421.08km in 1980. The bituminous surfaced roads increased from 11.053km in 1961 to 30,285km in 1980, while the Earth/gravel roads also increased from 60,818km to 86,136km during the period.

In the first, second, third and fourth development plans investment in the transport sector represented 21.28%, 23.01%,

22.34% and 15.19% respectively of the total planned public investment or an average of about 20 percent. During the 3years National Rolling Plan period, (1990-92), the allocation to the sector has been reduced in the light of much reduced resources which informs the emphasis on rehabilitation and maintenance of existing infrastructure as against significantly embarking upon new ones. The commercialisation of certain infrastructural such as Railways, Ports and Central Water Transportation also explains the much reduced allocation to the sector since the adoption of the Structural Adjustment Programme.

The problems of the sector remain as largely as stated in (1990-92) plan development. These include inefficient management of transport enterprises resulting in poor operational performance. Lack of effective rehabilitation and maintenance programme and shortage of indigenous executing capacity for construction and maintenance. Another problem is lack of co-ordination among and within the various transport modes which had led to imbalance in the overall development of this sector.

There is also the problem of inflexible pricing policy which has to be reviewed in line with existing market realities.

One major objectives of government policy will therefore be to co-ordinate the planning of all transport development and the administrative regulation of their operation, to regulate the maximum axle-loads permissible on the highways

and ensure that road users pay more equitable share of the cost of providing road facilities. This emphasis on co-ordinated development in the transportation sector which call for a re-organisation and strengthening of the Federal Ministry of Transport in order to prepare it adequately for the new active role in policy formulation and programme planning. To this end,a new and effective transport planning unit would need to be established in the Federal Ministry of Transport, initial under a Technical Assistance arrangement.

A major objectives of a National road development programme would also be the creation of National Highway Authority that would not be burdened unduly by government bureaucracy and interference. This would facilitate the coordination of development in all modes of transport, as all modes would then be under government indirect control. It would also facilitate the lessening of undue politisation of investment decisions in the mode.

The review undertaken in this work has shown that in the transportation sector, there are two general policy issues confronting the government. The first has to do with the need for greater coordination among various transport modes. The other is concerned with the urgent needs for the infusion of better management and technical expertise into the various transport organisation, which are mainly Public Co-operation. There is however, now, much greater need for coordinaton and rationalisation in making investment decision in the transport

sector. Pressures from external lending agencies have pushed governments to allow mainly market forces to determine investment and operational activities in the transport sector. Political pressures at home have similarly, imposed some purely politically motivated decisions on government as established in this work. The current situation going in the nation is faced with a near collapse of the transportation system and where scarce funds might be invested without proper consideration for the inter-dependance of the whole sector demands that wiser decision informed by practical realities be made.

The recommendations include widening the scope for planning and programme execution with flexibility and continuous monitoring of the socio-economic environment as well as the setting up of a National Highway Authority. Incorporation of public participation into the planning process has also been proposed. it has also been recommended that, because the studied area has road densities much below the National Average, it requires special consideration and assistance to accelerated development must strike a careful balance between maintaining existing roads and embarking on new construction. The reduced resources available to governments and the rapidly rising costs make this absolutely necessary. The given accident tables and chart, shows apparently that something needs to be done to maintain our highways and some major roads so as to reduce accident rate to its nearest minimum.

BIBLIOGRAPHY

Adebisi. O. (1992): "Allocation of resources and Road Maintenance". Being a Seminar paper prepared at the Road Maintenance Policy for Nigeria. NITT-Zaria.

Borno State Government. (1990) "Borno State First Rolling Plan (1990-93)". Printed by the Government Press, Maiduguri, Borno State.

Federal Government of Nigeria.(1962). "First National Development Plan 1962-68". Federal Ministry of National planning. Printed by the Federal Government Printer, Lagos.

Federal Government of Nigeria.(1970). "Second National Development Plan 1970-74". Federal ministry of National Planning, (1970). Printed by the Federal Government Printer, Lagos.

Federal Government of Nigeria.(1975). "Third National Development Plan 1975-80". Federal Minstry of National Planning, 1975. Printed by the Federal Government Printer, Lagos.

Federal Government of Nigeria.(1981). Fourth National Development Plan 1981-85". Federal Ministry of National Planning, 1981. Printed by the Federal Government Printer, Lagos

Federal Ministry of Information.(1992). "Transport Situation",The Nigeria trade Journal. Federal Ministry of Information, Vol. 36, No. 2, October-December, 1992.

Federal Ministry of Transport. (1991). "Digest of Transport Statistics", 3rd Edition 1991. Published by the department of Planning, research and Statistics, Federal Ministry of Transport, Lagos.

Ginsburg, N. (1961):"Atlas of Economic Investment". University of Chicago Press

Hawkins, E.K. (1962) "Road and Road Transport in an Under-Developed Country". London Crucial Office.

Kampax Consultant, (1967): "High Survey In Nigeria", Obtained from the NationalRolling Plan (1993-95 VOLII).

Marshall, A. (1961): Principles of Economics". Ed. C.W. Guilleband Macmillan, London.

Nigerian Police Force.(1994). "On Accident rate in Former Borno State". Motor Traffic Division, Nigeria police Headquarters, Maiduguri, Borno State, 1994.

Nnama, S.K. (1989):"Mass Transit Programme In Nigeria: Appraisal of Implementation and the Role of Training", NITT-Zaria.

Roston, W.W. (1960) "Stages of Economic Growth" Cambridge University, England.

Sigh, G.C. (1983): "Highway Engineering" Standard Publishers 1705, B. Nai Sarok Delhi -6

Smith, A. (1976) "An Enquiry into the Nature and Causes of the Wealth of Nations". Published and edited by E. Cannanc and Mcthuem.

WORLD BANK Report (1987): "Road Deterioration Problems In Developing Countries"

Yobe State Government.(1993). "Yobe State Annual Progress Report". Published by the Ministry of Information, Damaturu, Yobe State.

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