THE IMPACT OF CHANGES IN MANAGEMENT ON THE DEVELOPMENT OF THE NIGERIAN RAILWAY CORPORATION

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THE IMPACT OF CHANGES IN MANAGEMENT ON THE DEVELOPMENT OF THE NIGERIAN RAILWAY CORPORATION (NRC)

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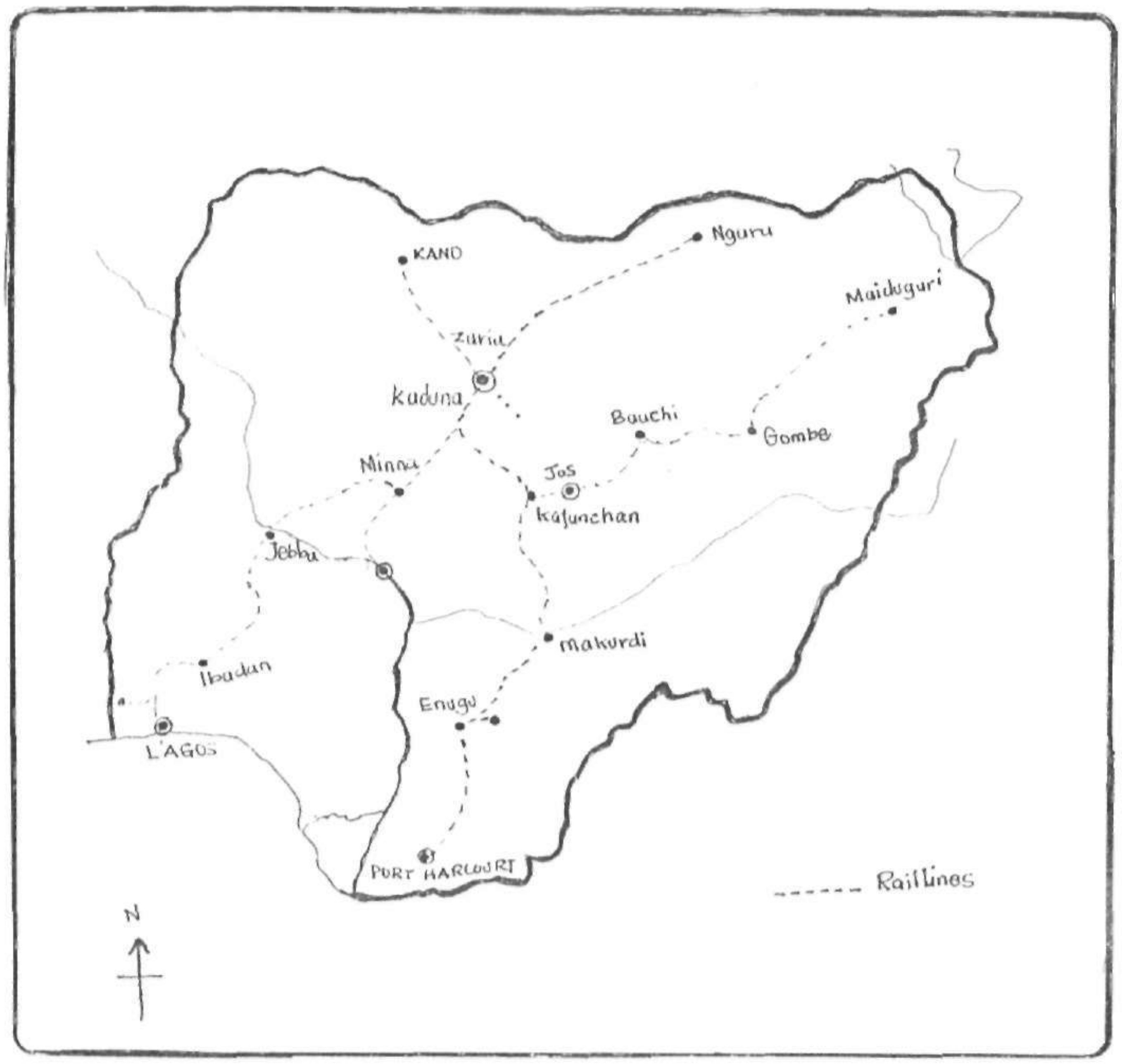
MAP OF NIGERIA SHOWING THE RAIL WAY LINES



DECLARATION

I hereby declare that this Research Project has been conducted solely by me under the guidance of Dr (Mrs) J. Nwasike of the Department of Business Administration, ABU Zaria. It is a record of my own research efforts.

It has not been previously presented in any application for a degree. Writers whose works have been referred to in the project have been duly acknowledged.

OMEDE VINCENT

NAME OF STUDENT

SIGNATURE

DATE 7-9-95

The above declaration is confirmed by

....

NAME OF SUPERVISOR

....

SIGNATURE

DATE ....

DEDICATION

This research project report is dedicated to my dear parent and my beloved wife and children.

ACKNOWLEDGMENT

I would like to express my profound gratitude to my project supervisor, Dr J Nwasike who had taken pains to read through my write up, corrected my mistakes, offered useful suggestions and guided me on how to go about the research.

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APPROVAL PAGE

This Research Project entitled The Impact of the Changes in Management on the Development of Nigeria Railway Corporation (NRC) by Omede Vincent meets the regulations governing the award of the Degree of Master's in Business Administration (MBA) of Ahmadu Bello University (ABU), Zaria and is approved for its contribution to knowledge and literary presentation.

8/9/99

Dr (Mrs) J. Nwasike (Supervisor) — Date

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9/9/99

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ABSTRACT

The research project found out the impact of the change in management on the development of the Nigerian Railway Corporation (NRC).

In view of the importance of railway transport system in the socio-economic development of a nation, the Federal Government, in recent times, put in reasonable resources to resolve the persisted problems militating against efficient operational performance of the NRC. Mismanagement was identified as one of the major problem and as a result, a change in management was made by inviting foreign experts on contracts This project was therefore mainly concerned with the impact of the change on NRC, development.

This issue was approached by undertaking the indept study of the rail system in Nigeria. The problems within the system were ascertained. The roles of the Nigerian management body before and after the change were determined and the results during the change in management were fished out

The study was limited to the management of the NRC. The data for the study was collected through NRC publications and document, Ministry of Transport and Aviation Information Handbook, Journals, Seminars and personal contacts with the management and technical staff of the NRC

The data were analysed by the use of figures. The results revealed that the change in management had a significant impact on the development of NRC.

With references to the findings recommendations were made to the Federal Government and NRC management body. Also, suggestions for further research were put forward.

CHAPTER ONE

1.1 GENERAL INTRODUCTION

Transport has been viewed as one of the key elements in the socio-economic development of any nation. Railway system plays a very significant roles among other models of transportation. In countries where effective and efficient rail transport services are provided, their contribution to the movement of freight and passengers as well as the promotion of commerce and development has always been very significant. In most developed and developing economies of the world railway is relied upon as the cheapest, safest and comfortable means of transportation. Though it is capital intensive but it is worth its investment in all its ramifications.

According to Elechi (1998), it was against this background that the British colonial government decided to embark on railway construction in Nigeria. With the benefit of hindsight, the Nigerian Railway has not only come a long way since 1898 when the first rail track was laid but it has contributed substantially to inter-regional and international trade and the movement of passengers. The contribution of the Nigerian Railway to the haulage of freight prior to the political Independence (1960) has been aptly documented in 1961. Report of the Standard Research Institute, where it was indicated that about one-third of the total freight tonnes/kilometres used to be handled by the Nigerian Railway Corporation (NRC), in addition to the handling of just about four percent of total commercial passenger traffic (Robinson et.al,1961: 67)

The Railway assisted the British colonial government a great deal to achieve their imperial economic interest. The system was mostly engaged in evacuation of Nigerian agricultural and mineral products from the hinterland to the Ports for onward exportation to Europe, especially Britain. It also guaranteed the inflow of manufactured goods from Britain to Nigeria. As a result, the rail-lines run North-South and from coast to hinterland with no effort made to develop a lateral railway and a multidimensional network of roads, railways and riverine transportation systems.

As observed earlier, the rail-lines pattern and its objectives were fashioned out by colonial government to serve their imperial interest; but the pertinent question now is, what steps has the successive management and regimes of the Nigerian Railway corporation (NRC) and the Nigerian governments respectively taken to correct the anormalies in the pattern, policy and objectives laid down by the colonial Administrators? For the successive management of NRC not to have taken positive steps to change rail-line pattern, set policies/objectives that are Nigerian oriented, and offer effective and efficient services as envisaged and implemented by the colonial government for the past thirty-eight years (since independence) indicates that NRC is besieged by myriad of problems.

The Nigerian Railway however continued to enjoy some reasonable degree of patronage in 1960s through to early 1970s. By the mid 1970s it has started becoming apparent that the NRC was heading towards to crises situation except its rapidly declining fortunes and performance were revamped. Among the major identified contributing factors of NRC problems are neglect and mismanagement over the years (Media Research Publication 1988).

In order to address the recurring problems that often bequeathed from one NRC management to another the federal government set up several commissions, Board of inquiries and Seminars to identify and analyse NRC problems, and offer possible solutions to them. In response to the findings, analysis and recommendation from the above, the federal government and NRC management have in recent years undertaken measures to rehabilitate the NRC and restore or improve on its deteriorating effective and efficient performance. It therefore resulted in the changes of management in NRC. In 1979 the Federal government invited the Rail India Technical and Economic services (RITES) on the three years contract to manage the services of NRC and provide Training for the Nigerian personnel. Also, in November, 1995, a sino-Nigerian bilateral pact was made in order to rehabilitate NRC. The contractual agreement, work about US&528,697,000, was entered into with China Civil Engineering and Construction Corporation (CCECC) and it was planned to cover a period of thirty six months (Adesanya, 1997, Elechi, 1988 and Ilukwe, 1998).

In the project therefore the impacts of these changes in management on the development of NRC is determined by examining in details the various inherent problems in management and technology environment that prevent the NRC to achieve its objectives. In addition, to ascertain the improvement made or other wise by the 'new' management teams (RITES/CCECC) and the consequent impacts on the corporation.

This will offer us the opportunity to know, appreciate and utilize the positive development in view of the railways' important roles in transportation system and the huge amount of investment in the two contracts on the corporation.

In this regards, reviews are made on the available literature on the entire transportation system and Railway Industry in particular in order to have a clear insight on the development of the railway system among the world's contemporary modes of transportation (Air, roads and water way) and determine its importance in socio-economic development of the Nations.

In reference to the Nigerian Railway system in particular, the researcher reviewed the historical background of the corporation in order to follow the trend of development as a focus for further investigation. The Corporations policies/objectives and their implementation over years were reviewed. This is to determine the extent at which these objectives have been achieved. Also, the management performance of the subsequent management teams is equally reviewed to fish out factors responsible for the successful management or otherwise with the aim to recommend any corrective measures, if any, to enhance good management and effective/efficient performance.

It is hope that the research will determine the relevance of the changes in management in the Corporation in term of the extent at which the objectives of the corporation were achieved. Also, the finding will reveal the factors responsible for the success of RITES/CCECC as compared to the Nigerian management body. This will help both the Federal Government and the subsequent Nigerian management teams to take corrective measures for improved productivity.

1.2 THE BACKGROUND OF THE STUDY

In the various write up, seminars, commissions, Board of Inquiries and public opinion on the NRC, it is consistently pointed out that its operational performance has deteriorated to almost a halt. For example, in his opening address to the seminar on Rail Transportation in Nigeria held at the Nigerian Institute of International Affairs, Victoria Island Lagos on Tuesday October, 27 1987, Major General Muhammed Shuwa (Rtd) OFR, the then chairman of the NRC had this to say;

> " It is pertinent to point out that the inability of the NRC to meet the legitimate expectations of the general public in terms of providing efficient rail transport system is traceable to years of neglect of the Railway system by past governments."

As rightly observed above, neglect and mismanagement over the years had been responsible for the inability of the corporation to meet its set objectives. From this experience, therefore, the researcher has decided to undertake an indepth study of the problems, efforts made by the federal government and subsequent Nigerian management teams to revitalise NRC and their constraints. Also, the effects of the changes in management on the operational performance of the NRC in respect to the contractual agreement between the Federal government and the Rail India

Technical and Economic Services (RITES), and China Civil Engineering and Construction Corporation (CCECC) will adequately be examined.

The findings, their cross examination and results are expected to contribute to the appropriate measures in improving the general operational performance of the NRC.

1.3 THE RESEARCH PROBLEM

This research is intended to find out the effects of the changes in Management on the development of the Nigerian Railway Corporation. The research therefore seeks to find answers to the following questions:

a. What are the factors militating against the effective and efficient management of the Nigerian Railway Corporation (NRC)?

b. How do the changes in management affect the operational performance of the NRC?

c. What are the future prospects of the Corporation?

1.4 THE PURPOSE OF THE STUDY

a. To determine management performance of the NRC from 1960 to date.

b. To evaluate the existing management policy of the NRC with the view to recommend changes in them when and where necessary in order to tackle the problems of the Corporation.

c. To examine the impact of the changes in management on the development of the NRC.

d. To ascertain further areas of research for the development of NRC.

1.5 SIGNIFICANCE OF STUDY

a. To further determine the relevance of the NRC management team in the development and efficient performance of the Corporation.

b. To find other possible means of solving existing problems facing the Corporation.

c. To determine means of improving the management performance of the NRC.

1.6 SCOPE AND LIMITATION OF THE STUDY

The scope of the research is to ascertain and analyse the management problems of the NRC with the view to finding solution to them. The Study will examine factors responsible for its in efficient performance. Also, the impact of the federal government and NRC management efforts in their attempt to revitalize the corporation.

The study is limited to Nigerian Railway Corporation (NRC).

1.7 RESEARCH METHODOLOGY

The methodology employed in this study did not entail the use of questionnaire. Most of the information and statistics required in the study were obtained from the NRC publications and documents; and the rest of them were from other publications like ministry of Transport and Aviation Information Hand books, Board of inquiries, seminars and workshops on NRC.

However, any information that needed to be explicitly explained and verified was duly referred to NRC officials who did the verification. As a result of the nature of study, a lot of personal contacts were made and sometimes face-to-face interviews were conducted.

The bulk of the data used will therefore be inform of books, pamphlets and published statistics.

1.8 DEFINITION OF OPERATIONAL TERMS

LOCOMOTIVE

A railway engine

ROLLING STOCK

Everything on wheels that belong to a railway, such as engines and carriages

TERMINAL

A place or set of buildings for the use of passengers joining or leaving a train.

FREIGHT

Goods carried by train

COACHES

Railway passenger carriages

TRACKS

A railway line

GAUGE

The distance between the rails of a railway or between the wheels of a train

RAILS

The pair of metal bars fixed to the ground, along which a train runs.

CHAPTER TWO

2.0 THE LITERATURE REVIEW

2.1 TRANSPORTATION

Transportation is the conveyance of person or properties from one place to another. It has always been an important activity of man, from the most primitive to advanced state of his development. The need for the conveyance of goods arises from the fact that they are often produced in one place and desired in another. The transportation of persons arises from the need of individual to go from one place to another to satisfy some needs weather connected with business or related to social, cultural and recreational interest.

The distance between the location of goods and where they are desired or between where an individual finds himself and where he wants to go may be looked upon as an obstacle in time and cost. Transportation improvement, therefore, is focused on the objective of overcoming the difficulties inherent in distance; although other aspects including safety, convenience and comfort may be important values in improved transportation services. Any transportation improvement reduced time, cost or both overcome the principal handicaps that distance represents. At least in terms of time, Moscow in just as near New York City today as Philadelphia was in the 1833.

Transportation routes tend to be directed straight lines between any two traffic centres, unless there are such obstacles as mountains or bodies of water or unless it seems worthwhile to deviate from the straight line to serve an intermediate trade centre. Ocean routes are deflected by land masses. Of all modes of transportation, the most modern air transportation is least affected by topography or other natural condition in following a straight line route.

A look at the history of transportation reveals that from prehistoric times man has exercised ingenuity in regards to transportation, to obtain his food and the material required for clothing, shelter, tools and weapons. In migrating from one area to another, population have restored to those routes where transportation conditions where favourable. Advanced civilizations require transportation not only for the necessities of life but also travels undertaken for entertainment or cultural purposes.

The most primitive type of transportation was human pack-a-back, using human beings as the means of conveyance. It is likely, therefore, that some of the first fruits of human ingenuity where devices that could be placed on the shoulders or heads to facilitate bearing things or carrying children from place to place. Among the American Indians the squaws used such devices to carry their papooses on their back. Also, were the Bassa Komo and Gwari of Nigeria. Primitive man in the course of time domesticated animals and trained them to carry burdens or pull crude vehicles; amongst those animals were horses, camels, donkeys, cattle and elephants. The only vehicle that prehistoric man developed for use with animals was a drag. Consisting of a forked-tree limb with strips of skins or sticks across the two prongs to which the burden was attached.

Pre-historic man invented the wheel, the basis of modern transportation but to what extent he used it is not certain. The axle which permits the rotation of the wheel on a cart or wagon was a development of early civilization. there is little doubt that primitive man found the waterways the best medium for conveyance and he therefore tended to live in the vicinity directed retreat to a less accessible location. Floating logs were found to be more buoyant if rolled out in the centre and this led to the dug out, a vehicle carved from a log. The raft also became an important vehicle for pre-historic man. Some primitive peoples, like the American Indians and the Eskimos developed very refined Canoes. The Indians made Eskimos stretched skin over a skillfully constructed frame work. The Canoe of the American was often a true work of art.

The primitive man learned early that by attaching skins to one or more poles fastened to his raft or boat he could use wind as a propellant. It is therefore known that at the down of civilization man had developed both the sail boat and a crude cart with an axle. The primitive man however did almost nothing to improve roads or waterways but confined himself to supplementing human power with animal power and developing primitive vehicle for conveyance on land or water. On Land man used the paths or trails of large animals for high ways.

Important contributions to transportation were made by the civilizations of the far East and Mediterranean which involved a long navigable waterways. The Sailboat was the first vehicle to receive significant improvement in ancient times. The sailing vessels of the Babylonians, Phoenicians, Egyptians and Chinese were great improvements over the crude craft of pre-historic man. During the Greek and Roman periods, the sailing vessel developed still further in efficiency and size; the larger Roman vessels which brought gains from the Nile valley in Egypt to Rome attained some 400 tons. The Roman also built canals at the mount of the Nile and installed a light house at Alexandria as an aid to navigation.

With respect to land transportation, the most important contribution of the Romans was the famous system of roads that they built, not only in Italy but elsewhere in western Europe, Asia-minor and North Africa. Also of importance was their invention of the Swiveling front axle for four-wheels vehicles with a cutout in the forward part of bed of the wagon for turning the front wheels. While there is little evidence that the Romans made general use of this principle in the development of wagon transportation, excavation at Pompeii revealed that the invention was made by them.

In general, ancient civilization depended on the Sailing vessels, the cart with wheels revolving on a fixed axle and cameral caravan for the conduct of commerce. Transportation of people was mainly on backs of animals. In the conduct of war chariots were widely used on land while galleys with rows of oarsmen were used on Naval combat in the Mediterranean area.

STEAMSHIP: The steam engine, invented by James Watt in 1765, was applied to both water and rail transportation early in the 19th Century ushering in the mechanical age in transportation. The Steam boat which represented the first practical application of the steam engine to transportation was invested independently by several Americans, among them John Fitch, James Rumsey, Oliver Vans, Robert Fulton and John Steven. Fulton's Clermont demonstrated on the Hudson river in 1807 a practical type of steamboat that could be used on tide water and inland water. Steamboats were introduced on Ohis and Mississippi rivers about 1811, although it was not until 1814 that a distinctive river type was developed that could satisfactorily move Cargo and people upstream. The stream boat was introduced on the Great Lakes in 1816 and was first applied to Ocean travel in 1819 when a sailing packet named the Savannah was equipped with an auxiliary steam engine and made across the Atlantic. The first steamship to cross the Atlantic entirely under steam was the Canadian Royal William in 1833. The ocean going steamship experienced a remarkable development during the 50 years following 1833. Hull construction changed from wood to iron and then to steel. In later years, also, the diesel engine was perfected.

RAILROAD: Steam railroad transport began in England and the limited states in 1825-1830. In the United States the first railroads were short and for the lack of capital were often only supplementary to water transportation; but by 1850 it became clear to Americans that railroad rather than canals and turn pikes offered the best access to the resources of the country and would best permit them to develop its vast rich area. The first connecting link between the two coasts was completed at promontory point, Utah in 1869. By 1890 the United States was ribbed with steel from East to West and from north to South.

The steam locomotive went through great technical development in power and efficiency until it was replaced by diesel power after world war II.

MOTOR VEHICLE: In 1887 the German engineer Gottlied Daimler first applied the gasoline engine to high way vehicle. The development of the automobile in the united states began about 1895. For years motor transportation in united states and other countries was handicapped by a lack of hard surfaced roads; for over half a century highway had been regulated as people relied largely on railroads for inter city transport. The convenience of the motor vehicle whether freight or passenger was so welcome to the public that the registration of private cars, buses and trucks accelerated rapidly after 1910. Today all the developed nations are provided with large systems of improved highways including many super highways; large quantities of freight are conveyed by truck and tractor trailer units, and millions of persons travel in buses and cars daily all over the world.

AIR TRANSPORTATION: The first air navigation took place on June 5, 1783 when a balloon filled with heated air was floated over Annonay, France by Joseph Michael Montgolfier and his brother, Jacques. The dirigible, a balloon with a rigid frame powered by a gas engine was developed in Germany during the last decade of the 19 century and was used intensively in world war I.

Air plane transportation began with the successful flight of the wright brothers at kitty Hawk, NC in 1903. the gas engine first used successfully by the Wright brothers was further adapted to Aircraft which, with technological advances in Aircraft design, the growth of navigation facilities and airports caused the industry to expand rapidly after world War I. In the 1950s the airlines began to abandon gas engines in favour of jets which offered new possibilities in speed and economy of maintenance and operation.

2.2 RAILWAY INDUSTRY

Railways are facilities for transportation by locomotives and other rolling stock over permanent routes consisting usually of parallel steel rails laid to a Uniform gauge and fixed to wooden ties. Besides the roads themselves and rolling stock, the term 'railway' include the land, building franchises and other assets connected with rail transportation.

Railway originated in the early 19 century through the experiments of various investors in England and United States; railway quickly prevailed over competing means of land transportation and revolutionised the economy of one country after the other. This was especially true in the United States; where railways Unified the nation and contributed greatly to the settlement and development of much of the country.

Railway stemmed from the early tramways that were used to convey coal, stone and other bulky and heavy commodities down from mines and quarries usually to tide water ports. These were typical examples on type side in England and at quincy, mass. such tramroads employed gravity and horse traction. Their short rails were flitted with flangs to guide the wheels; but with the coming of the steam locomotives, at the beginning of the 19 century, the flange was transferred from the rail to the wheel and the vehicle became suitable for movement only on railroads.

The Surney Iron Railway (1801) was the first to be sanctioned by the British parliament but it was not until the period from 1812 to 1817 that the steam locomotives came to be used for commercial railroad traction. At Leeds in 1812 the Middle ton collieries line used a rocked railway since it was feared that the light weight of the locomotives, limited by the light track would have inadequate adhesion and therefore slip. However, William Hadley proved at Wylam in 1813 the practicability of using smooth wheels on smooth tracks. The first public steam operated railway to be opened was the stockton and Darlington line in England. When it first began operations in 1825, its passenger, coaches were drawn by horses. Opened in 1830, George Stepherson's Liverpool and Manchester Railway, some 30 km long, was the first mainline railway anywhere and its success stimulated the construction of railways throughout the world. The famous locomotive Rocket was employed on this railway.

In United States (USA), the first steam locomotive was the stourbridge Lion. Imported from England by the Delaware and Hudson Canal and Railroad Company; it made its first run at Honesdale, Pa, August, 8, 1829 but it proved to be too heavy for the track. The south Carolina Railroad (generally known as the Charleston and Hamburg), the

Baltimore and Ohio can be regarded as the pioneer of the United States railroad system. The Camden and Amboy railroad in New Jersey occupies a honoured place since upon it originated the so called "T" or flat bottomed rail which has become the almost universal standard for railroad throughout the world.

The first major railway to reach London, England, was the London and Birmingham and was opened in 1838. Other Landmarks in railway history were: the completion of a through railroad from the Atlantic Sea board to the Great Lakes in 1851; the joining of the rails at promontory Utah in 1869. That marked the final link in the first transcontinental route in the United States. Also, the completion of the Canadian pacific route from Montreal to Vancouver, Bil, in 1885.

Railway development was much slower outside the United States and Britain and much was financed by the government. By the close of the 19 century the united States network consisted of nearly 190,000km (counting only the first track between any two places) or about one third of the world's kilometres. Other countries with large kilometres were Germany, Russia, France, India, the British Isles, Canada and Australia. In 1956 the worlds railway kilometres, irrespective of second or multiple tracks and sidings totaled more than 750,000 kilometres of which USA accounted for 220,000 and Canada 40,000.

The railway transportation attracted the attention of other countries of the world. In Latin American, for example, its railway were not constructed in a uniformed network like that of the United States (USA) because of the different pattern of original settlement. Small lines were built to connect a port with its hinterland or with nearby cities. Long range planning was rare and too little thought was given to the possibility of eventually forging these isolated tines into large national or international system. consequently, there developed a complicated mosaic of at least nine different gauges ranging from 1 feet 115/8 inches to 5 feet 6 inches.

The greatest period of rail expansion in Latin America occurred in the last quarter of the 19th century and the first years of the 20th century up to world War II. In 1890 Brazil had 5,952 Kilometres, Argentina, 5,858 and Mexico 5,901. In 1910 Brazil had 21,000 Kilometres, Argentina 14,000 and Mexico 12,112. The other countries followed approximately the same rate of growth in their railway systems.

In the mid 1950s Latin American railways including those of Brazil, Haiti and Jamaica totaled 87,000 Kilometres for the surface area of nearly 8 million square kilometres with a population of approximately 174 millions. The plan to construct transcontinental railway in Latin America were more successful than in United States and by 1957 there were seven railways which cross the continental Divide and connected ports on both East and West coasts.

In the continent of Africa, the total length of railways is approximately 46,000 kilometre (according to 1955 figured but with the inclusion of Island of Madagascar which has 530 kilometres of meter gauge lines, and the Sey Chelles, the figure will exceed slightly. In much of the Northen tier of Mediterranean countries there are no railways because this section is characterised by the great desert areas where there is little of a commercial or industrial nature. Libya for example, a country of just under 680,000 square miles posses only 222 kilometres of railway, consisting of two short stretches of 0.95 metre gauge line 3 ft 11/^{2} inches, 117 kilometres and 104 long in vicinity of Tripoli and Benghazi respectively West of Libya a line of 4ft 8 $^{1}/_{2}$ inches gauge rans from Marrakech in Morocco through Algeria connecting with main line of the Tunisian system. This main through line is connected with a number of feeder lines primarily used to carry miracles; but also serving the chief Moroccan and Algerian ports. It comprises a total of 5,152 kilometres of which 1264 kilometres constitute the Tunisian system. The main line of Egyptian system which closely parallel the course of the Nile is also of American and European standard gauge and has a total of length of 2900 kilometres.

In East Africa a connection is made between Egypt and the Sudan on the border. The main-line of the Sudan system (2030km long) continues to follow the Nile closely but branch lines to the East serves Kassala on the Eritrean border and port of sudan on the Red Sea.

South of Somaliand are the East African Railways composed of two lines. The first connects the Port of Mombase in Kenya with Lake Victoria and Uganda and further South of Tanzania system serves the port of Dares Salaam. it connects its out let to the Sea with the South shore of Lake Victoria and the Eastern shore of Lake Tanzania.

In west Africa, the Ghana ports of Tokoradi and Accra are connected by individual railway with Kumasi about 125 kilometres in the interior, thus forming a kind of triangle. Togo has its separate little meter gauge railway of 278 kilometres serving the port of Lome while that of Nigeria, which this research is concerned, boast of something more of a system. It has two main lines running inland from the ports of Lagos and Port-Harcourt with a junction at Kaduna.

Of all the countries of the world highlighted, the railway, transport systems have contributed immensely to the socio-economic development of the various nations.

2.3 THE MANAGEMENT POLICY OF NRC

At its inception, the railway was known as Nigerian government Railways and was run as a department of the Federal Government. However, in 1952 the government announced its intention to establish the Nigerian railways corporation (NRC) as an autonomous body to take over the duties and functions of the railway Department. This did not come true until in 1955 when Nigerian Railway Corporation Act was passed. The Act set up the NRC as a statutory Corporation entirely owned by the Federal Government. The Act assigned the following functions to NRC.

(1) To manage and operate the Railway and provide reasonable facilities for the carriage of passengers and Goods.

(2) To control railway expenditure.

(3) To ensure that as far as it is practicable annual revenues are sufficient to meet all expenditures properly chargeable to revenue.

(4) To direct and control expansion and extension of the railway system.

The idea to establish the NRC was to free the Railway management from the rigidity and formality of government procedure and to establish the corporation as a public utility run on quasi-commercial lines and on a sound financial basis. The NRC Act advised that uneconomic services could only be undertaken at the expense of the government, should the later insist on such services. Again the government white paper on statutory corporations and state-owned companies 1978, emphasized that corporations were largely of commercial and industrial nature. However, from its inception, the NRC has served political cum socio-economic functions.

The NRC Act empowers the minister of transport and Aviation to give the corporation directives of a general character as to the discharge of its functions in relation to matter appearing to him (minister) to be of grave public importance. The minister may also establish the upper limits of rates and fares within which the NRC is free to fix its rate/fares as well as appoint an inspector of Railways. The NRC is required to furnish any information requested by the Minister relating to its operations, property and finances, including annual accounts and reports.

The strategic plan of the NRC is therefore directed to efficient maintenance of all fixed installations, locomotives, rolling stock, plants machinery and equipment. It is also aimed at the improvement of the human resources and technology, development of local manufacturing capacity and to encourage growth of supporting local industries. This is to ensure that the corporation will at all times sustain the achievements of its general objectives.

It is a common belief amongst policy analyst that for any policy to be effective and result, there is a need to anchor each goal to a particular mission. In the case of Nigerian Railway system it can not be detached from the national transport policy. The National Transport Policy document of 1988 which is yet to be made public and available for public consumption, identified the following desires or statement as its policy objectives. The transport policy aim at making the nation's transport sector to be:

(1) Efficient and fast

(2) Reliable

(3) Available

(4) Cheap and Affordable

(5) Safe and Accident free

(6) Environment friendly

(7) Competitive.

Since the National transport policy wants the nation's transport sector to be responsible, it is by implication that it is assumed that the Nigerian Railway system will follow suit. As a result, the Nigerian Railway system aim at making the mode to be available, cheap and affordable, safety, reliable, competitive and more importantly integrated. The extent at which the NRC has been able to live up to its policy objectives is discussed below.

2.4 THE POLICY IMPLEMENTATION AND ITS EFFECTS

The Nigerian Railway corporation from its inception tried and performed its general duties, hence the British colonial government who constructed it was able to achieve their socio- economic objectives. As observed earlier, the NRC enjoyed some reasonable degree of patronage in 1960s through to early 1970s. Within this period the NRC to some extent, attempted to live up to its policy objectives. It is however, unfortunate that the NRC general performance began to deteriorate to an alarming situation. Consequently, the achievement of its policy objectives became an illusion.

The current operation performance of the NRC cannot be described as fast and efficient; furthermore, it cannot be described as available and competitive. It is not environment friendly when compared with contemporary thinking in other parts of the world. Also, the system is unintegrated, uncoordinated and highly isolatory. As a result, the system has not exerted strong influence and competitive role in recent and modern Nigeria.

Many factors are responsible for the inability of the NRC to live up to expectation. Among them are:

(a) The NRC ACT 1955: The Nigerian Railway corporation Act of 1955 as amended, which established the corporation created some problems that have lingered for some of the difficulties by the corporation. As already reflected above, the NRC became a statutory corporation with an autonomy to determine wages and other conditions of services in October 1955. This status was reversed in 1969 when the NRC was put under the Ministry to transport. This status perhaps could be responsible for the stagnation that had confronted the NRC ever since. The former managing director (MD) of the Corporation Major General Paul Tarfa (Retired) and many others seem to agree with this fact and are of the opinion that so many interests dominate the overall interest of the NRC. The corporation lacks the autonomy to exist on its own, consequently it could neither take decision urgently nor implement already taken decisions faster and better.

The NRC Act seems not to have provided clear cut objective for the corporation. There is inherent contradiction in the Act that makes economic objectives conflict with socio-political aims of the corporation.

This is clearly evident in section 15 of the NRC Act of 1955 already sited, implies that the NRC will receive from government grants in respect of public service obligation rendered by the corporation. Conversely, section 41 (2) of the Act States as follows:

> "Nothing in this section shall require the corporation to make charges against revenue both for redemption of capital and for depreciation or renewal of capital assets which have been acquired directly or indirectly from funds derived from the issue of such capitals"

Section 41(2) of the Act implies that, it is the primary responsibility of the Federal Government to fund all capital projects. It would also make financial provisions for operating deficits incurred by the NRC through the operation of unremunerative services and maintenance of uneconomic routes. Despite the provisions of section 41(2) of the Act, capital funding for renewal of assets even though grossly inadequate has been treated as interest yielding loan to the NRC since 1959. Reimbursement costs incurred by the NRC in operating uneconomic routes and services under public service obligation account is not refunded in full. Consequently, the NRC is forced to borrow from commercial banks at high interest rates and maintains high supplies credit. These facilities are presently no longer available to the NRC due to the economic situation in the country and the non viability of the corporation.

There is also the excessive power conferred on the Minister of Transport to intervene in almost all aspects of decisions making process of the NRC. The minister therefore arbitrates in any matter appearing to him to be of grave public importance. This has influenced the corporation adversely since the word appearing creates room for subjectivity. The corporation that was created to be detached from all aspects of civil service apron has in its 43 years of existence been forced to stagnate under excessive bureaucracy. Presently, the corporation can neither fix its freight and passenger charges in line with economic trends nor purchase spares of any magnitude without attracting the attention of the Minister.

Unlike the other transport modes where basic infrastructure like roads, airports, seaports, pipe line and communication facilities are provided by separate independent organisations, the NRC is solely responsible for the following:

a. Construction and maintenance of network of rail track and supporting facilities.

b. Construction and maintenance of railway station building and infrastructures.

c. Construction and maintenance of railway communication and signaling equipment.

d. Procurement, running, maintenance and repairs of locomotives and rolling struck which consist of passenger coaches, wagons for goods, power cars brake Van et Cetera.

The other modes of transport have independent institutions performing similar function for their operations. This explains the involvement of heavy capital outlay and the large number of staff in the employment of the

NRC. All the functions already highlighted are performed by the NRC in addition to its primary function of operating passenger services. The huge size of capital investment required for the construction and maintenance of railway establishment explain government ownership funding and control of rail transport organisation all over the world. Since the railway is both capital and labour intensive industry, an independent body such as Nigerian Airport Authority (NAA) as there in the Aviation could be established for NRC. This establishment could own the tracks, bridges, stations and terminals, maintain them and collect rates from users. The NRC on the other hand would own and manage locomotives, wagons and van.

As it is rightly expressed above the provisions of the NRC Act of 1955 on carriage of passengers and goods in a manner that will offer full value of money, meet cost of operation, improve market share of operation and maximum efficiency, meet social responsibility in a manner that will meet the requirements of rail users, trade, commerce and industry, government and the general public, are too general to be commercially meaningful.

From the analysis and the implications of various sections of the NRC Act of 1955 a clear definition of the main policy of the corporation has not been specifically addressed. Consequently, the exact status of the Corporation continues to be matter of guess work of varying dimension. Transport policies are not static but should be dynamic in order to meet the goals and aspirations of national needs. For example in Britain a new transport Act was enacted in 1968. Basically this Act, as was reflected by

Button and Gilling water (1986), brought about major reorganisation of public transport management. It was clear that the main intention was to try to reserve the trend towards Commercial freedom and disintegration of public transport services. Similarly, in 1970, the United States Congress established the National Railway Passenger Corporation (Amtrac) to provide a minimum amount of basic intercity rail passenger service through contracts with railroads. Other wise, according to Sampson and Farris (1979), almost all passenger rail traffic have been taken over by automobiles, buses and airlines. The reason for this intervention was attributed to the unprofitable passenger traffic encountered by most railroads for several years.

The situation governing the implementation of the NRC corporation is completely different. The Adefarasin tribunal of enquiry that looked into the affairs of the corporation remarked as late as 1967 in section 11 (5) of the report that:

> "We agree with the need for the Government to redefine its attitude to the question. Our opinion is that the corporation should be run as a commercial undertaking. The legal framework to which it is tailored and the demands of the government are not suitable for the purpose of achieving economic success and the government must take steps to remove both legal and economic factors which lay a strong hold on the corporation"

A clear definition of the main policy of the corporation would therefore be required to be put in place. This would however entail the revision of the NRC Act of 1955 in order to vest the corporation with the proper powers to match the new status and genuine expectation of the government and people of Nigeria.

(b) TECHNOLOGY: Another most serious problems facing the NRC today are technology in nature and they are of varying dimensions. The technological problems include, existing rail track alignments, track structure, non-renewal of over-used rails, communication and signaling equipment and spare parts.

The existing railway line network was completed in 1964 and no new railway extensions have been constructed since then, neither has any serious efforts been made to modernise the existing track alignment. This under-investment in the railway has exposed it to unfair competitive standing with the over-pampared road transport. Besides the North-South orientation of the rail system has failed to take into focus the transport needs of a vast section of the country. Moreover, about 28 percent of the entire network consists of curves as sharp as 175 metre radius as against a desirable maximum curvature for high speed of 582 metre radius. This has been responsible for the very low speed of our trains. To achieve a speed of about 100km/h on exiting 1067mm gauge network would imply complete realignment of about 800 to 1000km of sharp curves and steep gradients.

The narrow 1067mm gauge of the network is another problem facing the NRC. The call has been for the adoption of the standard gauge which seems to be the trend all over the world. Much as snail speed of the Nigerian rail transport is not, strictly speaking, attributable to the gauge, the present state of the gauges disrepair is problematic. The fear being expressed is that since narrow gauge is gradually being phased out world-wide the NRC may be having problems securing these spares at economic rates in near future.

The track structure adopted by the NRC consists mainly of jointed rails of weight ranging between 30kg/m and 40kg/m and it is generally of steel sleepers, except on bridges and ballast cushion of up to 30 cm. It permits a maximum speed of 65km/h on the system. This has hampered speed and patronage for the railway system. A technologically superior track structure with heavier rail sections up to a maximum of 50-60km/h and continuous welded rails on concrete sleepers will need to be adopted if the expected future demand on rail transport is to be met.

In deed, other major technological problems of the NRC which equally militate against its effective and efficient performance include the non renewal of over-used rails which has led to a spate of rail failures and fractures, poor signalling and communication based on the mechanical lower quadrant semaphore signals and single-wire mechanically operated system which poses problems due to the expansion and contraction tendencies of the steel wires. Although the single wire has been replaced by the double wire, NRC is yet to fully execute the gradual replacement of the mechanical semaphore signaling.

All these major problems highlighted above have adversely affected the NRC and thus prevented the corporation from realising its policy objectives. The contributions of management as a very important organ of the corporation is discussed below.

2.5 THE MANAGEMENT OF NRC

(a) **ORGANISATION STRUCTURE:** Prior to 1955 the railway was organised as a department of the Federal Government and tied to the civil service apron but with the creation of the NRC Act in 1955 came a different organizational structure. Under the NRC Act the Corporation became an autonomous body (a statutory corporation) and took over the duties and functions of the department. As stated earlier, this status was reversed in 1969 when the NRC was put under the Ministry of Transport. This change, as it can be seen later, has adverse effects on the management of the corporation.

In the organisation structure the control of the Corporation rests with the Board of Directors consisting of a Chairman and 12 members appointed by the Minister of Transport and Aviation, after clearance from the Federal Executive Council, which ensures that regional and political interests are protected.

The General Manager (recently changed to managing director) is appointed by the Board of Directors and is the chief executive of the organisation. The amendment to the railway corporation Act of 1955 now provides for an 8 member Board of Directors. It vests the power to appoint the Managing Director (MD) in the Minister of transport.

The Corporation has its headquarters in Lagos. It has six divisions and each is headed by a Railway Divisional Manager (RDM). The Divisions are:

Divisions	Headquarters
Lagos	Ebute-Metta junction
West	Ibadan
North	Zaria
North - Eastern	Bauchi
North- Central	Kafanchan
East	Enugu

The NRC is divided into seven major department and each is headed by Executive Director. These are:

1. Director of Administration

2. Director of Operation

3. Director of Medical

4. Director (New line)

5. Director of Finance

6. Director (Civic)

7. Director (Mech/Elec)

A department for internal audit has been carved out of the finance department. At the divisional level, there are functional heads and they are responsible to the Divisional Managers.

(b) MANAGEMENT: The management of the NRC has passed through various hands since its inception. Before the Nigerian Independence; 1960, the NRC was managed by its founder the British Colonial Administrators. The Nigerian took over the management thereafter and they run the corporation until the Federal government invited the Rail India Technical and Economic Service (RITES) in 1979 and China Civil Engineering and Construction Corporation (CCECC) in 1995.

The management of NRC by the British Administrators and later by the Nigerian team uptil late 1960s could be considered to be better to a reasonable extent. The success in the general performance of the management within the period were as a result of the following factors:

a. Prior to political Independence, the British management team put in all the necessary means and efforts in order to achieve their target objectives.

b. Most of the Locomotives, Coaches and wagons were relatively new and more in numbers. For example, in 1955-1963 the Corporation had 307 Locomotion, 567 coaches and 5,825 wagons. Also, other current problems associated with existing rail track alignments, track structure, over used rails, Communication and signaling equipment had not significantly surfaced.

c. The railway enjoyed a near monopoly in passenger traffic and freight as there were few road net work in the country within the period under discussion.

d. Absence of rigid bureaucratic interferance of the Ministry of transport.

e. Absence of total neglect by the government. It was a deliberate government policy to move civil servants, government goods such as imports and exports mandatorily by rail.

The financial performance (Revenue) of the NRC was very buoyant between 1955 and 1963 because of the above numerated factors. Consequently, the NRC was able to meet the demands of its Large staff strength (29,579) in term of salaries, allowances and other welfare services; and carried out some maintenance of its equipment.

Unfortunately, the general performance of the Corporation later began to decline rapidly, especially in the areas of freight and passenger patronage. Apart from the problems associated with the NRC Act of 1955 as amended and that of technology as highlighted earlier, poor management also constituted another major militating factor against the effective/efficient performance of the NRC. The poor management of the Corporation is epitomised by the inability of the management to maintain discipline and productivity. The Management also failed to efficiently utilize the limited available funds, check fraud and identify commercial priorities.

In addition, inadequate funding of the Corporation Compounded the Management problems of the NRC. The management was often faced with serious financial problems because of under investment by its sole financier, the Federal Government. The fund allocation to the Corporation in the various development plans of the government since 1962 had been inadequate. For example in the 1962-68 development plan only N43.3 million was allocated to the development of the railway in the country as against N165.7 million to the road sector. Similarly in the 1970-1974 plan period, it was N360 million for road development and only N81 million to the railway development. Thus, the road transport capital investment according to World Bank (1983) in the first four national development plan gulped a huge percentage of 58%, 67% 70.6% and 60% as against 10%, 23%, 15% and 25% for railways out of the total allocations to the transport sector. It is therefore not surprising that the rail network has not witnessed any significant expansion since the Borno extension of 1964. The road network on the other hand expanded from 44,41 kilometres to 114,768 kilometres (158.4% expansion) within the same period and most of the roads run parallel to the railway lines hence the very poor freight and passengers patronage of the Corporation.

CHANGES IN MANAGEMENT

The NRC has so far witnessed over 14 committees, commissioners, tribunals or studies set up to investigate one aspect or the other of its management. None of the reports could solve the problems of the NRC, not because the problems were not defined and appropriate solutions not recommended but rather because the political will to take decisive action by the government was either lacking or ignored.

When the Federal government later acted to save the Nigerian Railway from total collapse it handed over the management of the corporation to Rail India technical and Economic services (RITES) in 1979 on a three year contract. the RITES management Team was assigned to modernise, rehabilitate or refurbish as the case may be, the existing rail track alignment, track structure, renewal of the over used rail and communication and signaling Equipment. In addition to provide training for Nigerian personnel. (Adesoji,1998)

The RITES Team brought to Nigeria 36 top Managers and 390 Technical Staff. At the end of the contract in 1982 RITES management team made some significant impacts on the development of NRC in the following areas:

a. Maintenance target

b. Rolling stock availability

c. Freight and passenger traffic

d. Introduction of rail Mass transit in late 1980s in Ibadan, Lagos, Enugu, Port-Harcourt and Kaduna.

There was also a significant improvement in operational efficiency within the period. As a result, there was a reasonable growth in the revenue earning of the Corporation. For example, the details of the revenue pattern within the period (1969-1989) shows more revenue was realised during the RITES management (see Table 2, Chap 4) There were however corresponding more expenditure and operating deficit because of the huge volume of revitalisation exercise that was undertaken by the RITES. For this reason, the Financial performance of the NRC did not improve but rather earning covered just half of the total working capital.

It has been observed that the success recorded by the RITES management team was not much as a result of the high calibre of the RITES management team but the co-operation which the then government gave to the consultants and the sufficient allocation of funds which no previous management or the succeeding ones ever had. For example, between 1979 and 1982, RITES got annual subvention of N64.5 million to bridge the operating deficit and another N64.5 million for capital expenditure. It is believed that if the succeeding Nigerian management team was equally given clear objectives, sufficient autonomy to effectively pursue the objectives; and adequate funds for maintenance, renewal and modernisation programmes it might possibly perform more efficiently than RITES team did.

Unfortunately, however, no sooner had the RITES left than the government either by omission or commission refused to extend such co-operation and funds to succeeding Nigerian management team. Consequently, the gain from RITES management were quickly lost and the poor performance continued. Some of the institutional weakness that still persist when they left in 1982 include:

(i) Guidelines in the form of detailed functional manuals for the managers and senior staff to provide consistency in decisions making and quality in the management process.

(ii) Corporate planning

(iii) Analysis of investment decisions

(iv) Manpower planning and staff development

(v) Poor remuneration policy and lack of incentives

(vi) Costing and tariff setting

(vii) Marketing techniques.

(viii) Equipment standardisation

(ix) System procurement procedures.

There was, again, a steady decline in the daily availability of locomotives and rolling stock; and the quantity and quality of NRC services for both passengers and freight dropped precipitously. Infact, by the early 1990s only an average of 350 coaches, 4,000 wagons and about 40 locomotives were in serviceable condition out of a stock of 674 coaches, 6,000 wagons and 189 locomotives. (CBN annual Report of 1992 : 103).

Another attempt was again made by the Federal Government to solve the persistent problems of the NRC. In November, 1995 a sino--Nigerian bilateral pact was made in order to turn round the fortunes of Nigerian Railways. this contractual Agreement worth about US $ 528,697,000 was entered into with the China Civil Engineering and Construction corporation (CCECC) and it was planned to cover a period of 36 months (Adesanya,1997, Elechi, 1998 and Ilukwe,1998) Among other things the CCECC is expected to engage in:

1. Track survey and design for rehabilitation of existing 4,288km Railway lines.

2. To eliminate sharp curves, ease steep track gradients and renew existing sleepers with additional ballast.

3. To rehabilitate and refurbish existing signalling and Telecommunication system.

The CCECC is currently undertaking the above mentioned revitalization of the NRC and an eye witness by the writer reveals that a reasonable progress has so far been made in these areas.

CHAPTER THREE

3.1 HISTORICAL BACKGROUND OF NRC

When the Trans-Atlantic -Trade became very lucrative as the agricultural products of the sub-Saharan region were in great demand in the European market, it was discovered by the colonial administration in Nigeria that the major transportation made to the hinterland, the inland water ways could no longer meet their needs. Moreover, the season ability of Navigation on the rivers and Greeks posed serious problems.

As a result, various applications for permission to construct railway in Nigeria were made to colonial office by private United Kingdom (UK) interest. In 1892, the then secretary of state for the colonies Lord Kuntsford directed that preliminary survey be conducted and a commission was set up for that purpose. This was to enable it establish an estimate of the cost implications of the railway construction in Nigeria. The survey conducted by Mr. William Shellford M.I.C.E revealed great potentials for trade; and in 1895 the secretary of state for the colonies sanctioned the construction of 32km, 1067mm gauge railway from Iddo, Lagos to Ota.

The existing railway system in Nigeria was built primarily to develop agriculture and mining for export and to facilitate Government Administration. During the construction of the railway the planners were faced with problems of the physical features of the country. The knowledge of its topography was lacking while funds to carryout the project was difficult to raise by the colonial Administration. For this reason, an economic construction strategy was adopted by the colonial regime. The construction avoided as much as possible deep cuttings, viaducts, high embarkments and long bridge span. The objective at that time was economy in the use of human and material resources. The economic construction strategy which was adopted during the development of the rail network gave rise to the inherent problems of the present rail track in Nigeria. These problems consist of sharp curves, steep gradients, single track and narrow gauge network train speeds and train loads restriction et cetera. These problems are not desirable in modern railway operation and they have affected the operations of the NRC adversely.

3.2 DEVELOPMENT OF RAILWAY LINES

The Railway system in Nigeria commenced in 1898 with an initial track line of 193 kilometres starting from Ebute-Metta on a narrow gauge single track with steel-wooden sleepers. Between 1901-1909 the line was extended from Ibadan to Jebba, a distance of 295km. The Kano Baro line stretching over a distance of 562km was constructed between 1907 - 1911 while the line was further extended from Jebba to Minna between 1909 - 1915, a distance of 255km. The period of 1914 - 1916 witnessed the construction of the line from Port Harcourt to Enugu a distance of 243km while for the extension of the line from Enugu to Markudi a distance 220km was carried out between 1916 - 1924.

Kaduna to Kafanchan a distance of 179km was constructed between 1922-1927 while Kafanchan to Jos became operational in 1927. The last segment of the Railway development came underway after thirty one years in 1958 when the line was extended from Kuru to Bauchi in 1964, 238km and finally to Maiduguri also 1964 a distance of 302km. All these developments yielded a total trackage of 4,332km including loops, sidings and yard lines.

PROGRESS OF RAIL CONSTRUCTION IN NIGERIA

SECTION	YEAR	DISTANCE
Lagos-Ibadan	1898-1901	193km
Ibadan-Jebba	1901-1909	295km
Kano-Baro	1907-1911	562km
Jebba-Minna	1909-1915	255km
Port Harcourt- Enugu	1914-1916	243km
Enugu-Markudi	1916-1924	220km
Kaduna-Turu kion-kafachan	1922-1927	179km
Kafachan- Jos	1927	101km
Kafanchan-Bauchi	1958-1961	238km
Bauchi-Gombe	1961-1963	166km
Gombe-Maiduguri	1963-1964	302km

Source:FMTA, Lagos.

3.3 POST COLONIAL RAILWAY

Post colonial Nigerian Railway system has remained the same as no new rail lines are known to have been constructed since after Maiduguri extension in 1964. The situation today undoubtedly differs from that of colonial era. At that time, the vital importance of railway construction was quite obvious as it made the movement of people and goods possible on a greater scale than ever known before. It began without any competitive struggle with other modes of transportation; it proved its importance, knit the nation together, harnessed all agricultural and mineral producing regions of Nigeria for easy evacuation of their products and triggered much of the economic development of the Nigerian economy. Other twentieth-century modes of transportation with inherent advantages arose to share the glory of the railway as the underlying basis of the Nigerian Transport economy.

It remains to be seen today however, whether the Nigerian Railway Corporation has achieved the noble objectives for which it was established. As highlighted earlier in chapter two, the rail network in Nigeria today is faced with a lot of problems raising from management, technology, signaling and telecommunication system and operations services. The Federal Government has again in recent time, given a new lease of life to the railway system through the bilateral pact between Nigeria and China (as stated earlier) for the rehabilitation of the corporation.

CHAPTER FOUR

4.0 DATA ANALYSIS AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

The data collected for study were analysed and discussed by the use of the statistics of the NRC operational performance of the management bodies at various stages of their tenure in the office. The results of the following areas of operations were analysed and discussed, the volume of Freight and passenger traffic, the NRC revenue, the locomotive and rolling stock availability, Federal Government grant to NRC and other aspects of NRC that were equally considered relevant to this study. The results of the data in those areas elucidate the extent of success or failure, as the case may be, of the operation and the corresponding impacts on the development of the NRC.

4.2 DATA ANALYSIS

Table 1

FUNDS ALLOCATED TO THE TRANSPORT SECTOR AND THE RAIL SUB-SECTOR (1962-1985)

Plan Period	Plan Size (N'M	Transport Sector (N'M)	% of Plan Size	To Rail Sector (N'M)	As % of Transport Alloc
1962 -68	1,586,000	309,092	19.49	40.24	14.01
1970 - 74	2,050,738	472,398	23.03	43.68	17.15
1975 - 80	43,314,000	9,677,541	22.34	986.08	10.64
1981 - 85	70,500,000	10,706,616	15.19	1,634.0	14.94

Source: Based on sector Fund Allocations, as reflected in the Fourth National Development Plan (1981 -1985) P.217 and P.223

A cursory look at Table 1 reveals the allocation of Funds to the rail transport sub-sector during the first four National Development Plan periods (1962 - 1985), It was seldom up to one fifth of the allocation to the transport sector at any given plan period in spite the depleting and ageing stock of locomotives and rolling stock, the need for track renewal as well as the need for upgrading workshop tools and equipment and so on. It is note worthy that during the 1981-1985 Development Plan Period N1.3 billion out of the N1.6 billion allocation to the rail transport subsector was earmarked for the first phase of construction of rails of standard gauge planned for Enugu, Port Harcourt, Makurdi - Otukpo - Ajaokuta section of the proposed new lines.

It shows from the Table 1 that the allocation of funds to rail sub sector had been grossly inadequate. The allocation of fund in 1981 - 85 plan period was however encouraging and that was during the period of RITES management team; when concerted efforts were on by the Federal Government to improve the overall performance of NRC.

During the National Rolling Plan period (1990- 92) N310 million was allocated to rail transport sector, while N349 million and N522,228 million were earmarked for the 1992 - 93 and 1993 - 95 Rolling Plan periods. N80 million and about N12.01 billion were set side for the 1994 - 96 and 1996 - 98 Rolling plan periods. Much of these funds were meant for the acquisition of locomotives, rehabilitation of coaches and wagons, track improvement and expansion as wel! as the provision of rail links to Kaduna refinery, Oturkpo-Ajaokuta- Onne Ports rail line and the fertilizer factory at Port-Harcourt.

Table 2

VOLUME OF PASSENGER AND FREIGHT CARRIED AND REVENUE GENERATED BY THE NRC

YEAR	PASSENGER CARRIED *('000)*	PASSENGER *REVENUE* (N'000)	GOOD CARRIED *METRIC* TONNE (000)	FREIGHT REVENUE *(N'000)*
1971	5,760.3	5,865.3	1,350.1	15,960.8
1973	5,330.5	6,940.6	1,935,6	19,928.0
1979	8,606.9	15,316.4	1,129.9	18,530.0
1980	10,855.1	25,393.7	1,620.2	30,382.3
1981	9,972.7	22,871.4	2,116.1	44,493.5
1982	11,753	28,487	2,163	48,431
1983	13,012	31,333	1,619	36,636
1984	15,552	33,938	1,458	33,355
1985	11,709	37,527	1.182	34,247
1986	9,912	39,088	825	27,776
1987	7,407	36,510	353	15,632
1988	3,629	15,157	294	13,200
1989	6,520	24,318	270	18,155
1990	6,345	31,403	319	35,911
1991	3,942	19,314	330	64,460
1992	1,747	17,015	204	42,743
1993	1,502	14,627	157	74,148
1994	1,438	35,967	142	121,317
1995	1,729	39,402	108	133,915
1996	1,784	39,560	138	161,350
1997	2,272	57,492	270	136,228

Source: CBN Annual Reports and statement of Account (for the year ended 31st December 1970 -1996) Federal office of statistics, 1991 Edition (P.217) Elechi (1998:255) and Fos Annual Abstract of statistics 1996.

From Table 2, it is deducible that the relatively high volumes of goods and passengers carried with its corresponding high revenue coincided with the periods of main intervention by the Federal Government (contracts with RITES and CCECC) to turn the fortunes of the NRC round.

Table 3

NRC REVENUE AND EXPENDITURE PATTERN (1969 - 1989)

YEAR	REVENUE EARNED (N)	EXPENDITURE (N)	OPERATING DEFICIT (N)
1969	23,902,000	25,618,000	1,716,000
1970	23,148,000	27,530,000	4,382,000
1971	24,018,000	35,018,000	11,000,000
1972	22,546,000	38,254,000	15,708,000
1973	25,397,000	42,221,000	16,824,000
1974	25,533,000	38,407,000	12,685,000
1975	19,233,000	53,391,000	34,158,000
1976	27,209,000	66,797,000	39,588,000
1977	28,195,000	71,632,000	43,437,000
1978	30,216,000	74,648,000	44,468,000
1979	33,372,000	94,172,000	60,800,000
1980	42,854,000	123,831,000	80,976,000
1981	73,431,000	158,538,000	85,106,000
1982	77,660,000	161,599,600	73,938,000
1983	67,816,000	158,325,000	90,509,000
1984	67,461,000	165,510,000	89,057,000
1985	74,668,000	189,176,000	114,567,000
1986	70,019,000	157,290,000	87,270,000
1987	55,842,000	199,288,000	143,385,000
1988	44,983,000	196,715,000	151,732,000
1989	48,103,000	194,023,000	145,917,000

SOURCE: NIGERIAN RAILWAY CORPORATION (NRC)

Table 3 shows the details of the revenue and expenditure pattern within the period (1969-1989). it could be observed from the table that there had been gradual and significant increase in revenue earned by the

NRC during the period of a change in management from Nigerians to RITES. As stated earlier in Table 1 analysis, it was mainly as a result of more allocation of funds to RITES management team for renewal, rehabilitation and refurbishment of track, locomotives and rolling stock respectively that also called for more expenditure and the corresponding deficits. As could be seen in Table 4, there was grant to cover the deficit.

Table 4

FEDERAL GOVERNMENT GRANTS TO NRC: OPERATING DEFICIT AND CAPITAL PROJECT (1978 -1990)

PERIOD	CAPITAL PROJECT (N)	OPERATING DEFICIT (N)	SPECIAL ALLOCATION (N)
1978/79	44,559,354	65,022,964	-
1979	62,760,000	61,000,000	-
1980	33,000,000	41,650,000	40650,000
1981	85,985,000	60,000,000	-
1982	33,895,362	56,000,000	-
1983	30,240,000	69,650,000	-
1984	3,840,000	76,821,632	-
1985	10,000,000	68,113,661	-
1986	39,135,000	75,364,500	-
1987	54,317,128	80,545,263	-
1988	48,70,000	82,880,000	-
1989	-	-	-
1990	74,860,000	26,000,0000	33,000,000
TOTAL	521,361,844	753,048,020	73,650,000

SOURCE: NRC

Table 4 shows the Federal government financial Grants to the NRC. Here the grants covered operating deficits, capital projects and special allocation for the period 1978 -1990. It reveals that the Government released N521,361,844 and N753,048,020 for capital projects and operating deficits of the NRC. Also, the sum of N73,670,000 was given as special allocation.

Table 5

LOCOMOTIVE AND ROLLING STOCK MAIL ABILITY (1955 -1990)

PERIOD/YEAR	LOCOMOTIVES	COACHES	WAGONS
1955 -1963	307	567	5,825
1964 -1978	219	645	7,124
1979 - 1982	88	600	4,729
1983 - 1987	61	600	2,900
1988	35	400	30,050
1989	35	500	3,250
Jan - Oct 1990	45	620	3,500

Source: NRC

Table 5 shows that the locomotive and rolling stock availability of the NRC between 1955 and 1963 could be considered to be adequate, given the economic situation at that time. There were 250 steam locomotives and 57 diesel totaling to 307. The NRC started to witness a gradual depletion in the number of locomotive stock thereafter. In 1989 it had degenerated to 35. There was however a marginal improvement in locomotive availability which had increased by the end of October 1990. This was due to the corporation's rehabilitation efforts. As stated in the literature review the Chinese civil Engineering Construction Company (CCECC) under its terms of contract is to supply new 50 locomotives, 150 coaches, 400 wagons and 100 guard vans. These will give a lease of life to the corporation.

Table 6

4 NATIONAL DEVELOPMENT ALLOCATION TO TRANSPORT LAND SUB-SECTOR 1962 -1985

PLAN PERIOD	ALLOCATION TO TRANSPORT (N'000)!"	ALLOCATION TO LAND SUB SECTOR			
		RAIL N(M)	ROAD N(M)	RAIL %	ROAD %
1962 -1968	309,092	40.24	179.29	10	68
1970 -1974	472,398	43.68	331.8	9.3	67
1975 -1980	9,677,541	986.08	7124.0	9.4	70.6
1981 - 1985	10,474,462	1634.0	7400.0	25	60

Source: Third and fourth National Development Plans P.203,208 and 226.

Table 6 shows the financial allocation to transport sector and land transport sub-sector during the 4 National Development Plan Periods 1962 - 1985. Although one can argue that allocation to railway development increased in each of the subsequent plan periods, the amount allocated to the sector was insignificant when compared to that allocated to road sub-sector during the same period. The Government huge capital investment has been employed in the development of the road transport mode in particular, oil pipeline, air and water transport modes. This situation is at variance with the adoption of a strategic transportation system which had been advocated in the past.

Table 7

PLAN ALLOCATION AND ACTUAL CAPITAL EXPENDITURE 1962 - 85

PERIOD	PLAN ALLOCATION N(M)	ACTUAL EXPENDITURE N(M)
1962 -68	40.24	43.3
1970 -74	43.68	51.26
1975 - 80	986.08	488.49
1981 -85	1632.0	74.54
	TOTAL	617.59

Source: NRC Fourth National Development Plan

The table 7 above shows that under the 1962 -68 planned investment of 40.24m was accomplished with an over-expenditure of N2.96. The core programme was the completion of the Borno extension and implementation of the dieselisation programme of NRC locomotives. Similarly the second Plan Period investment in the railways amounted to N51.26m as against the N43.68m under the successive Plan Periods the total expenditure on capital investments in the railways amount to N617.59m. The National Development Plan was suspended in 1986; it has been replaced by the yearly Budgetary Allocations.

Table 8

BUDGETARY ALLOCATION TO TRANSPORT SECTOR

1987 - 1990

YEAR	LAND	SECTOR AIR	ALLOCATION WATER	(N) TOTAL
1987	257,791,200	21,110,740	1,605,200	312,953,940
1988	420,120,000	64,436,400	63,106,140	547,662,540
1989	325,462,334	16,750,000	37,000,000	379,212,334
1990	354,373,000	32,050,000	44,361,000	430,784,000

Source: FMTA Lagos.

The Federal Government Budgetary Allocation to the transport Sector from 1987 - 1990 is as reflected in Table 8 above. The allocations for the various transport sub sectors had been utilised in the development and maintenance of Airports and aviation industry and Seaports. The allocations to land transport were used mainly for the development and maintenance of high ways in Nigeria to the detriment of the railway which is the other alternative land transport hence the current advantage of the road transport over the railway system.

Table 9

INTER NODAL ANALYSIS

	Model Agency	Type of Traffic	Optimum Distance	Remarks
1	Road-Motor Carrier- Lorries	Suitable for lighter items of higher values and of perishable nature	Distance of 120 km to 150 km	Very versatile and less delay
2	Railways	Best for large volumes of heavy and bulky items of either low or high HqualityO	Best for long distance in excess of 400-500 km.	One of the cheapest per tonne km. Best for bulk and distance Il
3	Air	Suitable for light items of higher values or perishable nature	Best for longer distance with no topographical hindrances	best for speed and time saving but mostly costly per tonne km even where the distance is short. One of the cheapest on tonne km basis
4.	Water Ways	Suitable for bulky and low value traffic	Very good for long distance	best where speed is not critical
5	Pipelines	Suitable for liquid cargoes	Good for long distances and free from Climatic	One of the cheapest on tonne km basis

A transportation system along the above (Table 9) Functional arrangement would be strategically, economically and socially suited to the development of Nigeria. The inability to evolve a strategically balanced transport system in Nigeria in spite of the rapid growth of dynamic economy has created several bottle necks in the nations transport economy.

4.3 DISCUSSION OF RESULTS

The data collected from the research were analysed using figures and the results were discussed as they related to the information and statistics obtained.

With reference to the fund allocation to the Transport Sector as shown in Table 1, a total amount of N270,400 million was given between 1962 and 1985; N522,887 million between 1990 and 1995 and N12.01 billion in 1995/98. The funds were mainly earmarked for track renewal, rehabilitation, refurbishment of locomotive and rolling stock and purchase of some new ones.

As regards to the volume of passenger and Freight carried, it was observed from Table 2 that the high volumes of goods and passengers carried as mentioned earlier was during the time of Government efforts to give the NRC a new lease of life and that was within the periods of governments contracts with RITES management team and CCECC technical body. It also resulted in a corresponding high revenue for the NRC as it could also be witnessed in Table 3

The details of the Revenue and expenditure pattern within the period of 1969 -1989 as shown in Table 3 revealed that more gradual improvement in revenue was recorded when the NRC administration and operation were with the RITES Team. The revitalisation of the NRC system improved, to a large extent, the operational performance hence the high revenue earning..

In order to resolve the operating deficit in Table 3 and undertake some capital project, the Federal Government gave grants to NRC as shown in Table 4. The sum of N521,361,844 and N753,048,020 were granted for capital project and operating deficit respectively. A special allocation of N73,650,000 was equally granted.

The numbers of serviceable locomotives and rolling stock were adequate when the management of the NRC was in the hands of the founder, British Colonial masters, and immediately after the independence (1960). Many of them began to deteriorate thereafter as could be seen in Table 5. A good number were due for refurbishment, rehabilitation and replacement. Some new ones were purchased within the period of Federal Government Contract with CCECC.

Table 6 shows that the allocation of fund of rail was grossly insufficient when compared to what was allocated to road sub sector. For example, in 1962 - 1968 plan period the road sub sector was allocated 68% of the amount allocated to Land transport and rail was only given 10%. Also, in 1975 - 1980 road had 70.6% and rail has as very low as 9.4%. The same very low percentage allocation were granted to rail in similar National development allocation as could be observed in Table 6. Allocation to other modes of transportation like Air and water were made as shown in Table 8. A greater part of the NRC fund allocation was used for track renewal, refurbishment, rehabilitation and modernisation of the locomotive and rolling stock, signaling and Telecommunication, development and training of personnel.

The inter nodal analysis in Table 9 shows that the Nigerian transport system is not in any way strategically balanced. The major reason for the imbalance is due to the under-investment in the railways. This has led to road traffic congestion, loss of lives in road accidents. With a well developed rail system these unfortunate incidence can be avoided.

THE IMPACT OF THE CHANGE IN MANAGEMENT ON THE DEVELOPMENT OF THE NRC

From the findings and analysis the impact of the change in management on the development of the NRC were:

a. Maintenance target: The track and supporting features were renewed. These include the rails, rail fastening and anchor systems, sleepers, ballast, rail points, grade crossing subsystems, bridges and depot facilities.

b. Availability of locomotive and Rolling stock: The old ones were rehabilitated, refurbished and even modernised and new ones were equally purchased.

c. Higher volume of Freight and passenger traffic: The NRC enjoyed some reasonable degree of patronage.

d. Installation of modern signaling and Telecommunication equipment: A comprehensive communication system using digital micro wave technology was provided.

e. Training and development of management and technical personnel.

It was however observed from the finding that the success recorded as a result of the change in management was not much due to the high calibre of the management team perse but it was due to the Federal Government co-operation and sufficient allocation of funds for maintenance, renewal and modernisation of programmes;_also, sufficient autonomy to effectively pursue the objectives of the NRC. None of the previous management or succeeding ones ever had that opportunity. For instance, (as stated earlier) between 1979 and 1982, RITES got annual subvention of N64.5 million to bridge the operating deficit and another N64.5 for capital expenditure.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

This chapter deals with the summary, conclusion, recommendations and suggestions for further research.

5.1 SUMMARY - CONCLUSION

This research found out the impact of the change in Management on the development of the NRC. The study began by highlighting the importance of rail transport system in the socio-economic development of a nation. The research examined the management performance of the NRC from the Nigerian Independence (1960) to date and the effects of the change in management, especially the involvement of foreign experts (RITES) in the administration, on the development of the corporation. As a result, an evaluation of the existing management policy and factors militating against effective and efficient management of the corporation was made.

The importance of the study was out lined and a detail literature review was carried out. Among the items reviewed were the concept of transportation and its various modes, the railway industry, the policy implementation and its effects, the management of the corporation and its historical background.

Relevant information of the research were obtained essentially from NRC publications and documents, Ministry of transport and Aviation information. Handbook, seminar, workshops, magazines, journals and personal contacts with the management and technical staff of the corporation.

Figures were used in the analysing the data collected. The results of the data analysis revealed that:

1. The Nigerian Railway Corporation (NRC) was established by an Act of Parliament - NRC Act 1955 as amended No 20 of 1955.

2. The Corporation was transfered to the ministry of transport in 1969 and the arrangement still exists today.

3. The existing railway line network was completed in 1964 with the opening of the Bauchi-Maiduguri route.

4. The NRC played significant roles in Nigeria Socio-economic development from its inception to late 1960s.

5. The NRC suffered government neglect for a long time.

6. The renewal, rehabilitation, refurbishment and modernisation of the system elements and structure were long over due before they later began to receive the government attention.

7. The Rall india Technical and Econoinic Services (RUES) took over the management of the NRC from the Nigerians in 1979 to 1982.

8. The Change in management had significant impact on the development of the NRC.

9. RITES management team received more Federal Government attention and sufficient allocation of funds.

10. Some institutional weaknesses still persisted when RITES management team left in 1982.

11. Nigerian management body could perform as effectively and efficiently as the RITES if given equal Co-operation, sufficient funds and autonomy.

5.2 **RECOMMENDATIONS**

In reference to the findings, the following recommendations are made to the Federal Government and the NRC management body:

1. A clear definition of the main policy of the Corporation should be put in place.

2. The NRC Act 1955 as amended should be reversed.

3. The Corporation should be given a full autonomy to manage a restructured railway in line with modern railway operations. It has to be taken out of the direct control of the Minister of transport.

4. The managing Director (MD) should be appointed directly by the Federal Executive Council and vested with full executive power.

5. Construction of more rail lines to the new states and major commercial and strategic cities are necessary.

6. There is need to pursue without delay an integrated and internodal rail transport system within the overall transport framework.

7. There is need to develop the East to west rail connection for the Country.

8. The railway transport system is capital intensive; for this reason, the federal government should always allocate sufficient funds to the Corporation.

9. There are two aspects of the railway financial profile, its infrastructural requirements and the operation of its transportation services. It is therefore recommended that the Federal Government should, as it is done in the case of road transport, continue to finance and pay for construction, maintenance and upgrading of the track, telecommunication system and other infrastructural areas while elements of locomotive and rolling stock requirements should be

provided for only as loan to NRC and the cost should be fully recovered by the government from a well structured operation. This will put the rail in the competitive footing as road transport and lead to greater efficiency in resource allocation generally in Nigerian's Transport Sector.

10. The railway system should be insulated from political vagaries especially those that create disruption in personnel, policies and programmes of the system.

11. The establishment of appropriate strategies for indigenisation of technology in the railway sector should be vigorously, pursued by the Federal Government to enhance the use of facilities, local expertise and materials.

5.3 SUGGESTIONS FOR FURTHER RESEARCH

Having considered the areas covered by the research and the limitation encountered, the following suggestions for further research are made.

1. A research is needed to find out the appropriate operational strategies for effective and efficient railway system in Nigeria.

2. A further research is required in the following areas of management:

a. Manpower planning and staff development.

b. Corporate planning.

c. Marketing techniques in relation to railway operational strategies.

d. Guide lines inform of detail manuals for line managers and senior staffs to provide consistency in decision making and quality in management process.

3. There is the need to carryout a research in the rail technology especially in the following areas.

a. Design, testing and adoption of concrete sleepers.

b. Design, construction, testing and adoption of concrete pave-track for use at level crossing and other special areas.

c. Strengths of bridges for higher speeds and axle loads.

APPENDIX 'A'

BIBLIOGRAPHY

Abel, J,	(1990) 'Track Components for Long Term Economy' in Heraty, M.J (editor in chief) Developing World Transport, Grovenor Press, London, PP 151 -155
Adesanya, A	(1997) 'Transportation Development'; in Philips, A O and S. Titilola (eds) Nigeria in 2010 NISER, IBADAN, PP 128-136.
Adesanya, A	(1995) 'Human Resources Development and Training in the Transport Sector'. A public Sector Analysis (proceedings of NITT National Workshop, 1995).
Adenira D,	'A Rail Behind time' African Guardian weekly Magazine, Lagos 268 pp 1988.
Babatunde, AFA,	(1988) 'The Technological problems of Railways Transportation in Nigeria', Nigeria: Transport-Aviation and Tourism, information Handbook, Directory and who's Who? A Media Research Publication, Lagos Pp 128 - 136

Busby R.H and G Davies (1989) 'Changing Consideration and Techniques in the Selection and Design of new Railway Systems' in Heraty, M.J (editor-in-chief) Developing World Transport, Grosvenor Press, London PP 109 - 111

Cook, J.H.G (1990) 'Railway Construction and maintenance:' A overview in Heraty, M.J (editor-in-chief) Developing World Transport, Grosvenor press London, PP, 148 -150.

Elechi S.I.O (1998) 'Rail Transport in Nigeria: Problems and Prospects', in Eniola, J.O (ed) Transport: Development Catalyst, Trance, PP. 241 -256.

Ilukwe, G.C, (1998) '100 Years of NRC (interview) Newswatch, April 27, 1998, PP 22 - 24.

Heath, R.M (1995) Railways - 'The Challenge for Today's Young Civil Engineers'; New World Transport '95, Sterling, London, PP 121 – 123

Hornby, G. (1989) 'Maintenance and Refurbishment of Locomotives and Rolling stock', in Heraty, M J (editor-in-chief) Developing World Transport, Grosvenor Press, London. PP 221-223.

Jakpa, P.F (1981) ' Nigerian Railways in the 1980s', in Ekanem, N.F and S.O Onakomaiya, Transportation in Nigeria National Development (Proceeding of a National Conference) NISER, Ibadan. PP 67-89.

Media Research, (1988) 'Nigerian Railway Corporation (NRC) Nigeria: Transport-Aviation and Tourism', Information Handbook Directory and Who's Who? A Media Research Publication, Lagos PP. 108 - 117.

Ojo, Emma, 'Reviving the Railways' Daily Times, April 21, 1997. PP 22-23.

Robinson H. (1961) et al, 'The Economic Co-ordination of Transport Development in Nigeria', Stanford Research Institute, California.

VBO International, (1987) 'Agent of Growth and Development:' The Nigerian Railway Corporation; Fiant Strides (Vol1) VBO International, Lagos. PP 297-301.

Zoba B, (1990) 'Railway Management in sub-Saharan Africa' in Heraty MJ. (Editor-in-Chief) Developing World Transport, Grosvenor Press, London. PP 174 - 177.