FEDERAL REPUBLIC OF NIGERIA

REVIEWED NATIONAL INTEGRATED INFRASTRUCTURE MASTER PLAN

FEDERAL MINISTRY OF FINANCE, BUDGET AND NATIONAL PLANNING

2020

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FOREWORD

I am delighted to present the Revised National Integrated Infrastructure Master Plan (2020-2043) produced by the Federal Ministry of Finance, Budget and National Planning. The Revised National Integrated Infrastructure Master Plan (NIIMP) gives update on some of the infrastructure development activities, spending, and progress achieved on the capital projects executed across the seven key infrastructure asset classes namely: Transportation; Energy; Social Infrastructure; Information and Communications Technology; Housing; Agriculture, Water & Mining; Security and Vital Registration. The NIIMP provides the roadmap for building a world-class infrastructure that will guarantee sustainable economic growth and development. It would enable the nation to take advantage of the vast opportunities in the domestic and global economies to enhance the nation's competitiveness and improve the quality of life of the citizenry. In recent years, the Federal Government adopted different strategies in addressing the huge infrastructure gap in all the sectors of the Nigerian economy. Some of these strategies include the Nigerian Vision 20:2020, the National Integrated Infrastructure Master Plan (NIIMP) and the Economic Recovery & Growth Plan (ERGP) that form the basic government blueprint for building world-class infrastructure required to grow the economy and improve Nigeria's global competitiveness.

The reviewed NIIMP provides an integrated view of infrastructure development in Nigeria, with clear linkages across key sectors. It identifies and elaborates on enablers for successful implementation in line with the current economic realities. It takes stock of existing infrastructure and identifies the required investments to bring infrastructure to the level desired by Nigerians in line with the country's growth aspirations. The document also specifically sets out the goal of raising Nigeria's infrastructure stock to at least 70.0 per cent by the year 2043. When this goal is achieved, its impact on nation-building cannot be overemphasized as it will stimulate desired economic growth and development in social and human capital of the nation. It is, therefore, plausible to say that the growth of any nation's economy is largely dependent on the state of its infrastructure. In order to close the huge infrastructure deficit, Government has to invest more in infrastructure development such as roads, electricity, housing, agriculture, water, healthcare, and education amongst others, across all sectors of the economy. This investment will usher in the country's desired economic growth levels, provide employment for our teeming youths and create wealth for all. The involvement of the private sector is also very important in improving and increasing the infrastructure stock.

In conclusion, the Reviewed National Integrated Infrastructure Master Plan is a product of wide consultations with stakeholders drawn from the Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), Academia, the Private Sector and Federal Ministry of Finance, Budget and National Planning (FMFBNP). While commending the efforts of all concerned towards the achievement of this great milestone, I would like to further urge all stakeholders involved in the implementation of this blueprint to relentlessly work towards its actualization so as to ensure that the desired maximum impact on the economy and the livelihood of the people is attained.

Once more, I have no doubt that with careful implementation of the reviewed NIIMP, the country is on a predictable and irreversible path to collective prosperity. I would therefore like to say thank you all for the support and dedication towards building a secured future for a greater Nigeria.

Muhammadu Buhari, GCFR
President, Commander-In-Chief of the Armed Forces,
Federal Republic of Nigeria

PREFACE

The National Integrated Infrastructure Master Plan (NIIMP) is Nigeria's blue-print for boosting and modernizing the nation's stock of infrastructure, over the next 23 years. The document was first drafted in 2012 and approved in 2014. Ever since, the Federal Government had followed through the implementation of the Plan with varying degrees of success. Amongst others, Government had set up the Infrastructure Delivery Coordinating Unit (IDCU) within the Infrastructure Department of the Federal Ministry of Finance, Budget and National Planning in line with the NIIMP framework to coordinate the implementation of the Programme.

More than ever before, the Buhari Administration had given a renewed vigour to infrastructural development and the implementation of the NIIMP. This has reflected in the execution of the priorities of the Economic Recovery and Growth Plan (ERGP) and improved budget allocations. Taking account of Government efforts in infrastructure delivery over the years as well as new developments within the domestic and global environments, the Federal Ministry of Finance, Budget and National Planning felt the need to review the document to reflect these developments. Consequently, the Ministry initiated the review process in 2019 and this document is the outcome of that exercise.

The NIIMP, therefore, is set to liberate the economy from the shackles of weakening infrastructure and the bottlenecks it portends to an enviable height in the future and place it on a solid growth path. It provides the framework that will guide interventions, investments, as well as budgetary allocations to the sector in the next 23 years (2020-2043).
The Reviewed NIIMP has taken stock of the existing infrastructure, and future stock requirements, including total resource requirements, across key sectors of the economy and has identified critical enablers for the promotion of private sector investment. The document presents a strong platform for improved Public and Private sector partnership and Donor support for boosting infrastructural development and empowering Nigerians.

There is no doubt that the estimated resource requirement for NIIMP's implementation is enormous. We are not unmindful of the challenges that lay ahead. However, we are optimistic that, with the various bankable projects identified under the NIIMP and investment by both international and domestic investors in the Nigerian economy, the NIIMP objectives are attainable.

I must acknowledge that a lot of work went into the crafting of this document and I thank all those who contributed to the successful development of this policy document, particularly members from the Central Bank of Nigeria, National Bureau of Statistics, the Academia, Organized Private Sector and staff of the Federal Ministry of Finance, Budget and National Planning for their commitment and hard work, especially in the inclusion of the macroeconomic framework. I also acknowledge the effort of the Editorial Committee, who painstakingly worked to ensure that the final document is of impeccable quality.

The Federal Ministry of Finance, Budget and National Planning is committed to coordinating the implementation of the reviewed NIIMP and the provision of necessary support to stakeholders to ensure that the noble objective of the document is effeffectively realized.

Zainab Shamsuna Ahmed (Mrs.)
Honourable Minister of Finance, Budget and National Planning
Federal Ministry of Finance, Budget and National Planning

ACKNOWLEDGEMENT

The Reviewed National Integrated Infrastructure Master Plan (NIIMP) is a product of wide consultations with stakeholders drawn from Federal Ministries, Departments and Agencies (MDAs), Sub-National Governments, Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), Academia, Private Sector, and Development Partners. Based on these consultations, consistent macroeconomic parameters and projections were developed, while investment requirements by asset classes and region, with estimates for the national and sub-national levels of government and medium and long-term sector targets to guarantee consistency of the document, were revised.

My sincere gratitude goes to the President, Federal Republic of Nigeria, Muhammadu Buhari, GCFR, the Vice President, Federal Republic of Nigeria, Prof. Yemi Osibanjo, GCON and the Leadership of Sub-National Governments. The commitment of the Federal Government of Nigeria in addressing the huge infrastructure gap in all the sectors of the economy is a welcome development. This is evident in the allocation of 30 per cent of total budget appropriation to the implementation of capital projects by key infrastructure MDAs.

This work would not have been possible without the support of the Honourable Minister, Federal Ministry of Finance, Budget and National Planning, Zainab Shamsuna Ahmed (Mrs); her support is highly appreciated. It is practically impossible to overlook the immense support by all the Honourable Ministers and the Honourable Ministers of State in the successful review of the NIIMP. Let me also appreciate the commitment of the Permanent Secretary (MBNP) who chaired the Technical Committee on the Reviewed NIIMP. My sincere gratitude goes to the Technical Team on the Review of NIIMP, the management and staff of the Infrastructure Department of the Ministry that had worked tirelessly to ensure the timely revision of the NIIMP.

While commending all efforts towards the achievement of this great milestone, I seek the support of Stakeholders at all levels of Government, the Private Sector, and Development Partners to assist in the full implementation of the revised NIIMP for the actualization of the plan targets and objectives for sustainable infrastructure development in Nigeria.

Thank you all.

God bless the Federal Republic of Nigeria

Prince Clem Ikanade Agba
Honourable Minister of State for Budget and National Planning
Federal Ministry of Finance, Budget and National Planning

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ACRONYMS

AfDB	-	Africa Development Bank
AIB	-	Accident Investigation Bureau
AIDI	-	Africa Infrastructure Development Index
BPO	-	Business Processing Outsource
BRICS	-	Brazil, Russia, India, China and South Africa
BSG	-	Business Support Group
BUDFOW	-	Business Development Fund for Women
CBN	-	Central Bank of Nigeria
COREN	-	Council of Registered Engineers in Nigeria
COVID-19	-	Corona Virus 2019
DisCos	-	Distribution Companies
ERGP	-	Economic Recovery and Growth Plan
EMDEs	-	Emerging and Developing Economies
ESP	-	Economic Sustainability Plan
ECOWAS	-	Economic Community of West Africa States
FDI	-	Foreign Direct Investment
FGN	-	Federal Government of Nigeria
FERMA	-	Federal Road Maintenance Agency
FMWR	-	Federal Ministry of Water Resources
FAAN	-	Federal Airport Authority of Nigeria
FAO	-	Food and Agriculture Organization
FMARD	-	Federal Ministry of Agriculture and Rural Development
FMBN	-	Federal Mortgage Bank of Nigeria
GAT	-	General Aviation Terminal
GDP	-	Gross Domestic Product
GW	-	GigaWatt
GenCos	-	Generation Companies
I&E	-	Investors and Exporters
ICT	-	Information, Communication and Technology
IMF	-	International Monetary Fund
IPPs	-	Independent Power Plants
ISO	-	Independent System Operators
ICAO	-	International Civil Aviation Organisation
JCU	-	Job Creating Unit
CAO	-	International Civil Aviation Organisation

ITU	-	Telecommunication Union
InfraCos	-	Infrastructure Companies
Km	-	Kilometre
KWh	-	Kilowatt-hour
LV	-	Low Voltage
MTSS	-	Medium Term Sector Strategy
MDAs	-	Ministry, Department and Agencies
MFBNP	-	Ministry of Finance, Budget and National Planning
MINT	-	Mexico, Indonesia, Nigeria and Turkey
Mpd	-	Million barrel per day
MDGs	-	Millennium Development Goals
MW	-	Mega Watt
MV	-	Medium Voltage
Mcfpd	-	Million cubic feet per day
NBS	-	National Bureau of Statistics
NV20:2020	-	Nigeria Vision 20:2020
NIIMP	-	National Integrated Infrastructure Master Plan
NAMA	-	Nigeria Airspace Management Agency
NCAA	-	Nigerian Civil Aviation Authority
NIMET	-	Nigerian Metrological Agency
NCAT	-	Nigerian College of Aviation Technology
NRC	-	Nigerian Railway Corporation
NIWA	-	National Inland Waterways Authority
NPA	-	Nigerian Ports Authority
NITT	-	National Institute of Transportation Technology
NNPC	-	Nigerian National Petroleum Corporation
NGN	-	Nigerian Naira
NIPP	-	National Independent Power Project
NBET	-	Nigerian Bulk Electricity Trading
NREEP	-	National Renewable Energy and Efficiency Policy
NNBP	-	Nigeria National Broadband Plan
NITDA	-	National Information Technology Development Agency
NIPOST	-	Nigeria Postal Services
NCC	-	Nigerian Communication Commission
NGC	-	National Gas Company
NDE	-	National Directorate of Employment
NGSA	-	Nigeria Geological Survey Agency
NYSC	-	National Youth Service Corp

NEMA	-	National Emergency Management Agency
NMRC	-	Nigeria Mortgage Refinance Company
NIDP	-	National Irrigation Development Programme
OPEC	-	Organization of the Petroleum Exporting Countries
PPP	-	Public-Private Partnership
PSRP	-	Power Sector Recovery Plan
PMS	-	Premium Motor Spirit
PEWASH	-	Partnership for Expanded Water, Sanitation and Hygiene
PIB	-	Petroleum Industry Bill
PIGB	-	Petroleum Industry Gas Bill
PHCN	-	Power Holding Company of Nigeria
PAGMI	-	Presidential Artisanal Gold Mining Development Initiative
PPPAC	-	Policies, Programmes, and Projects Audit Committee
RBDAs	-	River Basin Development Authorities
SPVs	-	Special Purpose Vehicles
SURCON	-	Surveyors Registration Council of Nigeria
SCPZ	-	Staple Crop Processing Zones
SMDE	-	Solid Minerals Development Fund
SDGs	-	Sustainable Development Goals
SMEs	-	Small and Medium Enterprises
STBs	-	Set-Top Boxes
TRACON	-	Total Radar Coverage of the Nigerian Airspace
TEUs	-	twenty-foot equivalent units
TFC	-	Trillion Cubic Feet
USD	-	United States Dollar
TCN	-	Transmission Company of Nigeria
Tcfpd	-	Trillion cubic feet per day
TRIMING	-	Transforming Irrigation Management in Nigeria Project
WAN	-	Wide Area Network

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The National Integrated Infrastructure Master Plan (NIIMP) is government's strategic document which was initially developed in 2012 to guide Nigeria's infrastructure investment, add value to the national economy and in particular enhance private sector participation in infrastructure development. Between 2012 to date, a lot has happened, including some important progress towards improving the quality and stock of the nation's infrastructure. Several important reforms have also been launched across the various spectrum of infrastructure in recent years. The macroeconomic fundamentals and landscape have changed significantly, making previous estimates, targets and assumptions largely unrealistic. Generally, developments within the domestic and global environments necessitated the need for a revision of the Master Plan.

In this revised version, the Plan has been updated to reflect current realities, particularly the COVID-19 pandemic and expected future demands through inputs from the Medium-Term Sector Strategies (MTSS) of each Ministry, Department and Agencies (MDAs), their mid-term reports, and other relevant sector reports. However, the overall objectives and philosophy of the Plan remain unchanged. As with the previous edition, this revised document provides the roadmap for building standard infrastructure that will guarantee sustainable economic growth and development. It provides an integrated view of infrastructure development in Nigeria, evaluates current stock of infrastructure, establishes sector targets and identifies the investments required to achieve the country's growth and development aspirations over the next 23 years (2020-2043). The Plan also identifies and elaborates on critical enablers for its successful implementation.

Unlike the previous version, this revised edition contained a consistent macroeconomic framework that indicates the impact of infrastructural spending on the future path of economic growth and unemployment. Taking account of fiscal realities and developments within the domestic and external environments, a more realistic infrastructure investment path over the next 23-years (2020-2043) is considered. Given the anticipated increased role of the private sector in infrastructure development, the NIIMP identifies potential sources of finance for the required infrastructural investments and enablers. Out of the total infrastructure investment of USD 2.3 trillion required over the next 23 years, about USD 150 billion is needed annually (by both the private and public sectors) to finance infrastructure investment over the medium-term period of 2021-2025. Over this period, the share of the private sector in total investment requirement is higher at 56 per cent while the public sector (Federal and States) accounts for the remaining 44 per cent.

At the sectoral levels, USD46 billion is an estimated annual investment in Vital Registration & Security, USD115 billion in Social Infrastructure, USD253 billion in ICT, USD253 billion in Housing & Regional Development, USD299 billion in Agriculture, Water & Mining, USD575 billion on Transport and USD759 billion in Energy over the plan horizon.

Although, for the next five years (2021 – 2025), the estimated annual investment requirement for Vital Registration & Security is USD3.0 billion; Social Infrastructure is USD7.5 billion; ICT is USD16.6 billion; Housing & Regional Development is USD16.5 billion; Agriculture, Water & Mining is USD19.5 billion; Transport is USD37.5 billion; and Energy is USD49.5 billion.

The largest investment needs are in energy (USD759 billion) and transport (USD575 billion) sectors both of which represents more than 50.0 per cent of the required infrastructure investments over the plan period. Since transport and energy play crucial enabler roles for practically all other sectors, investment in these areas should be accorded the highest priority. This will provide a solid stock of supporting infrastructure in place for other sectors such as Water, Agriculture, and Mining, and lay a foundation for subsequent growth in these sub-sectors.

In the first 5 years of the reviewed Plan, investments in Energy, Transport, Social Infrastructure, and Housing will be accorded priority due to their current relative level of under-investment. The priority project portfolios identified include 'quick wins' that would receive urgent attention over the first five years of this Plan. To guide MDAs and States in the prioritization of capital projects, the NIIMP provides an investment prioritization framework in the following areas.

- **Energy**: Priority would be given to generation capacity and expansion of transmission infrastructure. There is the need to also ensure that the Power Distribution Network, which is regarded as the "last mile", is improved as well. Priority would also be given to the construction of supporting gas infrastructure. Increased refining capacity to meet national demand for petroleum products is to be accorded high priority.

- **Transport**: Close to 50.0 per cent of investments would be directed at both energy and the roads infrastructure. Investment in road will cover the refurbishing of cross-national highways and expansion of the regional road network and linkages to other modes of transportation. Investments are also required in the rehabilitation of major rail links, renovation, and upgrading of main airports and aviation facilities and systems, inland waterways, and urban transportation in major cities.

- **Information and Communication Technology**: Expansion of mobile network capacity and the broadband fibre-optic network would be the priority. This will, among others, leapfrog the unlocking of digital access in Nigeria as it will provide (and enhance) broadband in both the urban and rural areas of the country.

- **Water, Agriculture, and Mining**: Priority would be given to investments in water supply and irrigation. Also, the development of the agriculture sector will require investments in staple crop processing zones, agro-industrial parks, as well as agricultural processing facilities. In the mining sector, investments would be targeted at reviving the basic mining infrastructure.

- **Housing**: Priority would be given to increasing the number of housing units to close the current and projected housing deficit.

- **Social Infrastructure**: Priority investments would be in the construction of facilities for education, hospitals, women and youth development, and sports.

- **Vital Registration and Security**: Priority would be accorded to investments in the national vital registration system and construction and rehabilitation of facilities for all security institutions.

- **Maintenance Economy**: In order to sustain and make our existing infrastructure attain their life span while giving optimal service, priority would be given to the promotion of Maintenance in the economy.

With regard to the financing sources for public sector infrastructure investment, four options have been identified. These include: (a) Government budget (Federal and States) which would finance up to USD 66 billion of infrastructure investment over the period 2020-2025; (b) public debt or government borrowing which would finance up to USD 29.33 billion over the same period; (c) other government-controlled sources such as the Sovereign Wealth Fund, or Pension Funds, which would provide a further USD 36.67 billion of financing; and (d) PPPs which is expected to finance about USD84 billion in participation from the private sector. Expectedly, the increased private sector participation would require a supportive environment with stable and transparent government policies, rules and regulations, fiscal and monetary incentives to investors, long-term financing mechanisms, and strengthened PPP management capabilities.

The NIIMP outlines the required short to medium term measures needed to ensure effective implementation of the Plan. The immediate changes required include: (a) Strengthening the legal framework to allow for private sector participation in Infrastructure investment; (b) Strengthening the infrastructure Department within the Federal Ministry of Finance, Budget and National Planning to enable it take responsibility for coordinating the required activities, monitoring progress and managing the process to overcome issues; (c) Ensuring financing for priority projects; and (d) Launching a broad communication effort to reach all priority stakeholders.

Finally, the Medium-term measures that are required as enablers would include the: (a) optimization of the end-to-end infrastructure governance model; (b) approval process of infrastructure projects, in which case all infrastructure projects must be reviewed and cleared by the MBPN before it can beadmitted into the budget. The projects must be costed; (c) promotion of private sector alignment and support; (d) development of large-scale training programmes to bridge the capability gaps in building, maintaining and operating the NIIMP infrastructure; and (e) strengthening engineering infrastructure. In line with the NIIMP, the State governments in collaboration with the Infrastructure Department of the Federal Ministry of Finance, Budget and National Planning are expected to develop the State Integrated Infrastructure Master Plans (SIIMPs) based on their various priorities.

INTRODUCTION

1 INTRODUCTION

1.1 Background and Context

There is widespread consensus that inadequate infrastructure is one of the major constraints to sustained economic growth and development in Nigeria. Consequently, Nigeria's various development plans such as National Vision 20:2020 (NV 20:2020) and the Economic Recovery and Growth Plan (ERGP), 2017-2020, consistently point to weak infrastructure as one of the factors that seriously undermined the country's economic performance over the years. Significant efforts have been made to address these challenges. One of the main objectives of the ERGP is building a globally competitive economy by improving the quality and stock of the nation's infrastructure. Among the five key execution priorities in the ERGP include expanding the power sector infrastructure to achieve at least 10 GW of operational capacity, and investing massively in transportation infrastructure.

However, despite some noticeable effort and progress made over the last few years - including allocation of at least 30 per cent to capital projects in the Federal Annual Budgets since 2016 - government still acknowledged that substantial infrastructural deficit remains across the country. As the 2019 Global Competitiveness Index Report reveals, Nigeria scored 48.33 points out of 100 and ranked 130th of 141 countries surveyed for the overall quality of infrastructure, well behind Egypt (52nd), South Africa (69th), and Algeria (82nd). The 2020 Africa Infrastructure Development Index (AIDI) produced by the African Development Bank to monitor and evaluate the status and progress of infrastructure development across the continent, also placed Nigeria (with an index of 23.27) at the bottom of the pyramid behind 23 other African countries (Figure 1.1). Although Nigeria's index indicates a gradual improvement since 2014, it also underscores the profound infrastructural challenges within the country.

Figure 1.1: Africa Infrastructure Development Index (AIDI)

		2020	2019	2018	2017	2016	2015	2014
1	Seychelles	96.73	94.97	94.32	94.11	93.93	93.71	89.57
2	Egypt	88.39	87.23	85.85	85.35	85.66	85.62	81.12
3	Libya	82.97	81.89	81.41	79.27	77.79	77.67	73.45
4	South Africa	79.34	78.43	78.53	79.63	75.52	75.90	73.81
5	Mauritius	79.12	77.50	76.79	75.49	74.08	74.28	71.21
6	Tunisia	70.57	69.30	68.98	66.97	66.26	66.20	61.89
7	Morocco	66.53	64.87	64.88	62.00	62.41	61.41	56.66
8	Algeria	57.87	57.08	55.79	54.04	53.39	52.99	49.91
9	Cabo Verde	48.88	47.96	47.96	50.43	49.43	48.96	46.20
10	Botswana	37.50	36.96	36.79	36.61	35.63	35.64	34.76
11	Gabon	31.29	31.17	30.67	28.08	27.75	27.98	26.97
12	Ghana	30.13	29.51	28.84	27.38	26.10	25.44	23.75
13	Namibia	29.98	28.96	28.65	28.64	28.80	28.74	28.27
14	Gambia, The	29.54	28.97	28.61	28.16	27.61	27.46	26.36
15	Senegal	29.22	28.30	25.97	25.26	24.71	24.59	23.07
16	eSwatini	28.21	27.11	25.76	25.43	24.63	24.70	23.40
17	Sao Tome and Principe	27.54	27.14	27.14	27.18	27.38	27.33	26.05
18	Kenya	26.09	25.92	25.60	24.93	24.37	24.00	21.85
19	Zimbabwe	25.54	24.42	24.52	24.43	24.15	24.17	23.86
20	Djibouti	24.65	23.90	24.46	24.30	23.93	23.95	23.44
21	Cote d'Ivoire	24.18	23.28	21.96	19.66	19.06	18.85	18.14
22	Comoros	24.13	23.62	23.50	22.15	22.12	22.03	21.64
23	Zambia	23.97	23.22	22.29	22.12	21.55	21.55	20.87
24	Nigeria	23.27	22.76	22.37	21.64	20.60	20.45	19.35
25	Uganda	21.97	21.17	20.62	20.18	20.00	19.81	18.61
26	Malawi	21.79	20.81	21.02	18.44	18.45	18.01	17.14

Source: African Development Bank (2020).

Over the next 10 years, Nigeria's population is expected to expand significantly from its current estimate of about 190 million people to almost 264 million. This is likely to exert profound future demand for infrastructure expansion to reduce congestion and strain on existing networks. Without drastic improvements in Nigeria's core infrastructure, the prospects for economic growth and development will be severely compromised.

Looking forward, although the ERGP is ending in 2020, expanding the stock of Nigeria's infrastructure will remain a key objective in the government's successor development plans such as the Medium-Term National Development Plan (MTNDP) 2021-2025 and Long-Term Plan Called Nigeria Agenda 2050. However, building quality infrastructure is widely known to be expensive and takes time as well. The Global Infrastructure Hub estimated that Nigeria's cumulative infrastructure spending need between 2016 and 2040 was about US$ 878 billion, translating to about US$35 billion per year. It is apparent to many that the Federal Government cannot provide all the needed resources, more so as government revenue is still heavily dependent on the oil and gas sector which are vulnerable to shocks in the international energy markets. The sharp crash in oil prices between 2014 and 2016 highlighted this vulnerability that eventually pushed the economy into recession. The slump in oil prices by early 2020 to historic lows of $14 per barrel following the outbreak of Corona Virus (COVID-19) has also significantly reduced government projected revenue leading to a downward revision of the 2020 Budget. A well-coordinated and strategic approach is required to harness sufficient resources to increase the stock of Nigeria's critical infrastructure. Besides investment by sub-national governments, the private sector is expected to play an increasing role either directly or in collaboration with the government through the public-private partnership (PPP) arrangements.

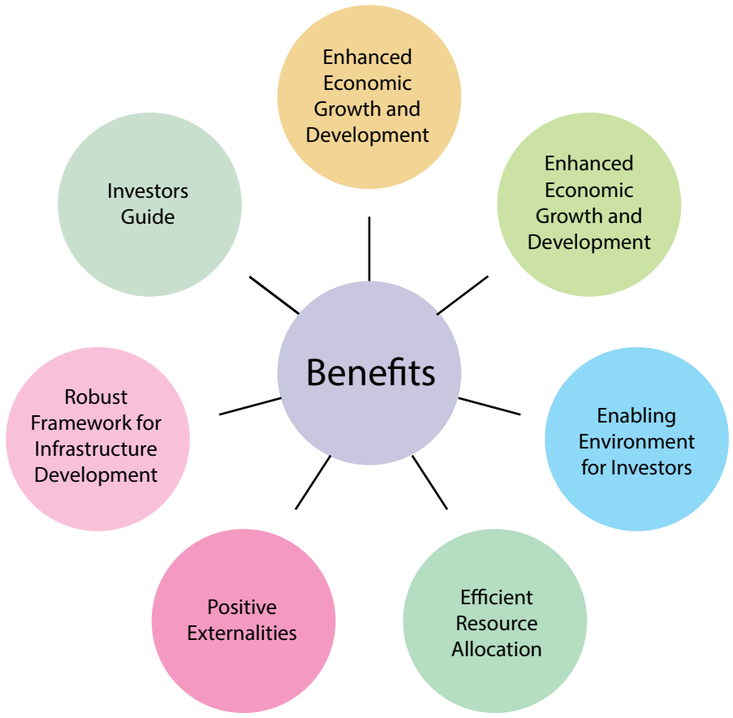
The National Integrated Infrastructure Master Plan (NIIMP) is government's strategic document which was developed in 2014 to guide Nigeria's infrastructure investment, add value to the national economy and enhance private sector participation in infrastructure development. The NIIMP was developed through an elaborate and inclusive process including the work of the Ministerial Steering Committee, eleven Technical Working Groups and Business Support Group (BSG), which provided private sector perspective and expectations. Besides, the views of International Development Partners were equally harvested. The outcome of that process was validated at national and sub-national levels.

Between 2014 to date, a lot has happened, including some important progress towards improving the quality and stock of the nation's infrastructure. A number of important reforms have also been launched across the various spectrum of infrastructure in recent years. The macroeconomic fundamentals and landscape have changed significantly, making previous estimates, targets and assumptions unrealistic. Generally, developments within the domestic and global environments necessitated the need for a revision of the Master Plan.

In this revised version, the Plan has been updated to reflect current realities and future demands through input from the Medium-Term Sector Strategies of each MDA, their mid-term reports and other relevant sector reports. However, the overall objectives and philosophy of the Plan have not changed. Like in the previous edition, this revised document provides the roadmap for building standard infrastructure that will guarantee sustainable economic growth and development. It provides an integrated view of infrastructure development in Nigeria, with clear linkages across the key sectors. The Plan also identifies and elaborates on enablers for its successful implementation. Figure 1.2 provides an overview of the expected benefits of NIIMP.

The Plan also identifies and elaborates on enablers for its successful implementation. Figure 1.2 provides an overview of the expected benefits of NIIMP.

Figure 1.2 Expected Benefits of NIIMP



Source: NIIMP Review Team.

Specifically, the objectives of the NIIMP are to:

i. Adopt a coordinated approach to infrastructure development;
ii. Strengthen the linkages between components in the infrastructure sector and the national economy;
iii. Preview, upgrade and harmonize existing sub-sector master plans and strategies in the infrastructure sector, to ensure consistency with national development aspirations;
iv. Prioritize projects and programmes for implementation in the short-term to medium-term;
v. Promote private sector participation in infrastructure development;
vi. Strengthen the policy, legal and institutional frameworks for effective infrastructure development; and
vii. Enhance the performance and efficiency of the economy.

Consistent with the original version, this document covers asset classes commonly referred to as 'core infrastructure' (Transport, Energy, ICT and Water) and others (Agriculture, Mining, Social Infrastructure, Housing, Vital Registration and Security) called 'non-core infrastructure'. It does not include equipment, personnel, etc. For each asset class, a definition of what is considered in scope has been developed for the Plan [Table 1.1].

Table 1.1: Concept of Infrastructure - Definition of Scope for the NIIMP

Asset Class	In scope (examples)	Out of scope (examples)
Transport	• Road, Rail, Seaport and airport: include investment in building the asset (e.g. construction equipment cost)	• Asset usage equipment (e.g. buses, cars, railway wagons, aircraft, water ships)
Energy	• Generation, transmission and distribution (includes power equipment like BTG) • Refineries, oil and gas pipelines	• Generators
ICT	• Investment in telecom lines and transmission towers	• Equipment, including computers
Social Infrastructure	• Public utility buildings (schools, hospitals)	• Human capital (e.g. teachers, nurses, doctors)
Housing and Regional Development	• Low-income (social) housing	• Luxury housing
Security and Vital Registration	• Public utility buildings (police offices, barracks, fire stations)	• Asset usage equipment (e.g. police cars, tanks)
Agriculture, Water and Mining	• Water treatment plants, sanitation plants • Irrigation systems • Rail and waterway mining infrastructure	• Asset usage equipment (e.g. tractors, mining equipment)

Source: NIIMP (2015).

1.2 Structure of the Plan

Following this introduction, the rest of this revised Master Plan is structured as follows:

Chapter 2 presents the Macroeconomic Framework underpinning the Plan. It shows the impact of infrastructural development on the Nigerian economy especially with regards to the growth of GDP and employment. It sets out the overall direction for the plan and outlines the overall investments requirements over the next 23 years.

Chapter 3 shows the sector-specific strategies for each of the asset classes (Transport, Energy, ICT, Agriculture, Water and Mining, Housing, Social Infrastructure and Vital Registration and Security). The chapter also describes the current state of infrastructure at a detailed sector level, and lays out the objectives of each sector and its infrastructure stock

targets. The required infrastructure investments for each sector over the plan horizon are also indicated.

Chapter 4 articulates regional strategies. It describes the current state and economic priorities of the six geopolitical regions and how these translate into infrastructure investment targets.

Chapter 5 outlines short-term, medium-term and long-term strategies required to ramp-up infrastructure development under respective asset classes. It identifies quick-win projects to prioritize over the next five years in order to stimulate growth in the stock of infrastructure.

Chapter 6 shows the Financing Plan for the NIIMP. This includes the capacity of the Government to finance investments through current accounts or public debt, and a potential approach to increase the share of private sector investments through PPPs by creating a supportive enabling environment.

Chapter 7 deals with the plan implementation. It describes the actions required to successfully implement the Master Plan. This covers short-term and medium-term initiatives such as the required legal and regulatory changes as well as the monitoring and evaluation mechanism to track the progress of plan implementation.

MACROECONOMIC FRAMEWORK AND NATIONAL INFRASTRUCTURE TARGETS

2 MACROECONOMIC FRAMEWORK AND NATIONAL INFRASTRUCTURE TARGETS

2.1 Introduction

The backbone of any national economy is its stock of infrastructure. Sound transport networks and modern ports reduce transportation costs. High-capacity telecommunication networks facilitate vast cum fast communication and efficient flow of information. Pipelines for oil and gas ensure constant energy supply and export, while ample generation capacity and functioning transmission and distribution networks secure disruption-free production of goods and provision of services. All these components of infrastructure also contribute significantly to the well-being of the population, the productivity of the workforce, and facilitate broader access to education and health services.

According to international benchmarks, more developed countries typically have 'core infrastructure' stock (roads, rail, sea ports, airports, power, water and ICT) equal in value to about 70.0 per cent of GDP, with power and transportation infrastructure usually accounting for at least half of the total value. With economic performance more and more closely tied to global competitiveness, building infrastructure that meets global standards has become a primary requirement for achieving ambitious growth targets. While the availability of high-quality infrastructure is expected to promote growth, a stable macroeconomic condition with revenue-based fiscal consolidation is also necessary for economic growth and investment in infrastructure.

This chapter presents the macroeconomic framework underlying the revised National Integrated Infrastructure Master Plan (NIIMP) for Nigeria, which spans 2020 to 2043. Given that business cycles and uncertainties usually characterized the evolution of economic variables, the importance of long-term projections are still debatable among economists hence the need to stress medium-term initiatives. Consequently, the NIIMP macro framework is divided into two components – the forecast horizon covering 2020 to 2030 and set targets for 2031 to 2043. The framework shows the impact of infrastructural development on the Nigerian economy, as well as the internal consistency between the real, fiscal, monetary and external sectors. To provide the background/macroeconomic context for the framework, the chapter starts with a brief review of developments in the global and domestic environments.

2.2. Macroeconomic Context

The macroeconomic context is derived from an eclectic framework which is not only consistent but also allows for investment in infrastructure from the private and public sectors of the Nigerian economy. The framework also allows for investment in infrastructure from multilateral and bilateral institutions.

2.2.1Global environment

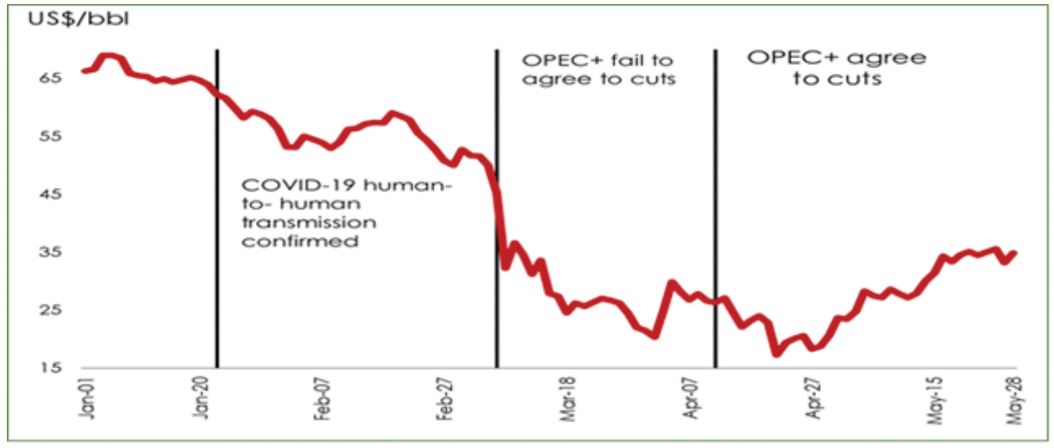
The overall medium-term outlook for the global economy remains broadly uncertain due to the outbreak and spread of the novel Corona-virus (COVID-19) pandemic that has thrown the world into a historic crisis. As at June 14, 2020,

over 7.6 million cases of COVID-19 had been reported worldwide, including 426,317 deaths. These figures are still rising by the day and may even be under-reported due to limiting testing capacities in a number of countries.

Attempts to prevent further spread of the virus has seen countries shifting away from open economic systems and multilateralism to protectionist policies. They have responded by implementing several containment measures like lock-downs to limit the spread of the virus within their economy, regardless of the spill-over effects on the rest of the world. Consequently, there has been significant disruptions to global supply and demand, especially in the tourism, hospitality services, and transportation sectors.

In some parts of the world, where the economic indices were already fragile before the pandemic, the crisis further complicated their challenges. The dramatic decline in economic activities and prolong lock-downs have precipitated unprecedented collapse in oil demand, a surge in oil inventories and the steepest historic decline in oil prices (Figure 2.1). The collapse of oil price particularly in March also follows the failure of OPEC+ coalition to reach agreement on how to react to the weak oil demand outlook. A renewed OPEC+ agreement in April proved somewhat insufficient to bolster prices to its previous levels, bringing significant fiscal challenges to oil dependent economies.

Figure 2.1: Brent Crude Oil Price (Jan-May 28, 2020)



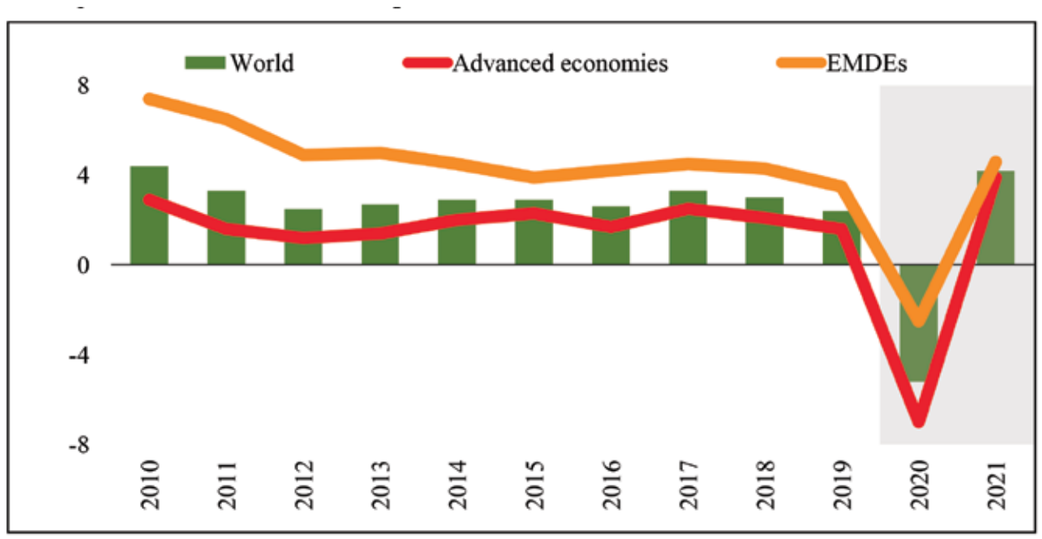
Source: Bloomberg; World Bank.

Note: Vertical lines denote January 22, 2020; March 9, 2020; and April 13, 2020, respectively. Last observation is May 28, 2020.

Given the uncertainties around the depth and duration of the crisis, there are concerns that the overall economic damage could turn out to be more severe than currently anticipated. Policymakers have been caught in the dilemma of easing the lockdown to revive growth prospects or maintaining it to safeguard lives. Whatever actions are taken, the signs indicate that the global economy is already at the threshold of a deep recession in 2020, heightening fears for a surge in unemployment and poverty rates in many economies. The World Bank envisions a 5.2 per cent contrac-

tion in global growth in 2020 – worse than what was seen during the Global Financial Crisis of 2008 (Figure 2.2). Output in advanced economies as well as emerging and developing economies (EMDEs) are expected to contract sharply during the year to 7.0 per cent and 2.5 per cent respectively. However, depending on how fast the pandemic would be curtailed, the spate of unprecedented policy support across many economies is expected to bolster a recovery of global growth to 4.2 per cent in 2021.

Figure 2.2: Global Growth Prospects



Source: World Bank, 2020. *Global Economic Prospects*, June 2020. Washington, DC.

In Sub-Saharan Africa, output is projected to shrink by 2.8 per cent in 2020 as economic activities collapsed in the first half of the year. The effect of COVID-19 shock has been exacerbated by heightened investor risk-aversion which has spurred large capital outflows from the region and sharp currency depreciations. Inflation is expected to edge up due to these distortions while fiscal deficits are projected to deteriorate in many countries, reflecting sharp fall in revenue.

Growth in the region is however expected to rebound to 3.1 per cent in 2021 subject to substantial downside risks and uncertainties, including the assumption that the outbreak will abate by the second half of the year. A wide range of monetary and macro-prudential policies have been implemented to help support recovery of economic activities. Commodity prices are also expected to pick up to bolster growth. However, without substantial external assistance, constrained domestic fiscal space could further deepen contraction and delay expected rebound.

Indeed, the COVID-19 pandemic has left lasting scars in an already-fragile global economy through multiple channels including lower investment confidence, retreat from global trade and supply linkages, rising corporate debt in the advanced economies and public debt in some Emerging Market and Developing Economies (EMDEs) as well as escalation of unemployment and poverty. Comprehensive reform drive, stabilization of the macroeconomic environment and investment in infrastructure are needed to reduce the existing vulnerabilities, improve business

confidence, support growth recovery and tackle unemployment.

Available statistics indicate that global infrastructure needs are huge. According to World Economic Forum, worldwide investment in infrastructure is expected to be US$79 trillion by 2040, while the actual global investment need is closer to US$97 trillion. This leaves an infrastructure gap of US$18 trillion. To bridge this gap, average annual global infrastructure investment is expected to increase by around 23.0 per cent per year. When viewed in the context of anxiety-induced issues like surging demographics, rising cyber threats and terrorism, urbanization and climate change, global demand for infrastructure remains huge.

The challenges in the global economy as a result of both the COVID-19 pandemic, the uncertainty and volatility of oil revenue have impact on the Nigerian economy which was already in stagflation before the twin crises.

2.2.2 Domestic environment

The Nigerian economy faces a perfect storm of both domestic shocks (health crisis, necessary but painful shutdowns to prevent spread of COVID-19) and external shocks (shrinking trade, capital outflows, falling oil prices). Most immediately, the unprecedented slump in oil price including the glut in the global oil and gas markets, has exerted profound revenue challenges to the country. Depressed global demand and glut has seen Nigeria's reference crude, the Bonny Light crude oil price crashing from USD$69.31 in January 3, 2020 to an extremely disappointing low of USD$14.67 by April 27, 2020. Consequently, government revenue is expected to fall from an already low of 8.0 per cent of GDP in 2019 to a projected 5.0 per cent in 2020.

After taking steps through the ERGP to exit recession in the second quarter of 2017, the COVID-19 pandemic is fast reversing the gains. The country's already fragile growth and other socio-economic indicators have been worsened by the necessary but anti-growth containment measures adopted. Available data from the National Bureau of Statistics (NBS) showed that annual GDP growth had declined from 2.10 per cent in Q1 2019 to 1.98 per cent in Q1 2020 (Figure 2.3). While the uncertainty over the impact of COVID-19 persists, many analysts believed that the economy may experienced significant downturn in the next quarter and heads towards another recession within the year.

Figure 2.3: Real GDP Growth Rate (Q1 2017-Q1 2020)

Source: National Bureau of Statistics (NBS).

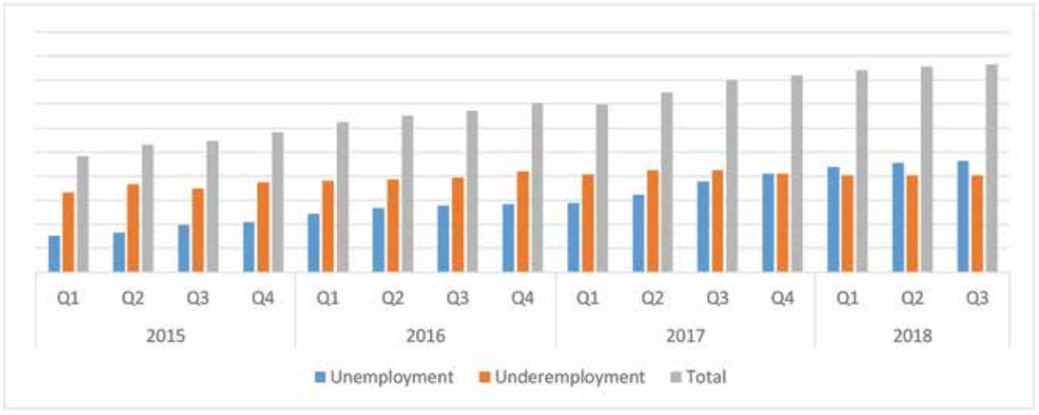
Headline inflation (year-on-year) had continued its upward trend which started since September, 2019, when the land borders protection coupled with other structural factors brought pressures on food and commodity supplies. For the ninth consecutive times, inflation rose from 12.34 per cent in April 2020 to 12.40 per cent in May 2020, far from the ERGP target of 9.90 per cent for 2020 (Figure 2.4). Current uptick was driven primarily by disruptions in food supply chains occasioned by the restrictions imposed across the country to curb the spread of the corona-virus pandemic.

Figure 2.4: Headline Inflation (year-on-year)

Source: NBS.

With a high population growth rate estimated between 2.6 per cent and 3.2 per cent, Nigeria's current growth performance is insufficient to make an impact on unemployment and poverty rates. Available data from NBS showed that unemployment remains high, increasing from 18.8 per cent (16 million) in Q3 2017 to 23.1per cent (20.9 million) in Q3 2018. Under-employment rate, however, declined slightly from 21.2 per cent to 20.1 per cent over the same period. Overall, combined unemployment and underemployment rates increased from 40.0 per cent (34.02 million) in Q3 2017 to 43.2 per cent (39.14 million) in Q3 2018. In terms of poverty, current report by NBS indicates that 40.1 per cent or 82.9 million Nigerians (excluding those in Borno State) are poor as at 2019.

Figure 2.5 Unemployment and Under-employment Rates in Nigeria (2015-2018)



Source: NBS.

Table 2.1: Poverty and Inequality Indicators in Nigeria (2019)

	Poverty Headcount (Per cent)	Poverty Gap Index (Per cent)	Gini Coefficient
Urban	18	4.5	31.9
Rural	52.1	17.4	32.8
Total	40.1	12.9	35.1

Source: NBS.

In response to these concerns, government has embarked on several initiatives including provision of direct and indirect employment through the Social Investment Programme. Robust intervention in the Agricultural sector is also stimulating job creation in the sector. There are also efforts to improve the business climate and boost the employment generation capacity of the private sector. But a lot remains to be done, as the COVID-19 pandemic has far reached implications for jobs and poverty. It has been estimated that about 10 million Nigerians could slip into poverty in 2020 due to the pandemic (AfDB, 2020).

From the monetary side, the CBN has stepped up its role as the bigger 'fire-fighter' in an economic crisis by providing strategic liquidity backstops in an attempt to safeguard the health of the economy and the financial system. Interest rate on all applicable CBN interventions had been reduced from 9.0 per cent to 5.0 per cent while additional one-year moratorium period has been granted for all CBN intervention loans. The Bank also created a N50 billion targeted credit facility (for households and SMEs) and injected about N3.6 trillion into the banking system, including N100 billion to support the health sector, N2.0 trillion to the manufacturing sector, and N1.5 trillion to affected industries in the real sector.

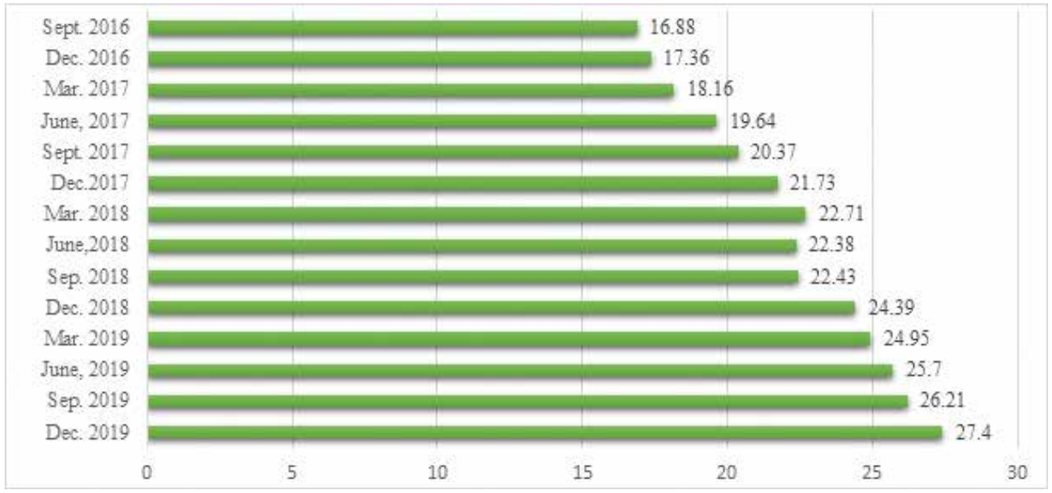
Regulatory forbearance has also been introduced to restructure loans in impacted sectors. The apex bank is also coordinating a private sector intervention initiative targeting N120 billion to fight the pandemic. Furthermore, the Bank had reduced the Monetary Policy Rate (MPR) from 13.5 per cent to 12.5 per cent by late May, 2020 to support the recovery of output and avert a recession.

On the external front, there has been significant threat to capital flows, external reserves position and exchange rate stability as a result of the slump in oil prices and uncertainties induced by the pandemic. While the external reserves have experienced downward trend, the CBN had adjusted the official exchange rate upward by 15.0 percent and attempt a unification of the various rates under the investors and exporters (I&E) window, Bureau de Change, and retail and wholesale windows. However, demand pressures across the various segments of the market have continue to introduce volatility in the rates.

The country's Debt Stock (Federal and States) as at December 2019 stood at N27.40 trillion up from N24.39 trillion as at December 2018 (Figure 2.4). This leaves the Debt/GDP ratio at 18.81 per cent, although well below the 25.0 per cent limit. A remarkable feature of Nigeria's debt stock was the introduction of project-tied financing products (Sukuk and Green Bonds) in the second half of 2017. However, with recent challenges in oil prices and disruption of economic activities, the Federal Governments has lost massive projected revenue, particularly for 2020. It should be noted that the debt/Revenue ratio indicates the need to borrow without tears. The COVID-19 pandemic has magnified existing

debt vulnerabilities due to widening financing needs. It is therefore important to deal with the challenge of low revenue which is highlighted by the country's high debt-service to revenue ratio. While this ratio has improved from 99.0 per cent as at end of March 2020 to 72.0 per cent by May 2020, it remains higher than desirable and undermines government ability to inject sufficient resources to infrastructure development.

Figure 2.6: Nigeria's Total Debt Profile (N' trillion)



Source: Debt Management Office (DMO).

While the overall long-term impact of the COVID-19 pandemic is still uncertain, the effectiveness of government response is critical to determine the speed, quality and sustainability of Nigeria's economic recovery and competitiveness. The crisis presents great opportunities to build a strong and resilient economy, especially by fixing the infrastructural challenges. Increasing investment in critical infrastructure would fast-track growth recovery and sustainability as well as generate employment.

In recent years, the Federal Government has made moderate progress in delivering infrastructure such as improved budgetary allocation, completion of the Abuja to Kaduna rail line, tangible progress on development of the 2nd Niger Bridge and commencement of the Mambila Hydropower Project, which had stalled for over 30 years. Government has also designed various incentives as well as special purpose vehicles (SPVs) to attract private sector investment to deliver on this objective.

Current trend showed that Federal Government actual investment in infrastructure between 2009 and 2018 stood at N5.99 trillion. This represents 72.0 per cent of the budgeted amount over the 10-year period. Further breakdown indicates that the bulk of the investment was on transportation infrastructure (37.4 per cent) followed by Vital Registration and Security (21.5 per cent) and Agriculture, Water & Mining (15.8 per cent), Social Infrastructure (12.3 per cent) and Energy (10.8 per cent).

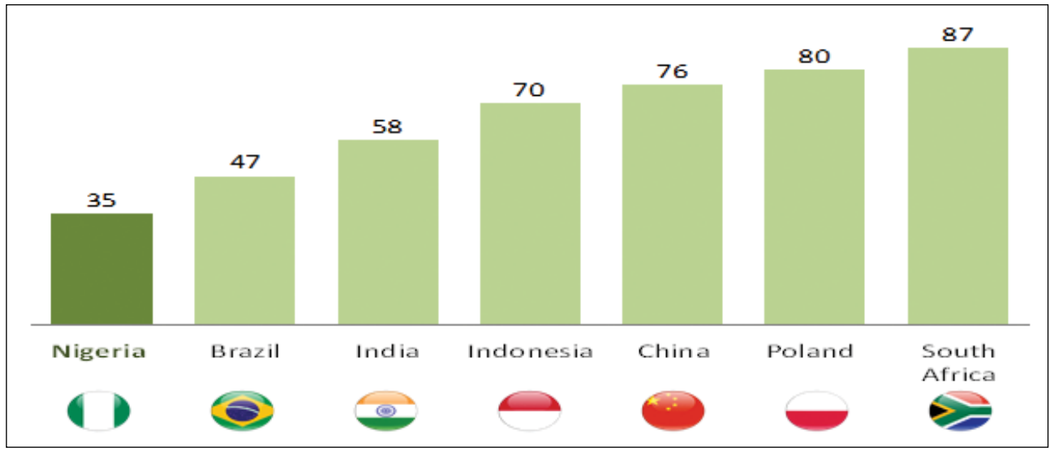
Table 2.2: Summary of Federal Government Infrastructure Expenditure per Asset Class in (N) Billion, 2009-2018

Asset Class	Budget	Actual	Percentage (per cent)
Vital Registration and Security	1,522.20	1,289.15	21.49
Housing	175.59	97.70	1.63
Social Infrastructure	1,013.38	740.39	12.34
Energy	918.16	649.40	10.83
Agriculture, Water, Mining	1,347.49	945.11	15.76
Transport	3,355.75	2,243.29	37.40
ICT	45.76	32.83	0.55
TOTAL	**8,378.33**	**5,997.85**	**100.00**

Source: FG Budget Implementation Reports 2009 to 2018, Budget Office of the Federation.

However, in spite of these efforts, the country's stock of infrastructure as a percentage of GDP remains lower than the international benchmark of 70.0 per cent. Previous estimates indicate that Nigeria's core stock of infrastructure was 35.0 per cent of GDP as at 2015, lower than other comparator countries (Figure 2.7). However, current estimate suggest that the country's infrastructure stock has improved to 40 per cent of GDP. In spite of this, if "non-core infrastructure" (social housing, security, mining, agriculture) is included, the gap still remains wider.

Figure 2.7: Infrastructure stock in selected countries (% of GDP), 2016

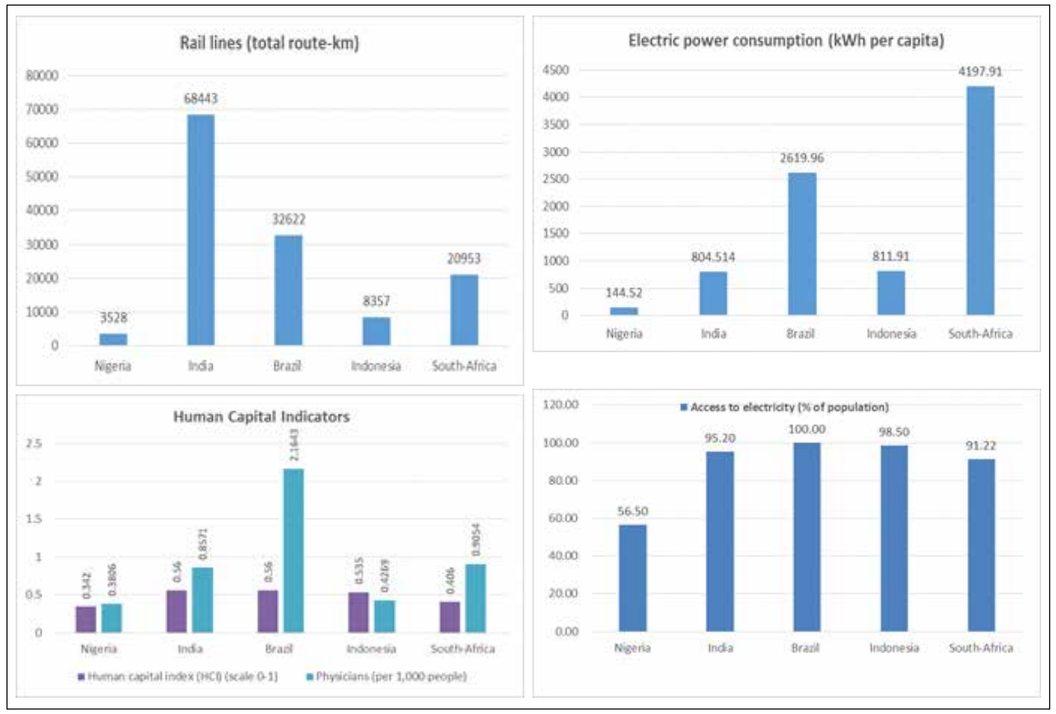


Source: Economic Recovery and Growth Plan, 2017-2020.

Table 2.3 below shows that Nigeria is doing well in road connectivity at 77.5 of 100 and very poor on exposure to unsafe water which stood at 75.6 per cent of the population as at 2018. According to the 2019 Global Health Security Index, Nigeria ranked 96 among 195 countries surveyed, reflecting the poor state of the country's health sector. As shown in Figure 2.8, Nigeria's human capital index (0.342) compares poorly with other comparator countries like South-Africa (0.406), India (0.56), Brazil (0.56) and Indonesia (0.535). Effect of weak infrastructure is most striking in the energy sector – the country's per capita electric power consumption of 144.52 kWh is lower than that of Brazil (2619.96 kWh) and South-Africa (2619.96). Proportion of the population with access to electricity stood at 56.50 per

cent compared to over 90.0 per cent in the selected comparator countries. Other indicators like the rail lines are far less than adequate and compare poorly with other countries in the sample.

Figure 2.8: Infrastructure stock: Nigeria and Comparator Countries (as at 2018)



Source: World Development Indicators, 2019.

Table 2.3: Nigeria Infrastructure Statistics, 2018.

Quality of Infrastructure (1-100)	39.7
Infrastructure Gap (% of GDP)	1.2
Infrastructure Investment (% of GDP)	4.0
Quality of Road Infrastructure (1-7)	2.5
Efficiency of Train Services (1-7)	1.8
Efficiency of Air Services (1-7)	3.4
Efficiency of Seaport Services (1-7)	2.5
Electricity Access (% of Population)	59.8
Quall of Elect Supply (% of Output Loss)	15.0
Reliability of Water Supply (1-7)	2.1
Exposure to Unsafe Water (% of Pop)	75.6
Ratio of Urbanisation (% of Pop)	50.0
Road Connectivity (0-100)	77.5
Digital Adoption Index (0-1)	0.4
Mobile Broadband Subscription (per 100)	30.7

Source: Global Infrastructure Hub 2018.

Given the current realities and cash position of the Nigerian government, developing Nigeria's infrastructure will require significant private sector funding, strong collaborations between government and the private sector, and a medium to long term view on the benefits and economic returns on investments to the country. "PPPs is expected to finance about USD84 billion in participation from the private sector. Expectedly, the increased private sector participation would require a supportive environment with stable and transparent government policies, rules and regulations, fiscal and monetary incentives to investors, long-term financing mechanisms, and strengthened PPP management capabilities"

To achieve this critical objective of the Plan, the ICRC should be strengthened to galvanize and mobilise the private sector. Equally, the government should ensure stable polity, adequate incentive for investors, stable macro-economic environment, and adequate security of lives and property

Government had unveiled an Economic Sustainability Plan (ESP) as a short-term measure to mitigate the impact of the pandemic on the economy while the development of a successor plan to the ERGP is underway. While the Federal Executive Council had approved the sum of N2.3 trillion for the implementation of the ESP, the IMF had approved the country's request for emergency financial assistance of US$3.4 billion to help limit the decline in external reserves and support the implementation of critical infrastructural projects in the 2020 Budget.

To prepare for a post-COVID-19 economy and increase the resilience of the country against future shocks, Nigeria has to address the structural bottlenecks that make the country more vulnerable. Accelerating structural reforms to increase the country's productive base will also require addressing obstacles in the business environment, particularly ensuring macroeconomic stability and building the stock of infrastructure, including the healthcare system.

2.3. Macroeconomic Framework

2.3.1. Basic Assumptions and Scenario Analysis

The projections are guided by the current state of the Nigerian economy as at Q1 2020 and the assumption that the COVID-19 pandemic will be contained by Q3 2020. The current stock of Nigeria's infrastructure is estimated at 40.0 per cent of GDP, with the target of raising it to 70.0 per cent in 2043. The expected infrastructure investment across the asset classes are weighted as shown in Table 2.4.

Table 2.4: Expenditure Allocation across the Asset Classes

Sector	Percentage
Energy	33
Transport	25
Agriculture, Water and Mining	13
Housing	11
ICT	11
Social Infrastructure	5
Vital Registration & Security	2

Source: MFBNP.

Three possible scenarios on future path of infrastructural investment and macroeconomic dynamics have been considered – Baseline, Conservative and Optimistic. Each scenario has different implications for the economy, particularly in terms of growth, unemployment and poverty reduction as well as global competitiveness.

a) **Baseline Scenario:** Under this scenario, investment in infrastructure is assumed to follow the pattern in the previous year. Thus, public sector investment in infrastructure is expected to increase by the average growth rate of 2019. Projections under this scenario indicates that Real GDP would grow by 4.19 per cent on the average over the period 2020-2030, with a contraction of 0.17 per cent in 2020. Unemployment rate would average 24.18 per cent. With a sluggish GDP growth path in the face of a growing population, per capita income will remain low while the country would continue to lag behind her peers in the global infrastructure competitiveness index.

b) **Optimistic Scenario:** This scenario assumes an accelerated development path targeting faster Real GDP growth along the lines proposed during the initial development of the NIIMP document in 2012. This will require an aggressive ramp-up of infrastructure investment by an average of (US$ 101.2 billion) per year. Real GDP is projected to recover from a contraction of 0.43 per cent in 2020 to 4.87 per cent in 2021 and peaking at 11.13 per cent in 2030. This will generate considerable reduction in unemployment rate to an average of 5.95 per cent over the period. To deliver on these, it is also assumed that Government will be able to secure fundamental external support to bridge the widening fiscal deficit or financing gap while the epidemiological path of COVID-19 pandemic would be flattened earlier than expected to restore macroeconomic stability. Oil prices are expected to recover to at least US$70 per barrel. Implementation of robust structural reforms to diversify the economy from crude oil over-dependence over the medium term, is also assumed.

c) **Conservative Scenario:** This scenario takes a conservative approach and considers the prevailing realities of the Nigerian economy, particularly the uncertainties arising from the COVID-19 pandemic, with oil price assumed to hover around US$40 per barrel. However, government is expected to undertake critical reforms in rationalizing its fiscal strategies towards reducing excessive recurrent spending in favor of capital investment. Consequently, public investment in infrastructural development is assumed at US$ 44 billion per year distributed equally over the forecast horizon. Following this path, Real GDP would decline by 0.19 per cent but rebound to 3.85 per cent by 2021 and 10.68 per cent by 2030. Overall, an average Real GDP of 6.22 per cent is estimated over the forecast period. Unemployment rate is expected to average 19.89 per cent for the period 2022-2030. This is still higher than desired in view of the expected surge in jobs losses due to the dislocations of economic activities by COVID-19 pandemic. A re-doubling of investment in infrastructure above current estimate may be required to bring significant impact on employment creation.

The dynamics of key macroeconomic outcomes under the three scenarios are summarized in Table 2.5 below.

Table 2.5: Selected Macroeconomic Indicators under Different Scenarios

	2019	2020	2021	2022-2030
Scenario 1: Baseline				
Real GDP growth	2.26	-0.17	2.87	4.19
Unemployment Rate	23.2	25.52	22.05	24.18
Scenario II: Optimistic				
Real GDP growth	2.26	-0.43	4.87	8.48
Unemployment Rate	23.2	22.68	16.65	3.40
Scenario III: Conservative				
Real GDP growth	2.26	-0.19	3.85	6.22
Unemployment Rate	23.22	24.86	20.80	19.89

Source: MFBNP, NBS, AND CBN.

The macroeconomic forecast for the revised Master Plan is based on the conservative path, which takes due account of current fiscal realities, impact of COVID-19 pandemic, prospects and other structural concerns. Table 2.6 presents the key projections of under this scenario.

Table 2.6: Macroeconomic Projections of Key Indicators (2020-2030)

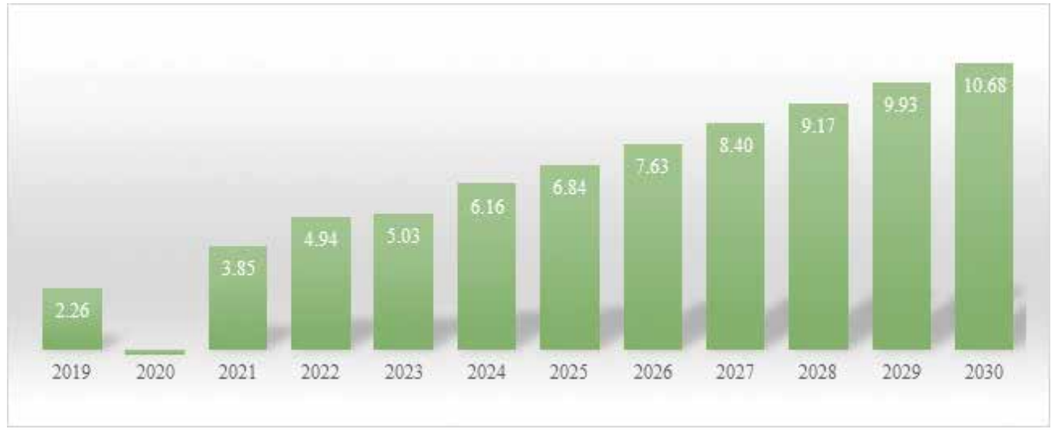
SELECTED ECONOMIC INDICATORS (In per cent of GDP, unless otherwise stated)												
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
REAL												
Real GDP Growth Rate (%)	2.26	-0.19	3.85	4.94	5.03	6.16	6.84	7.63	8.40	9.17	9.93	10.68
Sectoral Growth Rates:												
Agriculture, Water and Mining	2.38	2.13	1.99	1.89	1.78	1.64	1.51	1.38	1.24	1.11	0.97	0.84
Energy	4.16	13.36	9.31	11.61	9.07	10.45	9.73	10.07	9.91	9.98	9.95	9.96
ICT	9.22	23.03	13.04	13.87	15.58	16.35	16.43	16.36	16.31	16.30	16.30	16.31
Transport	11.24	4.49	6.07	8.71	7.11	7.04	7.39	7.34	7.27	7.29	7.31	7.30
Social	0.69	7.66	10.01	10.03	10.03	10.03	10.03	10.03	10.03	10.03	10.03	10.03
Housing	-2.17	-6.79	-3.52	-0.83	1.37	3.04	4.31	5.28	6.02	6.58	7.01	7.33
Headline Inflation (%)	11.98	13.80	12.02	10.47	9.48	8.66	7.97	7.38	6.87	6.43	6.04	5.70
Oil Price Benchmark (US$)	60.00	28.00	35.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Oil Production (mbpd)	2.30	1.80	1.93	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22
Unemployment Rate (%)	21.01	20.36	20.80	20.84	20.67	20.46	20.23	19.96	19.68	19.38	19.07	18.75
FISCAL												
Revenue	7.00	6.85	8.46	10.35	10.80	12.60	14.42	16.12	18.43	20.92	23.69	26.93
Expenditure	10.95	14.15	14.19	14.86	15.32	15.73	16.28	16.79	17.31	17.87	18.43	19.02
Non-debt Recurrent	5.83	6.63	6.43	6.60	6.86	6.94	7.12	7.30	7.45	7.63	7.81	7.99
Capital	3.35	3.25	2.95	2.85	2.50	2.29	2.10	1.90	1.74	1.58	1.44	1.31
Debt Service	1.76	3.61	4.21	4.71	5.55	6.40	7.37	8.56	9.89	11.43	13.23	15.29
Primary Balance	-2.21	-3.06	-0.75	1.02	1.02	3.27	5.50	7.89	11.01	14.48	18.48	23.21
Overall Balance	-3.97	-6.66	-4.96	-3.69	-4.52	-3.13	-1.86	-0.67	1.12	3.05	5.25	7.91
Financing:												
Domestic	0.08	2.95	2.01	1.52	2.11	1.99	2.05	2.30	2.37	2.51	2.69	2.83
Foreign	3.89	2.67	2.01	1.52	2.02	1.91	1.93	2.11	2.15	2.23	2.35	2.43
Divesture/Privitisation/Ot	0.41	1.05	0.93	0.65	0.89	0.88	0.90	1.02	1.07	1.14	1.24	1.32
EXTERNAL												
Exchange Rate	305	360	360	360	360	360	360	380	380	380	380	380
Exports	29.53	29.42	29.51	29.35	29.22	28.99	28.56	28.04	27.36	26.58	25.70	24.73
Imports	5.04	4.20	3.60	3.10	2.60	2.21	1.85	1.55	1.30	1.07	0.89	0.73
Trade balance	24.49	25.22	25.91	26.25	26.62	26.78	26.71	26.48	26.07	25.50	24.82	24.00
MONETARY												
Broad Money (M3)	24.10	46.83	46.18	45.53	45.14	44.30	43.23	42.01	40.64	39.14	37.49	35.73
Net Domestic Credit	25.04	38.71	38.17	37.63	37.32	36.62	35.73	34.72	33.60	32.35	30.99	29.53
Government	6.75	6.35	6.10	6.19	6.03	5.95	5.79	5.65	5.45	5.25	5.03	4.80
Private	18.29	32.36	32.07	31.44	31.28	30.67	29.94	29.07	28.15	27.10	25.96	24.74
Income Velocity (M3)	4.10	2.14	2.17	2.20	2.22	2.26	2.31	2.38	2.46	2.56	2.67	2.80
Monetary Policy Rate	13.50	12.50	12.50	12.50	12.50	12.00	12.00	11.50	11.50	11.00	11.00	11.00

Sources: MFBNP, NBS, and CBN.

2.3.2. Real Sector

Real GDP growth is expected to contract by 0.19 per cent in 2020 as a consequence of the COVID-19 pandemic. However, a rebound is expected in 2021, reflecting the effects of the various fiscal and monetary stimuli, and in particular the implementation of the NIIMP. Moreover, with the gradual recovery of oil price, exchange rate stability, re-opening of major economies and trading routes, Nigeria is expected to register 10.68 per cent real output growth in the next ten years, with an average of 7.64 per cent over the forecast period. Oil production is expected to stabilize on the back of sustained peace in the Niger Delta, while oil price is expected to hover above the conservative benchmark of US$40 per barrel used in the forecast.

Figure 2.9: Real GDP Growth Rates (2019-2030)

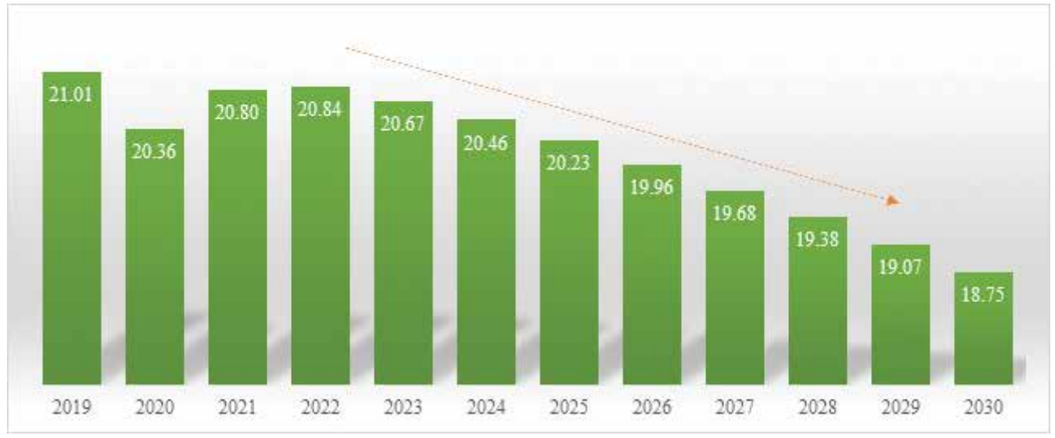


Source: MFBNP, CBN and NBS Projection.

While the oil and gas sector will continue to be significant in the growth dynamics, growth is also expected to be driven, largely, by public and private investment in core infrastructure. At the sectoral level, ICT, housing, social sector, transport, and energy are expected to be key drivers of growth. Efforts to continuously improve the ease of doing business will boost manufacturing sector activities, including light manufacturing. An increase in non-oil revenue through the implementation of the reforms in the new Finance Act is also expected over the plan horizon. Accommodative monetary policy as well as CBN interventions in growth-stimulating sub-sectors will also be central in overall GDP growth.

Significant improvement in infrastructural stock and removal of other structural constraints, particularly factors that affect domestic food prices are expected to drive down inflation from 13.80 per cent in 2020 to 12.02 per cent in 2021 and further to 5.07 per cent by 2030. Overall, the expansion of the economy through significant investment in infrastructure will lead to employment creation, especially in the ICT and Housing sectors. It is projected that unemployment will reduce to 18.75 per cent by 2030 (Figure 2.10).

Figure 2.10: Unemployment Rate Projections



Sources: MFBNP, CBN and NBS.

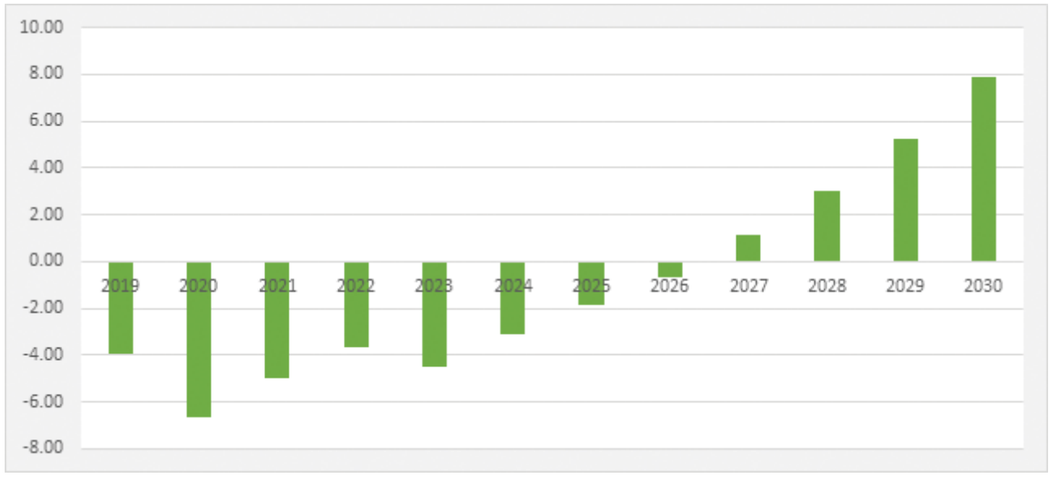
2.3.3. Fiscal Sector

Efforts to contain the COVID-19 pandemic and revive output growth to starve off recession is expected to trigger expansionary fiscal policy response amidst worsening fiscal positions. Consequently, fiscal deficit is projected to widen significantly from 3.97 per cent of GDP in 2019 to 6.66 per cent in 2020. The widening fiscal deficits is also explained by deterioration of government revenue, particularly from the oil and gas sector.

However, with the expected recovery of the economy in 2021, and progress in domestic revenue mobilization following the implementation of the new Finance Act, diversification of the economy, and other public sector reforms, fiscal deficit is expected to narrow over time.

Government revenue to GDP ratio is projected to remain volatile and subject to COVID-19 shock for most part of 2020. This is expected to shrink from 7.0 per cent in 2019 to 6.85 per cent in 2020, before picking up from 2021 as the economic conditions improve. Expectedly, the COVID-19 pandemic will further exacerbate the country's debt vulnerabilities. The changing composition of the nation's debt portfolio towards foreign currency denominated and commercial debt such as Eurobonds, makes it riskier than before, leading to expected surge in debt service to GDP ratio from 1.76 per cent in 2019 to 3.61 per cent in 2020 and thereafter to 11.43 per cent in 2030. The burden of higher debt service obligations imply that government is faced with difficulties in channelling available resources to cushion the effect of the COVID-19 pandemic. Freeing the fiscal space for appropriate response will require debt service relief as well as commensurate support from international development partners.

Figure 2.11: Overall Fiscal Balance (per cent of GDP) (2019-2020)



Sources: FMFBNP, CBN, and NBS.

2.3.4. The External Sector

With diminished prospects for 2020 due to global headwinds and domestic imbalances, the external sector faces significant threats in the short term. Pressures are weighing on external reserves and exchange rates, while exports and import flows have been disrupted. However, with the stabilising measures by the Central Bank of Nigeria, and the assumption that the COVID-19 pandemic would not last beyond Q3 2020, the performance of the external sector is expected to pick up gradually. Marginal growth in exports are expected to increase over the medium term as the

economy recovers from the shock of the pandemic. On the other hand, growth in imports is assumed to remain muted in the short-term due to border protection and exchange rate depreciation effects. The outlook in the near-term, would be reinforced by the Government initiatives towards the diversification of the export base, including the various interventions in the agricultural value chains.

2.3.5. Monetary Sector

Monetary aggregates are expected to be accommodative over the time path. Furthermore, monetary policy stance is expected to be less restrictive going into the future, however, non-inflationary as indicated by the gradual decline in the policy rate over the horizon. In addition, the credit expansion initiative of the monetary authority through the increase in loan-to-deposit ratio from 60.0 per cent to 65.0 per cent, as expressed in its 5-Year Policy Thrust would facilitate domestic investment.

2.3.6. Downside Risks to Macroeconomic Projections

The macroeconomic framework underlying this document is subject to several downside risks and uncertainties, both within the local environment and the global economy. Some of them include:

(i) Uncertainties about the duration of the COVID-19 pandemic and the price of oil in the international market. A prolonged disruption of economic activities by COVID-19 and any further negative shock to oil prices would significantly reduce growth projections and worsen external sector positions. To mitigate this risk, conservative oil price benchmark of US$28, US$35 and US$40 per barrel are used in the framework for 2020, 2021 and 2022-30 projections, respectively. Government is also expected to build fiscal buffers when oil price rises over the underlying benchmark.

(ii) Exchange rate risks could pose considerable challenges to realising the projections shown in the framework. Given that over 80.0 per cent of Nigeria's foreign exchange earnings emanate from crude oil production, any prolonged oil price shock below the benchmark, will lead to a steep depreciation of the Naira against the US Dollar. This in effect, will constrain businesses given the reliance on imports of capital goods and other production inputs. It is expected that the Central Bank of Nigeria (CBN), as it has done in the past, will continue to mitigate such future risks by building up enough external reserves as well as effectively manage the demand for forex through pragmatic and proactive approach as dictated by both domestic and global developments.

(iii) The rebalancing in the debt management strategy towards external borrowing implies an increase in exposure to foreign exchange risk as debt service obligations rise. This risk is however being addressed by favouring borrowing at concessional rates under long-term borrowing arrangements.

(iv) Risk of domestic oil production shock in an event of any resurgence of hostilities in the Niger-Delta. A twin track approach of dialogue with key stakeholders in the region and deployment of military forces in the event of major security threats, are expected to mitigate this risk. At present, Nigeria's oil production is below

target. It is also expected that when the Petroleum Industry Bills is signed into law, deferred investments in the industry would materialise and result in increased production. Efforts to clean up polluted communities in the Niger Delta region will also contribute to production increases. Overall, no major disequilibrium in production is expected in the medium-term.

(v) Global economy is characterised by uncertainties. Possible slowdown in the world economy than currently anticipated could affect the country's momentum in achieving the target GDP growth, especially through dampening exports growth. To mitigate these risks, government current development strategy is to balances an outward-looking export-led growth strategy with policies and programmes designed to take advantage of Nigeria's potentials by stimulating domestic economic activity to address domestic demand.

(vi) Upsurge in terrorism and other security threats could cause a drag to growth from its projected path by discouraging capital flows and investment into the country. To mitigate this potential risk, Government would continue to increase funding to upscale the security infrastructure in the country as well as improve the vital registration facilities nationwide.

2.4. National Aspirations, Infrastructure Targets and Investments (2020-2043)

2.4.1. Required Infrastructure Investment

Nigeria is ranked among the fastest growing population in the world. According to United Nations estimates, the population of Nigeria will rise to 411 million by 2050, making Nigeria the third most populous nation on earth, behind only China and India. A rising population suggests an increasing need for infrastructure to cater for the population. Therefore, infrastructural needs of Nigeria are linked to both economic and population or demographic variables behaviour. As the economy develops and population grows, there will be need for more infrastructure stock in the areas of Roads, Airports, Seaports, Water, Railways, Power and Telecommunications to support businesses and human activities.

While building and maintaining national infrastructure is capital intensive and comes with a huge cost, it requires substantial and sustainable investments in the identified infrastructure sectors to increase Nigeria's competitive strength and comparative advantage. With economic performance more and more closely tied to global competitiveness, investing in the building and maintaining of core infrastructure that meets global standards in line with the seven core infrastructure sectors, is a necessary requirement for achieving ambitious economic growth target.

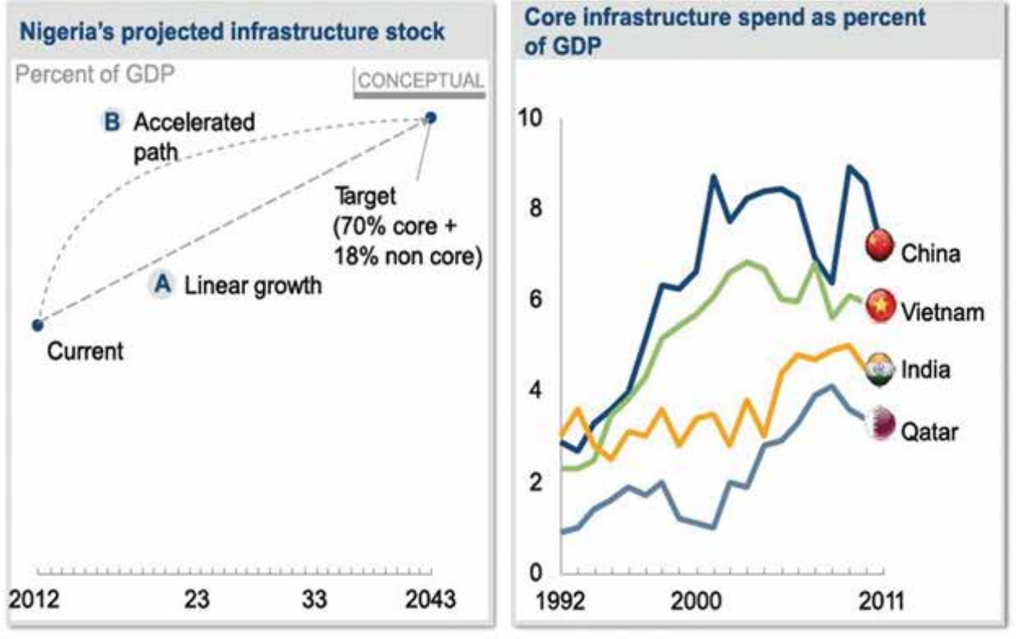
The end target of the Plan is to achieve annual GDP of at least US$2.7 trillion by 2043 and accelerate the country's stock of core infrastructure to 70.0 per cent of GDP. In order to close its current infrastructure gap and reach the desired national targets and aspirations, Nigeria must aggressively increase infrastructure spending as a percentage of GDP. Spending would need to ramp up fairly quickly over the 23-year period. Given Nigeria's high GDP growth projected for the period, such ramp-up is particularly challenging.

Moreover, maintenance costs will grow significantly, as infrastructure stock increases. According to global benchmarks, maintenance spend should amount to about 2.0 percent of GDP, which translates into a total of about USD 644 billion from 2020 to 2043, or USD 28 billion per year. This is more than double the current yearly total expenditure on infrastructure in Nigeria.

To fund the infrastructure needs of its growing economy over the next 23 years, Nigeria would need to spend about USD 2.3 trillion. This investment would allow Nigeria to close its infrastructure gap both in core asset classes (bringing it to the desired 70.0 per cent of GDP level) and in other key asset classes. Over the next ten years of the plan, this would require US$100 billion in investments on annual basis or per annum.

The initial edition of the Plan envisaged such an aggressive and ambitious scenario in which Nigeria accelerates spending very quickly to achieve the national targets (see Figure 2.12). An accelerated development path offers early momentum and faster time to impact in terms of economic and social development. Based on this path, funding needs in the first 5-10 years was estimated to be very high, and building the required local capabilities was expected to prove a huge challenge. Following this path, the country was expected to invest about US$33 billion in the first five years of the Plan (2014-18 and then growing to US$ 170 billion per year for the last five years (2039-43).

Figure 2.12: Ramp-up Paths for Infrastructure Spending

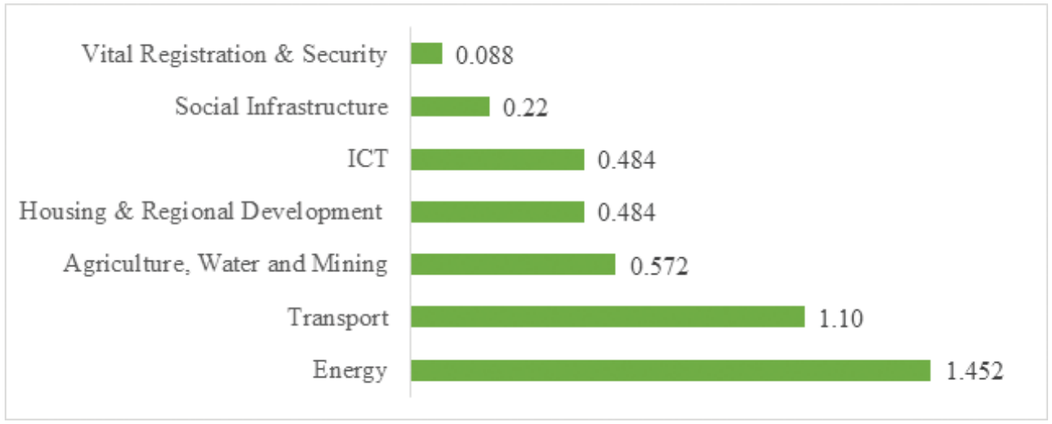


Source: NIIMP (2015:16).

However, fiscal realities and developments in the economy have proved that such path was overly ambitious and

unrealistic. Within this context, this revised plan considers what is more realistic, but a slower ramp-up scenario based on linear growth of spending over the next 23-year time span. Within this context, the Federal Government need to commit on annual basis, at least 10.0 per cent (USD 4.4 billion) of the desired amount USD 10.12 billion) to move a bit closer to the desired targets over the long term. This implies that the remaining sum would have to come from other sources including the private sector and the sub-national governments. In the next 23 years therefore, Nigeria needs about USD 2.3 trillion to close its investment gap. These figures include spending on physical infrastructure (e. g., roads and buildings) and the associated maintenance costs, but they do not include the operational cost of using the infrastructure (e.g., school teachers; firemen and fire trucks for fire stations) which will require additional investments. The expected investment by the Federal Government across the various asset classes is as shown in Figure 2.13.

Figure 2.13: Required Annual Infrastructure Spend by FG across Asset Classes (USD billion)



Source: Technical Review Team.

The largest investment needs are in energy (USD 759 Billion) and transport (USD 575 billion) sectors, representing more than 50.0 per cent of the required infrastructure investments over the 23-year period. Since transport and energy play crucial enabler roles for practically all other sectors, investment in these areas should be prioritised by means of allocating larger shares of the investment volumes to these two sectors. This will put a solid stock of supporting infrastructure in place for other sectors such as Water, Agriculture and Mining, and lay a foundation for subsequent growth in these sub-sectors.

2.5. Additional Factors to Consider in the Long-Run

2.5.1. Climate Change Considerations

As Nigeria seeks to achieve its vision for the nation's development over the next 23 years through the NIIMP, one important factor that will affect the country's development journey is climate change. Climate change could make food, energy, and water security more difficult for Nigeria to achieve. It could also affect the nation's infrastructure and make future investments costlier or require other types of investments to make the infrastructure climate resilient.

Agriculture in Nigeria depended mostly on rainfall, making its output highly susceptible and vulnerable to weather patterns and conditions. With a stagnant or low crop yield and a growing population, Nigeria dependence on food imports to make up for food shortages. Furthermore, livestock, a major source of livelihood in the northern states of Nigeria, are exposed to rising temperatures and declining pasture productivity. These climate risks are further compounded by Nigeria's rapid population growth, which, coupled with high poverty rate, reduces the nation's resilience to multiple climate risks.

The World Bank has described the issues and opportunities that exist for Nigeria in several detailed reports. According to the World Bank, climate change will increase Nigeria's vulnerability to weather swings and limit its ability to fulfil its development objectives. Potential impacts include:

- A 20.0 -30.0 per cent reduction in crop yields
- Lower livestock productivity
- Increased need for food imports
- Lower food security, particularly in the North and Southwest
- Reductions in GDP.

The World Bank's analyses confirm the fact that Nigeria cannot ignore its current climate situation or put off preparing for the likely change in climate in the future. Climate change must be considered particularly when planning future infrastructure investments. For example, investment decisions (particularly for irrigation and hydropower) that are made using historical climate data may be incorrect, as climate change might result in under- or over-designing the required infrastructure. This could lead to capital costs or foregone revenues of 20.0 -40.0 per cent of the initial capital invested.

Adequate planning of irrigation infrastructure is largely dependent on the expected climate. For example, a drier climate will require more water storage. This makes planning and designing difficult, as it is not possible to predict the future climate of a region with certainty. Using historical climate data to make these investment decisions might result in losses where the investment is undersized if the climate is drier than expected, or oversized if the climate is wetter than expected. The World Bank states these losses can be as large as 40.0 per cent of investment costs. However, losses can be reduced by 30.0 -50.0 per cent where the investment strategy focuses on minimizing the risk of misjudgments across multiple future climate outcomes, as opposed to solving for a specific climate outcome.

Climate variability in addition has a strong effect on Nigeria's power sector. Hydropower accounts for one-third of grid supply. Therefore, poor maintenance of the nation's dams and variability in rainfall result in power outages that affect Nigeria's energy security and growth potential.

Given the uncertainty of future precipitation and river run-off, climate change should be considered when planning hydro-power infrastructure. A drier climate could result in a hydro-power plant delivering less than the intended

amount of power. As with irrigation, designing a dam without considering climate change could lead to losses of up to 25.0 per cent of capital costs, but designing to increase the storage capacity in anticipation of a potentially drier climate could reduce possible losses to 5.0 per cent.

Beyond the uncertainty of the future climate situation, Nigeria's infrastructure will also need to be climate resilient. Floods are the most common and recurring type of disaster in Nigeria. Given the unpredictability of Nigeria's future climate, steps should be considered for building more climate-resilient infrastructure.

Damage to existing infrastructure from extreme climate events such as flooding reduces the expected durability of assets like housing, roads and dams. Building climate-resilient infrastructure, e.g., flood-proof housing, may increase costs but will also extend the asset's durability and lifespan. Furthermore, a potentially harsher climate in the future (that is not adequately planned for) will require higher maintenance.

The cost-benefit analyses of investing in climate-resilient infrastructure must be made on a project-by-project basis. But given the cyclical nature and prevalence of certain extreme climate events, the upfront costs of building more durable infrastructure are likely to be lower than the forestalled maintenance and replacement costs.

2.5.2. Population Management

Adequate consideration must also be given to Nigeria's population growth and dynamics, which is a crucial determinant of infrastructure demand in the long run. It is projected that by 2030, Nigeria's population would reach 264 million. This presents both threats and opportunities for timely policy action.

On the positive side, Nigeria's booming population brings potential benefits, primarily through a large consumer market and labour pool. However, higher and unchecked population growth rate, would wear off the full benefits of higher growth, cause per capita income to fall or remain flat and exacerbate poverty. Significant pressure will be exerted on public infrastructure, particularly in the urban cities. High urbanisation is expected to increase further demands for investment on roads, rails, security, reliable electricity, water supply and other basic utilities.

While effective implementation of NIIMP 2019-2030 is expected to deliver commensurate infrastructure to accommodate the medium and long-term needs of the country's population, government is also expected to re-design and implement a new national population policy that would moderate the rapid population growth.

2.5.3. Ensuring Accessibility for All

The development of infrastructure must consider accessibility for all citizens, particularly those with disabilities. With the right infrastructure, people with disabilities can exercise basic activities for daily living, such as performing home

activities, going to work, to school and using public and private facilities.

The World Health Organization considers a 'disability' to be a multidimensional life condition that consists of impairments, activity limitations and participation restrictions. To the extent that few humans remain healthy and able-bodied their entire lives, all people experience some form of disability at one time or another, whether it be from a broken limb or as an elderly person. Disability is thus an environmental construct in which actual performance depends both on the physical impairment and contextual factors. The contextual factors involved may make it more or less difficult for people with various levels of functioning to manage their lives. Infrastructure can consequently serve a major role in either facilitating or hindering accessibility to basic activities for daily living.

Nigeria's infrastructure needs to take into account the needs of people with disabilities. The solution to addressing these needs should not be to create parallel institutions and processes, but rather to adapt existing services to include people with disabilities. This will help prevent an uneconomical duplication of services.

Accessibility of public and private amenities such as water, transport, education, and healthcare for all citizens is crucial to preventing exclusion and tapping into the full social and economic potential of the populace. Accessibility requires that the entire infrastructural service chain be fully accessible. As an example, in the Transport sector this means that stations, bus stops, airports, etc., should be fully accessible to and usable by people with disabilities.

As Nigeria builds new and rehabilitates existing infrastructure, design-for-all or universal design principles should be a key requirement in order to ensure the accessibility needs of people with disabilities (such as the hearing, seeing or physically impaired) are fully met.

Below are several accessibility guidelines and standards that can be employed in the development and rehabilitation of the nation's infrastructure (the full text of these guides can be freely obtained via the websites of the respective authors):

- **Accessibility for the Disabled: A Design Manual for a Barrier Free Environment –** A comprehensive accessibility guide published by the United Nations.

- **Promotion of Non-Handicapping Physical Environments for Disabled Persons –** Guidelines developed by the United Nations Economic and Social Commission for Asia and the Pacific.

- **Enhanced Accessibility for People with Disabilities Living in Urban Areas –** Guidelines developed by the United Kingdom's Department for International Development with a focus on developing countries.

- **Adaptive Environments Checklist –** A set of standards and tools for universal design used by the United States for implementing the Americans with Disabilities Act.

2.5.4 Market Failure Concerns

Nigeria, like most developing countries, is confronted with challenges posed by market failure. Effort to increase infrastructure stock sometimes suffer some setbacks due to market failures such as Principal-Agent problems and incentive structure; information asymmetry; regulations and factor immobility among others. Political office holders, often times are confronted with the drive and desire to leave legacy projects behind not minding the cost effects of such infrastructure projects thus making economies of scale to take a back seat in the decision to locate infrastructure in regions.

SECTORAL OVERVIEW

3 SECTORAL OVERVIEW

3.1 Transportation Infrastructure

3.1.1 Introduction

A well-developed transport system is critical for any nation's growth and development. In particular, transport infrastructure is a critical enabler of development that has a far-reaching impact on all other sectors of the economy. Nigeria's existing stock of transportation infrastructure is not adequate to support the nation's expected growth aspirations. Adequate infrastructure planning and increased investment are critical to the realization of the nation's economic and developmental goals.

Indeed, the transportation sector is one of the sectors that is most affected by the COVID-19 pandemic. The lockdowns including closure of land and sea borders, restrictions to domestic and international flights significantly strained operations in the sector. All modes of transport have experienced significant disruptions leading to drastic revenue plunge. The aviation sector alone is estimated to lose over N21 billion in monthly revenue. On the other hand, most road and rail projects across the country were stalled. With over 80 million people using the transportation sector daily, the sector is fundamental in helping Nigeria rebound from the negative effect of the COVID-19 pandemic. Repositioning the transportation infrastructure for a post COVID-19 economy requires that the right structures be put in place to deliver a modern and safer transport system in the country.

There is a need for increased maintenance and expansion of the existing stock of transport infrastructure alongside the inauguration and completion of new fit-for-purpose transport infrastructure projects. The focus would be on linking the various forms of transport systems to strengthen the inter-modal transport of goods and services as well as improving safety, convenience, travel time, cost of transportation, and reduction of carbon emissions.

Table 3.1: Key Elements of the Transportation Infrastructure

Modes	Infrastructure	Mode of Transportation	Services
Air	Airport infrastructure Aerodromes Air Navigation Infrastructure	Airplanes Helicopters	Airline and air freight services Airport services Training
Land (Road)	Roads Bridges Terminals	Motorized Vehicles Non-motorized vehicles	Passenger services Road Haulage Informal services Training
Land (Rail)	Railways Rail Stations Signaling Infrastructure	Trains	Passenger services Freight services (Urban) Mass Rapid Transit Training
Land (Pipelines)	Pipelines	Line Pipes	Pipeline services
Water	Waterways (Inland and Sea) Port Infrastructure Navigation Infrastructure	Ferries Ocean-going vessels	Stevedoring services Shipping/Barge services Training

Source: Federal Ministry of Transportation.

The table 3.1 in the previous page highlights the key elements of the transportation sector and some of the priorities for the government which include:

- Increase emphasis on rail transportation - both passengers and freight;
- Rehabilitating rail network in some of the major cities across Nigeria;
- Building new standard gauge railway lines to link major cities across Nigeria;
- Increasing the capacity of inland waterways transportation – dredge 1000Km plus of inland waterways – build riverbank protection;
- Enhancing the performance and competitiveness of seaports – build three new deep seaports (Lekki, Olokola, and Ibom). Other Deep Seaport projects being developed as PPP include: Bonny, Badagry, Bakassi;
- 2000km of navigable waterways;
- 30,000 operational boats, vessels, and barges;
- 75.0 per cent of total ports operating 24 hours with patrol boats deployed;
- 2.2 km of roads rehabilitated and maintained between ports;
- Concession of four new airport terminal buildings;
- Improving airport and airline safety/security;
- Procurement of private sector contracts based on fair and transparent competition, and decisions on the roles of public and private parties based on value for money;
- Developing a pool of well-trained professionals for the transport sector;
- Creating an enabling environment for the emergence of Nigeria as a regional hub in West Africa for the different modes of transportation;
- Having an appropriate balance between public and private provided transport particularly in urban areas; and
- Enhancing inter-modal transportation in Nigeria to ease the load on the road's mode of transportation.

3.1.2 Road Infrastructure

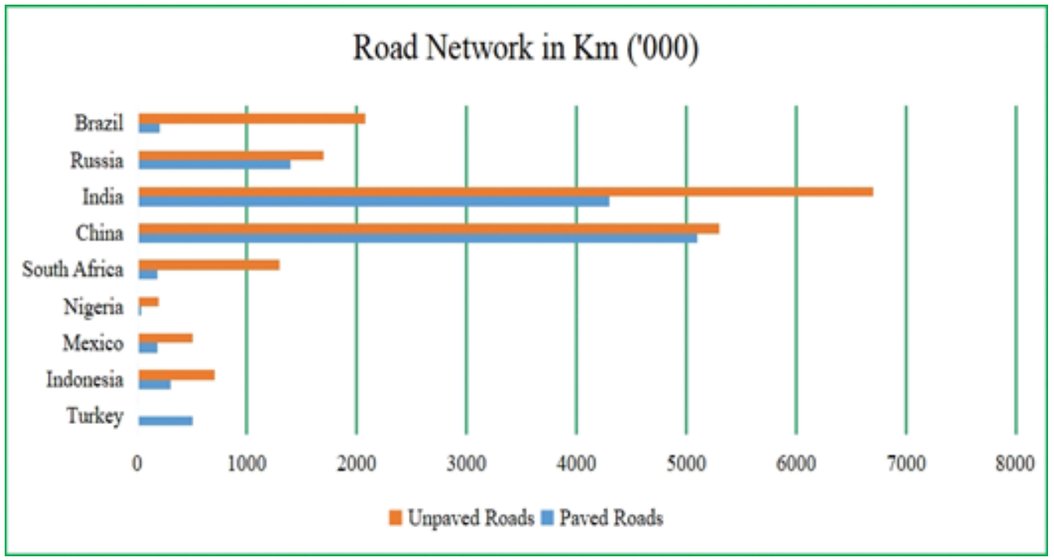
3.1.2.1 Current State of Road Infrastructure

Adequate road infrastructure is central to Nigeria's economic growth; it is at the core of good governance and public welfare. Any improvement in road infrastructure positively impacts on the nation's output. Nigeria has a total road length of about 200,000 kilometers, comprising 35,000km Federal roads, 30,500 km State roads, and 129,577 km Local Government roads.

Majority of road projects involved the rehabilitation and upgrade of existing roads while trying to construct new ones. In recent times, government has shown commitment to complete major highways through the formulation of policies that allow private sector participants to invest in road projects across the country, including the introduction of infrastructure bonds and Public-Private Partnership models. An overview of road projects undertaken between 2014 and 2020 indicates that some were funded through PPP arrangements supported with budgetary provisions. Specifically, Government has leveraged on Sovereign Sukuk Bonds, the Road Infrastructure Development and Refurbishment Investment Tax Credit Scheme (RIDRITCS) and the Presidential Infrastructure Development Fund (PIDF) to finance key road infrastructure projects including the use of multilateral funds/loans. The Federal Ministry of Works and Housing has also, in line with global best practices, established a Public Private Partnership Model known as the Highways Development and Mangement Initiative (HDMI) where private companies can tap into the numerous commercial opportunities available along Nigerian highways through concessioning of the Right-of-Way (RoW) for

management and development of the highway. The Federal Government has correspondingly increased expenditure and improved funding for the recovery of the Federal Road network from a budgetary provision of about N18.0 billion in 2015 to about N239 billion within the review period. Some of the key roads and bridges financed from alternative sources of funding include Lagos-Ibadan, Abuja-Kaduna-Kano, Lokoja-Benin, Benin-Shagamu, Enugu-Port Harcourt, Onitsha-Enugu, Kano-Maiduguri, 2nd Niger Bridge, Loko-Oweto Bridge and Ikom Bridge etc. However, significant challenges remain as the country's road network compares unfavorably with other comparator countries like Indonesia, Brazil and South Africa (See Figure 3.1 below).

Figure 3.1: Comparison of Nigeria Road Network with other Mint and Brics Nations



Source: Central Intelligence Agency – World Fact-book.

It is estimated that 40.0 per cent of the Federal Road network is in poor condition and needs rehabilitation; 30.0 per cent in fair condition and requires periodic maintenance; and about 27.0 per cent in good condition which needs routine maintenance. The remaining 3.0 per cent is accounted for by unpaved trunk roads that need to be paved. In the case of State roads, about 78.0 per cent are in poor condition, with only 22.0 per cent in fair-to-good condition. The local government roads are worse off with 87.0 per cent of the roads in poor condition.

3.1.2.2 Road Classification

The Nigerian Road network from the colonial days to the present day, have been classified into three, namely Trunks A, B and C. roads.

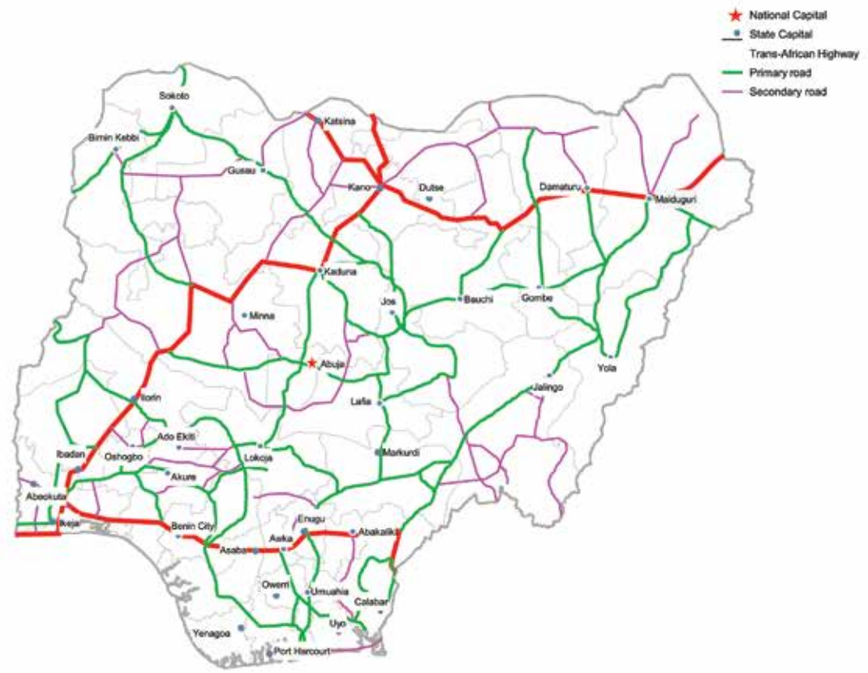
Trunk A: These roads form the skeleton of the national road grid. They cut across regional boundaries in the country and even extend to the international borders of neighbouring West African countries. These categories of roads are under Federal Government ownership. This means that they are designed, constructed, maintained, and financed by the Federal Government of Nigeria through the Federal Ministry of Works and Housing. The Federal Road Maintenance Agency (FERMA) is however charged with the responsibility of carrying out maintenance of the roads.

Trunk B: These roads are the second category of main roads in Nigeria. The roads connect the major cities within States

with the State capitals. These roads are designed, developed, financed, and maintained by the State Governments through their Ministries of Works, Transport, or Infrastructure.

Trunk C: These roads are local feeder roads constructed and maintained by the Works Department of Local Government Authorities in Nigeria. This class of roads is primarily not concrete asphalted and is often affected by seasonal weather changes. The roads connect villages and communities in the remote parts of each Local Government Area.
Figure 3.2 below shows the road connections in Nigeria.

Figure 3.2: Transport: Roads in Nigeria



Source: Natural Earth, African Development Bank.

3.1.2.3 Institutional Structure

The Federal Ministry of Works and Housing is responsible for the planning, designing, construction, rehabilitation, monitoring and maintenance of Federal roads and bridges nation-wide, provision of engineering infrastructure and surveying and mapping of the nation's internal and international boundaries. However, the current institutional structure for the management of roads infrastructure seems insufficient to cater for the increasing scope of responsibility occasioned by increasing demand for road use as a result of population and road traffic expansion. A Federal Road Maintenance Agency (FERMA) was established as an interim measure before instituting more substantive sector reforms, as Nigeria continues to rely on traditional general budget allocations to fund road maintenance and rehabilitation. The various policies being put in place to leverage on alternative sources of funding using different PPP Models require an institutional re-structuring to provide for a more result-oriented work force that will adequately

deliver on the Ministry's mandate.

3.1.2.4 Challenges affecting Nigerian Roads

Generally, the poor state of Nigerian roads can be attributed to the following challenges:

- **Inadequate funding of road maintenance and lack of new investments to expand the existing capacity.**
- **Lack of attention to inter-modality transportation:** The concept of inter-modality which requires that the various means of transportation is interlinked has not been given serious consideration thereby limiting the efficiency of the road sector in terms of convenience, travel time, and cost.
- **Lack of reforms:** The issue of sector policy, institutional, legal, and regulatory reforms that should accompany a liberalized economy have not been tackled head-on and continues to affect the effectiveness and efficiency of service delivery across the sector. However, the Federal Government of Nigeria has recently developed the Highways Development and Management Initiative (HDMI) to utilize private sector funds and management skills to complement the efforts of Government.
- **Inadequate resources for preventive road maintenance:** Current maintenance levels are insufficient to preserve the quality of the existing road infrastructure, resulting in annual deterioration. Ample resources have been allocated to federal road rehabilitation, but not enough of these resources are reserved for preventive maintenance.
- **Lack of road maintenance:** A historical trend of prioritizing new road construction over maintaining existing roads further exacerbates the deterioration of existing road infrastructure.
- **Heavy burden on roads:** A shift in inland transportation from rail and waterways to roads has increased the burden on roads as they have become the nation's primary mode of passenger and goods transport. For example, the high volume of petroleum products transported on the national roadways, which are meant to be transported via pipelines, diminish the already limited lifespan of the roads, resulting in higher maintenance needs.
- **Budget Cycle:** The budgeting cycle limits the use of funds during the dry season (the season most favourable for construction).
- **Overweight and poor drainages:** Overloading, blocked drainage structures and the parking and repair of heavy axle vehicles on carriageways and shoulders contribute to additional deterioration of road infrastructure.

3.1.2.5 On-going efforts to address the challenges

Government is committed to completing the road sector reforms, particularly the establishment of Road Authority and Road Fund to engender best world practice in the administration of road network development and management in the country. The proposed amendment of the Infrastructure Concession Regulatory Commission Act seeks to rename the Commission as the Public Private Regulatory Commission and expand the powers to: impose appropriate sanctions to ensure compliance with the provisions of the Act and regulations, establish a process for direct invitation and direct appointment for protection of national interest and security; set up a PPP Approval Committee for project below certain threshold; and superintend over all PPPs to facilitate private investment. Similarly, the recently approved Tolling Policy by the Federal Executive Council (FEC) shall pave way for the concessioning of the major dual carriageways. The monies saved from the concessions would be used for the development of other critical road infrastructure on the Federal Road network.

The Federal Ministry of Works and Housing is also currently working on the improvement of about 13,000km sections of the Federal Highway network. This covers about 859 ongoing contracts covering 796 projects estimated at N7.5 trillion (see Appendix 1). Within the period under review, the total sum of N2.336 trillion had already been certified for the works done while the sum of N1.960 trillion had been paid to the various contractors. This includes payment of N315.650 billion from the PIDF on the Lagos-Ibadan Road, Abuja-Kaduna-Kano Road and the 2nd Niger Bridge, N362.557 billion from SUKUK Bonds on 44 major Arterial roads spread across the six geo-political zones of the country within the period under review. Also, the Public-Private-Partnership Department in the Ministry, has evolved a Highway Development and Management Initiative (HDMI) to attract private sector and Foreign Direct Investment (FDI) in the operations, maintenance and management of the Federal Road network. The pilot phase entails the concession of twelve (12) viable road corridors across the six geo-political zones of the Federation to technically and financially capable concessionaires. The procurement process is currently at the Request for Proposal (RFP) stage.

3.1.2.6 Specific Achievements of the Road Sub-sector

i. Completion of the Construction of Loko-Oweto Bridge across River Benue in Nassarawa and Benue States (1.97km). The construction of the Approach Roads is in progress;

ii. Completion of the Construction of Ikom Bridge (360m) and 1.2km Approach Roads in Cross River State;

iii. Completion of the Dualization of Kano-Maiduguri Section II: (Wudil -Azare) in Kano and Bauchi States (117.77 km Dual);

iv. Completion of the Dualization of Kano-Maiduguri Section III: (Azare-Potiskum) in Bauchi and Yobe States (101.84km Dual);

v. Completion of Joint Border Bridge at Mfum/Ekok on the Nigeria Cameroun Border (406km);

vi. Completion of the Rehabilitation of Vandeikya-Obudu road in Benue State (25km);

vii. Completion of the Rehabilitation of Oshogbodo-Otukpo road in Benue State (53km);

viii. Completion of the Rehabilitation of Sokoto-Tambuwal -Jega-Kontagora-Makera Road in Sokoto /Kebbi States (305km);

ix. Completion of the Rehabilitation of Gombe-Numan-Yola Road (Gombe-Kaltungo Section) in Gombe State (68km);

x. Completion of the Rehabilitation of Nnenwe-Oduma-Mpu-Uburu road in Enugu/Ebonyi States (40.27km;

xi. Completion of the Rehabilitation of Nguru-Gashua-Bayamari Road Section II (Gashua-Bayamari) in Yobe State (25km);

xii. Completion of the Dualization of Abuja-Lokoja Road Section I (Abuja-Abaji Road & International Airport Link Road Junction-Sheda Village Junction) in FCT (42km);

xiii. Completion of the Rehabilitation of Calabar-Ugep-Katsina Ala Road Section II (Ugep-Katsina Ala) In Benue/ Cross River States (30km);

xiv. Completion of the Rehabilitation of Alesi-Ugep (Iyamoyung-Ugep) Section in Cross River State (67.10km) amongst others;

xv. Establishment of the Highway Development and Management Initiative (HDMI);

xvi. Successful implementation of the Road Infrastructure Development and Refurbishment Investment Tax Credit Scheme (RIDRITCS) being utilized to fund Apapa-Oshodi-Oworonshoki Road in Lagos State (km), Obajana-Kabba Road in Kogi State (km), Bodo-Bonny Road in Rivers State (km) and five other recently awarded projects under the scheme namely: Construction of Bama-Banki Road in Borno State (49.153km), Construction of Dikwa-Gamboru-Ngala Road In Borno State (49.557km), Construction of Nnamdi Azikiwe (Western Bypass) Road: Command Sec.Junction - Kawo (21.447km), Reconstruction of Deep Sea Port Access Road in Lagos State through Epe to Sagamu-Benin Expressway in Lagos/Ogun States (54.24km), Reconstruction of Obelle-Ilaro-Papalanto-Shagamu Road in Ogun State (100.5km); and

xvii. Approval of the Federal Roads and Bridges Tolling Policy.

3.1.3 Aviation Infrastructure

3.1.3.1 The current state of Aviation infrastructure

The aviation industry supports USD 2.7 trillion (3.5 per cent) of the world's gross domestic product (GDP). Civil aviation is a critical element in Nigeria's transportation system and indeed its economy.

Nigeria Civil Aviation Authority as at June 2020, revealed that Nigeria has twenty-two (22) Airports and many regulated Airstrips and Heliports; 23 active domestic airlines; 554 licensed pilots; 913 licensed Engineers, and 1,700 cabin personnel. Nigeria, being Africa's most populous country, is an important destination for over 22 foreign carriers. Nigeria currently has Bilateral Air Services Agreements (BASA) with over 78 countries. As at 2019, Nigeria had 17 registered air carriers with an inventory of 73 operated registered aircraft, annual passenger traffic on registered air carriers of 3,223,459, and annual freight traffic on registered air carriers of 22,400,657 mt-km.

According to the National Bureau of Statistics, air transport's contribution to the country's Gross Domestic Product marginally increased from 0.12 per cent to 0.14 per cent between 2018 and 2019 respectively. The Aviation industry's contribution to the country's Nominal Gross Domestic Product rose to N198.62 billion in 2019. The industry contributed N149.35 billion to the GDP in 2018 but increased by 32.9 per cent to N198.62 billion recorded at the end of 2019. The aviation sub-sector recorded the fastest growing activities in the transportation sector in the fourth quarter of 2019. Although the COVID-19 pandemic greatly affected the Aviation sub-sector in 2020, government would continue to provide the necessary enabling environment for the sector to continue to thrive post-COVID-19 and during the plan period.

Aviation remains a critical element in Nigeria's transportation system and its contribution to GDP is growing. Aside the state of infrastructure, there is a need to improve management practices, quality of policy initiatives, and ensure enabling business and investment environment. Figure 3.3 below shows the number and location of International and Domestic Airports in Nigeria.

Figure 3.3: Transport – Airports in Nigeria

Source: Natural Earth, African Development Bank (ADB).

3.1.3.2 Institutional Structure

Nigeria Aviation industry is divided into the following components: Nigerian Airspace Management Agency (NAMA), Nigeria Civil Aviation Authority (NCAA), and Federal Airports Authority of Nigeria (FAAN). FAAN is statutorily responsible for managing all Commercial Airports in Nigeria and provide service to both passenger and cargo airlines. NAMA is responsible for the safety of all airplanes and forestalls the intrusion of unauthorized planes (civil or military) into the country. It provides navigational facilities, air traffic services, aeronautical information services, aeronautical search and rescues services.

Nigerian Civil Aviation Authority (NCAA) is responsible for the safety and economic regulation of the aviation industry; ensuring compliance with government policies and the International Civil Aviation Organisation (ICAO) standards and recommended practices. Other agencies in the aviation industry include the Nigerian Meteorological Agency (NIMET), Nigerian College of Aviation Technology (NCAT) and Accident Investigation Bureau (AIB).

3.1.3.3 Challenges of the Aviation Sub-sector

The poor state of Nigeria's Airports can be attributed to the following challenges:

- Need to modernize and upgrade infrastructure and equipment such as terminal buildings, control towers, conveyor belts, instrument landing systems, communication equipment, runway lighting, fire tenders, etc;
- Manpower development and training on equipment handling and maintenance;
- Multiple entry points given to foreign airlines by the Nigerian government by granting multiple frequencies to foreign airlines without benefits to local carriers and the aviation industry;

- Difficulties in accessing foreign exchange by operators;
- Rising price and scarcity of Jet A 1 (Aviation Fuel); and
- Import duties on Aircraft engines and spares.

3.1.3.4 On-going efforts in the Aviation Sub-sector

Government has taken some initiatives to improve domestic capacities for air traffic management and safety. These include:

- Plans to establish Aviation University to promote research, development, and production of higher-level management manpower for the industry.
- Total Radar Coverage of the Nigerian Airspace (TRACON) project, the Mobile Tower project, and capacity building.

The objective of the TRACON project is to provide total radar coverage for the Nigerian Airspace to enhance civil and military surveillance of aircraft operating into the Nigerian Airspace. TRACON comprises of 4 primary and 5 secondary radars co-located in Nnamdi Azikiwe Abuja, Murtala Mohammed Lagos, Malam Aminu Kano, and Port Harcourt International Airports. It also has provision for 5 stand-alone Secondary Surveillance Radar to be in Talata Mafara, Maiduguri, Numan, Obubura, and Ilorin. The international airports will have a combination of primary and secondary radar and Lagos will have a simulator centre for on-the-job training of Air Traffic Controllers and Engineers. The architecture of TRACON comprises Voice Communication Systems, Voice Recording Systems, VHF transceivers, Fibre Optic, Display Consoles, Integrated aircraft billing systems and spares. The Primary Surveillance Radar has coverage of 65 Nautical Miles while the Secondary Surveillance Radar has a range of 250 Nautical Miles. The aim is for the coverage areas to overlap and provide total coverage. TRACON works by intercepting signals emitted from moving aircraft which is relayed back to the Area Control Centres for the use by the Air Traffic Control Personnel in the identification and monitoring of aircraft movement.

Changes in the scope of the project have resulted in significant delays in implementation. These range from removal of the Primary Radar, Mode of Payment, phasing of the project, an increase in the number of simulator training sites (from 1 to 40), to the construction of a new Area Control/Approach Radar building (rather than refurbishment). Delayed disbursement of project funds also led to delays in implementation. About 65 Air Traffic Controllers and more than 30 Engineers have been trained on the use of TRACON. The completion of this project has significantly enhanced air safety in Nigeria. Moreover, the subsequent acquisition of the satellite-based integrated flight tracking equipment that allows for both ground-based and flying aircraft to be tracked has further enhanced air traffic control capacities. The latter has replaced the outdated Emergency Locator Transmitter system.

The Nigerian Airspace Management Agency has also acquired motorized air traffic control tower, known as Mobile Tower, for air traffic management under emergencies. Considering that the aviation world is to implement the Global Positioning System for air navigation, NAMA has to configure the Mobile Tower with the state of art Global Positioning System receivers to keep the system current should Nigeria decide to adopt the GPS mode for air navigation. The entire tower system has backup spares to ensure its continuous serviceability. NAMA would acquire additional mobile tower to serve the Northern segment of the Nigerian Airspace.

There are also ongoing efforts to fast-track the completion of airport cargo and passenger handling terminals to increase capacity from 208,424 to 276,848 tons and 15 million to 45 million passengers respectively, by the end of 2020. Also, efforts are on-going to concession four international airports under the public-private partnership model. The facilities in-scope are the Murtala Muhammed International Airport, Mallam Aminu Kano International Airport, Nnamdi Azikiwe International Airport and Port Harcourt International Airport. Eleven airports are already

undergoing reconstruction nationwide which include Murtala Muhammed International Airport and the General Aviation Terminal (GAT), Lagos; the Nnamdi Azikiwe International Airport, Abuja; Port Harcourt International Airport, Omagwa; the Akanu Ibiam International Airport, Enugu and the Malam Aminu Kano International Airport, Kano. Others are Margaret Ekpo International Airport, Calabar, Yakubu Gowon Airport, Jos; the airports in Yola, Kaduna and Sam Mbakwe Airport, Owerri.

Other notable achievements in the aviation sector in recent times include the following:

i. Construction of New Terminal Buildings at Five International Airports, Abuja, and Port Harcourt Building already commissioned;

ii. Reconstruction of Abuja Airport Runway in 2019;

iii. Construction of 250 Capacity Cafeteria at NCAT, Zaria at 90.0 per cent completion;

iv. Reconstruction of the Rehabilitated Akanu Ibiam International Runway Airport was commissioned on August 29, 2020;

v. Installation of Automated Fire/ Smoke Training Simulator at NCAT, Zaria, 100.0 per cent completion;

vi. Construction/Refurbishment of CPD lounges at Kaduna, Kano, Abuja and Port Harcourt by NCAA at 100.0 per cent completion;

vii. Installation of thirty (30) digital screens at CPD lounges/desks at airports across the Country to display passengers' rights and obligations, and other educational / enlightenment information by NCAA at 100.0 per cent completion;

viii. Certification of Accident Investigation Bureau's (AIB) Flight Safety Laboratory by ISASI Working Group and ICAO Standard at 90.0 per cent completion;

ix. Signing of Memorandum of Understanding (MoU) between Accident Investigation Bureau (AIB) with the Nigerian Air Force in July 2020;

x. Installation of additional 63 Automatic Weather Observations Stations (AWOS) across the Country by NiMet;

xi. Upgrading of three (3) Doppler Radars at Port Harcourt, Lagos and Kano States by NiMet at 95 per cent completion;

xii. The first (1st) Africa Country to achieve: Implementation of Quality Management System leading to ISO 9001: 2015 Certification, the 2010 Certification of the Regional Training School accreditation leading to ISO 29990 and the recipient of ISO 9001: 2015 for Aeronautical Meteorological Services;

xiii. Construction of National Training Institute in Katsina to complement the Regional Training Centre at Oshodi, Lagos at 99.0 per cent completion;

xiv. Installation of New Category III Instrument Landing System (ILS) / Distance Measuring Equipment (DME) at Lagos and Abuja. Commissioning of Service Robots (CRUZR) in Abuja and Lagos International Airports, 99 per

cent completed; and

xv. Remodeling of FAAN training School and its certificate as a training institute.

Table 3.2: Approved Aviation Infrastructural Roadmap for 2020 -2025

S/N	Key Activity	Status/Expected Timeline of Implementation	
		2020	**2021-2025**
1.	Concession of Four (4) International Airports	Outline Business Case (OBC) Certificate has been reviewed by the ICRC and Compliance Certificate issued. The procurement Process commenced in Q3, 2020.	Four International Airports Concessioned. Full Implementation by 2022 -2025.
2.	Strengthening and Improvement of Safety and Security	Ongoing Project. Lagos and Abuja Certified.	Assessment of Comprehensive Security Threat and Vulnerability carried out. Full Implementation from 2021 -2025.
3.	Establishment of National Carrier	Outline Business Case (OBC) completed, Compliance Certificate issued by ICRC and revalidated on December 18, 2020. Procurement Process to commence in Q4, 2020.	Outline Business Case approved by ICRC. Full Implementation by 2021 – 2025.
4.	Development of Agro-Cargo Terminals	OBC has been submitted to ICRC for review and approval.	Agro-Cargo Terminals commences operations from 2022 – 2025.
5.	Development of Maintenance, Repair, and Overhaul (MRO) Centre	Certificate of Compliance for the OBC has been issued by the ICRC and the procurement process is at an advanced stage.	MRO Centre commences in Nigeria with Full Implementation from 2022 -2025.
6.	Establishment of an Aviation Leasing Company (ALC)	Certificate of Compliance for the OBC has been issued by the ICRC and the procurement process is at an advanced stage.	The Aviation Leasing company starts its operation by 2021, which will be reviewed in 2022 and Full Implementation from 2023 -2025.
7.	Development of Airport Cities (Aerotropolis)	OBC has been submitted to ICRC for review and approval.	Approval of Outline Business Case by ICRC by 2021. Commencement of Procurement Process by 2022. Full implementation by 2023 - 2025.
8.	Development of Five Airports Free Zones	Still at 80.0 per cent completion level. Submitted Feasibility Report (in conjunction with NEPZA) to HMIT&I.	Five Airports Free Zone operating in Nigeria by 2021. Full implementation by 2022 -2023

Source: Federal Ministry of Aviation

3.1.4 Rail Infrastructure

3.1.4.1 The current state of Rail infrastructure

The Federal Government had invested more effort and resources in the last five years (2016 - 2020) than in other years to restore the rail sub-sector through the execution of various railway projects across the country under different financing methods. The investments in the sector are expected to make the railway sub-sector a leading means of transport in the Transportation Sector. Most of the Rail sub-sector projects largely consist of rehabilitation of existing narrow rail gauge lines and construction of new standard gauge rail lines, for instance, the Lagos-Kano and Abuja-Kaduna standard gauge rail lines. Efforts to expand train services to many more parts of the country received a boost with the completion of the Abuja Inter-City Metro railway line and the test running of Itakpe-Warri and Lagos-Ibadan rail lines (see Table 3.3). It is envisaged that full operationalization of the rail lines will further ease the movement of goods and passengers from the North to South and vice versa in Nigeria.

Nigeria rail network consists of 4,332 track km and 3,505 route km, characterized by sharp curves and steep gradients in many sections. Only 137 km of the track is in the form of double track and all of that is in the Western corridor. The Nigerian Railway network runs from the Southwest (Lagos) to Northwest (Nguru) and from the South-South (Port Harcourt) through Kafanchan to the North-East (Maiduguri). The 3,505 km network is built on a Cape Gauge of 1,067 mm.

In summary, the Nigerian Railway Corporation's infrastructure and facilities include:

- 1,496 km of gauge rail line, comprising 827 km of narrow-gauge sidings and loops and 669 km of standard gauge rail line.
- 577 km of branch lines, made up of 304 railway stations (280 narrow gauge and 24 standard gauge) and 273 railway outstations, with 434 railway bridges across the entire track length (371 for narrow gauge and 63 for standard gauge).

Table 3.3 Nigerian Railway System

S/N	Section	Year Constructed	Distance	Type of Line	Status	Remarks
1	Lagos - Ibadan	1898 - 1901	193 km	Narrow Gauge	operational	Requires maintenance
2	Ibadan - Jebba	1901 - 1909	295 km	Narrow Gauge	operational	Requires maintenance
3	Kano - Baro	1907 - 1911	562 km	Narrow Gauge	operational	Requires maintenance
4	Jebba - Minna	1909 - 1916	225 km	Narrow Gauge	operational	Requires maintenance
5	Port Harcourt - Enugu	1914 - 1916	243 km	Narrow Gauge	operational	Requires maintenance
6	Enugu - Makurdi	1916 - 1924	220 km	Narrow Gauge	operational	Requires maintenance
7	Kaduna - Kafachan	1922 - 1927	179 km	Narrow Gauge	operational	Requires maintenance
8	Kafachan - Jos	1924 - 1927	101 km	Narrow Gauge	operational	Requires Rehabilitation
9	Kuru - Bauchi	1958 - 1961	166 km	Narrow Gauge	operational	Requires Rehabilitation

S/N	Section	Year Constructed	Distance	Type of Line	Status	Remarks
10	Bauchi - Gombe	1961 - 1963	155 km	Narrow Gauge	operational	Requires Rehabilitation
11	Gombe - Maiduguri	1963 - 1964	302 km	Narrow Gauge	operational	Requires Rehabilitation
12	Itakpe - Ajaokuta	1986 - 2020	277 km	Standard Gauge	operational	Newly Commissioned
13	Ajaokuta - Warri	1991 - 2020	275 km	Standard Gauge	operational	Newly Commissioned
14	Port Harcourt - Onne		19 km	Standard Gauge	operational	
15	Abuja (Idu) - Kaduna	2009 - 2016	186.5 km	Standard Gauge	operational	
16	Lagos - Ibadan (Double-Track)	2017 - date	156.5 km	Standard Gauge	Construction	93% Completed
17	Lagos - Apapa Port	2017 - date	6.516km	Standard Gauge		
18	Ibadan - Minna	To commence 2021	460 km	Standard Gauge	Aerial Survey Ongoing	Design and Preliminary Works ongoing
19	Minna - Abuja	To commence 2021	127 km	Standard Gauge		
20	Kaduna - Kano	To commence 2021	203 km	Standard Gauge		
21	Kano - Maradi (Niger Republic)	To commence 2021	212 km	Standard Gauge		
22	Itakpe - Abuja	To commence 2021	213 km	Standard Gauge		
23	Warri - Warri Town and Port	To commence 2021	214 km	Standard Gauge		
24	Branch line to Port Harcourt to Maiduguri:	To commence 2021				
a	Goniri - Gashua	216 km				
b	Elelenwa - Bonny Port	56 km				
c	Onne - Onne Port	8.7 Km				
d	Elelenwa - Owerri	85.4 km				
25	Coastal Railway Line: Lagos- Shagamu - Ijebu Ode - Ore - Benin City - Sapele - Warri - Yenagoa - Port Harcourt -Aba - Uyo - Calabar and Section from Benin City - Abudu - Agbor - Uko - Ogwashiukwu - Asaba - Onitsha	To commence 2021	1,402 km	Standard Gauge		

Source: Federal Ministry of Transportation.

The rail sub-sector, after years of neglect and dilapidation, is being resuscitated. The 25-year railway strategic vision provides the future path for the sub-sector. This is evident in the Government's effort as described below:

- Restructuring of the NRC Management structure.
- Complete rehabilitation of the Western line.

- On-going rehabilitation of the Eastern line.
- Rehabilitation and procurements of rolling stocks, workshop equipment, and machinery.
- Initiation of Public-Private Partnership Opportunities (for instance the 3,505 kilometres narrow gauges rail system, comprising Lagos-Kano; Port Harcourt-Maiduguri, and Zaria-Kaura Namoda) has been slated for a concession to a consortium of reputable international operators.

3.1.4.2 Specific Achievements of the Rail Sub-sector

i. Complete rehabilitation of the Western rail narrow-gauge corridor (Lagos-Kano);

ii. Completed and commissioned the 186km Abuja-Kaduna standard gauge rail lines for commercial operation. Fencing of the residential section of the corridor is on-going;

iii. Completed and commissioned the 302km Warri-Itakpe standard gauge rail lines for commercial operation;

iv. Completed the 185.5km Lagos-Ibadan double standard gauge rail lines with extension to Apapa seaport. Test running of train services is ongoing on this lines. The terminals and stations are nearly completed, commissioning is proposed for July 2021;

v. Procured and commissioned seven (7) new Standard Gauge (SG) Coaches for train services on Itakpe-Warri rail line;

vi. Took delivery of six (6) new SG Locomotives, nine (9) Freight Locomotives, two (2) Diesel Shunters and 44 Coaches;

vii. Procured two (2) Overhead Cranes for workshops, 50 Tons Capacity Re-Railing Jacks, two (2) Battery-Powered Shunter for Narrow-Gauge lines;

viii. The Upgrade and Modernization of Communication and Signaling System in the rail sub-sector.

Table 3.4 RAIL TRANSPORT SERVICES

S/N	Project Title	Location			Project Value ($)	Commencement Date	Completion Date	Status of Implementation	Remarks
		Zone	State	GPS Coordinate					
1	Segment 1: Completion of Abuja - Kaduna	North Central / North West	FCT / Niger / Kaduna	Abuja: 9°03'37"N 7°20'40"E to Kaduna: 10°32'52"N 7°21'21"E	1,040,028, 526.58	20th Feb. 2011	2022	98%	Commercial Operation commenced in July 26, 2016 after flagoff by Mr. President. outstanding Works to bring it to practical completion involves the Additional Works: construction of protective fence on the Railway Corridor. Expected to be completed in 2022 upon adequate budgetary provision and release of funds

S/N	Project Title	Location			Project Value ($)	Commencement Date	Completion Date	Status of Implementation	Remarks
		Zone	State	GPS Coordinate					
2.	Segment 2: Completion of Lagos - Ibadan and its associated Additional Works	South West	Lagos, Ogun, Oyo	Lagos: 6°29′54″N 3°22′34″E to Ibadan: 7°33′31″N 3°53′45″E	2,238,659, 586.35	5th May, 2017	2023	80%	Commercial Operation Commenced on June 10, 2021 after flagoof by Mr. President. Outsatnding Works to bring it to a practical completion involces additional works such as contruction of 7 Overpass Bridges in Lagos, Installation of Signal and Telecommunication System, Power Supply, Construction of the Quay Side of the Port
3.	Segment 3: Implementation Kaduna - Kano	North West	Kaduna, Kano	11°54′46″N 8°27′18″N	1,221,716, 655.82		2023	5%	Suvery and Design Stage and Presently on Acquisition of Right of Way
4.	Rehabilitation of Itakpe - Ajaokuta Rail line Permanent Way (Track Works) in Agbor Facility Yard	South South, North Central.	Delta, Edo, Kogi	Itakpe: 7°37′17″N 6°19′20″E to Warri: 5°28′06″N 5°48′42″E	N51,386,6 98,375.12	2009	2022	95%	Completion of Overpass Bridges ongoing
5.	Completion Itakpe-Ajaokuta-Warri Rail Track and Structures (12 Railway Stations)	South South, North Central.	Delta, Edo, Kogi	Itakpe: 7°37′17″N 6°19′20″E to Warri: 5°28′06″N 5°48′42″E	178,730, 262.37	2017	2021	100%	Final Inspection Stage

S/N	Project Title	Location			Project Value ($)	Commencement Date	Completion Date	Status of Implementation	Remarks
		Zone	State	GPS Coordinate					
6.	Design, Manufacture, Supply and Installation of Rolling Stock, supply of spareparts and maintenance Equipment for the ongoing Railway Modernization Project	South West, North Central, South South	Abuja - Kaduna Line; Lagos - Ibadan Line; Ajaokuta Warri Line	Abuja: 9°03′37″N 7°20′40″E to Kaduna: 10°32′52″N 7°21′21″E Lagos: 6°29′54″N 3°22′34″E to Ibadan: 7°33′31″N 3°53′45″E Itakpe: 7°37′17″N 6°19′20″E to Warri: 5°28′06″N 5°48′42″E	521,492, 645.85	10th April, 2018	2022	75%	Awaiting supply of Mainatenance Equipment and spareparts. With adequate budgetary provision and release of funds, the project would be practically completed by second quarter of 2022
7.	Installation of Signal and Telecommunication System on Itakpe - Ajaokuta - Warri Railway Line	South South, North Central.	Delta, Kogi, Edo	Itakpe: 7°37′17″N 6°19′20″E to Warri: 5°28′06″N 5°48′42″E	N10,930,40 6,536.00	2016	2022	27%	ongoing
8.	Water Supply Scheme:IA1 Eganyi (Km 16+000)	North Central	Kogi		59,438, 489.88	2017	2021	98%	Awaiting testing and commissioning
9.	Water Supply Scheme:IA2 Adogo (Km30+236)	North Central	Kogi	Adogo: 7°38′11″N 6°20′07″E	67,420, 199.39	2017	2021	59%	
10.	Water Supply Scheme: AW1 Ajaokuta (Km02+091)	North Central	Kogi	Ajaokuta: 7°39′13″N 6°21′41″E	58,774, 190.48	2017	2021	95%	
11.	Water Supply Scheme: IA2 Itogbo (Km36+860)	South South	Kogi	Itogbo: 7°08′45″N 6°39′06″E	66,215, 067.77	2017	2021	98%	
12.	Water Supply Scheme: AW3 Agenebode (Km62+315)	South South	Edo	Agenebode: 7°06′01″N 6°40′43″E	58,326, 518.25	2017	2021	98%	
13.	Water Supply Scheme: AW5 Ekehen (Km124+275)	South South	Edo	Ekehen: 6°33′24″N 6°13′34″E	58,616, 735.10	2017	2021		
14.	Water Supply Scheme: AW6 Igbanke (Km154+060)	South South	Edo	Igbanke: 6°21′41″N 6°15′01″E	68,898, 522.00	2017	2021	98%	

S/N	Project Title	Location			Project Value ($)	Commencement Date	Completion Date	Status of Implementation	Remarks
		Zone	State	GPS Coordinate					
15.	Water Supply Scheme: AW7 Agbor (Km179+960)	South South	Delta	Agbor: 6°09′26″N 6°13′03″E	68,187, 896.70	2017	2021	92%	
16.	Water Supply Scheme: AW8 Abraka (Km215-090)	South South	Delta	Abraka: 5°50′35″N 6°06′36″E	59,438, 489.88	2017	2021	92%	
17.	Water Supply Scheme: AW9 Okpara (Km242+610)	South South	Delta	Okpara: 5°39′46″N 5°57′04″E	70,030, 639.89	2017	2021	98%	
18.	Water Supply Scheme: AW1 Ujevwu (Km269 +553)	South South	Delta	Ujevwu: 5°31′06″N 5°50′52″E	70,070, 847.00	2017	2021	98%	
19.	Fencing Work: Abraka (Km224+250)	South South	Delta	Abraka: 5°50′35″N 6°06′36″E	316,818, 719.33	2017	2021	98%	
20.	Fencing Work: Oruwhorum (Km264+300)	South South	Delta	Ujevwu: 5°31′06″N 5°50′52″E	396,140, 334.40	2017	2021	100%	
21.	Fencing Work: Ojevwu -Egiegi (Km270+200)	South South	Delta	Ujevwu: 5°31′06″N 5°50′52″E	411,577, 678.92	2017	2021	100%	
22.	Fencing Work: Oria (Km226+750)	South South	Delta	Ujevwu: 5°31′06″N 5°50′52″E	308,406, 697.55	2017	2021	100%	
23.	Construction of Kano - Maradi (Niger Republic) Railway Project with Line to Dutse in Jigawa State	North West	Kano, Katsina, Jigawa, Niger Republic	Site not Acquired	1,959,744, 723.71		2023	-	EIA ongoing
24.	Construction of Port Harcourt to Maiduguri Eastern Railway Project, Bonny Deep Sea Port and Port Harcourt Industrial Park Projects.	South East, South South, North Central North East	Rivers, Imo, Abia, Enugu, Benue, Nassarawa, Plateau, Bauchi, Gombe, Borno	Existing Narrow-Gauge Line (Other site required not acquired)	3,020,279, 549.00		2023	-	About to Commence, Advance Payment effected. Awaiting commencement of Land Acquisition and discussion is ongoing on source of fund
25.	Construction of Abuja - Itakpe and Aladja (warri) - Warri Port and Refinery including Warri New Harbour	South South, North Central.	Delta, Kogi, FCT	Site not Acquired	3,089,203, 142.00	2020	2023	-	discussion is ongoing on source of fund

Source: Federal Ministry of Transportation

3.1.5 Maritime Infrastructure

The maritime Sub-sector is the backbone of international trade. A well-developed maritime sub-sector would play a fundamental role in driving the future growth of trade contribution to GDP. The maritime sub-sector was affected by the competitiveness of global maritime businesses and the attractiveness of the sub-sector should at least be the same for any geographically mobile activity. There is a need, therefore, to enhance the competitiveness of Nigerian ports against other ports in the West and Central African sub-regions, resulting in the development of deep seaports, driven by the private sector under the appropriate regulatory framework.

Within the country, the dredging of major rivers and construction of river ports and jetties is expected to reduce the cost of business by linking the hinterland and mining and extractive industries to the cities at a much-reduced cost. This will lead to an increase in economic activities in most parts of the country especially in towns and depots along the river and the hinterland. To ensure sustainable development in the sub-sector, a boatyard project at Oron was designed for the building of ships and primarily to provide practical experience for cadets and seamen on building, repairs, and maintenance of Seagoing vessels. When completed it is expected to reduce capital flight, improve manpower development in the sub-sector and boost local boat building capacity in the country.

3.1.5.1 Current State of Infrastructure in the Maritime Sub-sector

Nigeria has significant and diverse marine resources that are its waters and along its coastline of 853 kilometers bordering the Atlantic Ocean in the Gulf of Guinea and a maritime area of 46,000sq.km. Nigeria, with her huge natural maritime resources, is a major hub for local and international trade in Africa. The maritime sub-sector, through its contribution to economic activities and interlinks with various sectors, is fundamental to the Nigerian economy. However, the huge potential remains to be harnessed in this sector. Nigeria has substantial domestic water resources that include rivers, creeks, lagoons and lakes, and an extensive coastline of about 853 km. There are 12 major inland rivers with about 3,800 km that are navigable. The Niger and Benue rivers (including their major tributaries and estuaries) are the principal waterways. These waterways are the major transportation routes linking Apapa, Tin Can, Warri, Port Harcourt, Onne, and Calabar seaports.

Three Deep Seaports, namely the Lekki and Badagry deep seaports in Lagos State and Ibom Deep Seaport in Akwa Ibom State which are projected to have a minimum depth of 16.5 meters with the capacity to berth large super Panamax vessels, are expected to make the Nigerian Ports a regional hub for cargoes destined for West and Central Africa. These Ports will inevitably cause an increase in revenue generation, employment opportunities, and attracting tonnage for the Nigerian Ship Registry.

Figure 3.4: Transport –Ports in Nigeria

Source: Natural Earth, African Development Bank.

At present, the Nigerian seaports comprise 93 general cargo berths, 5 RORO berths, 7 bulk solid cargo berths, 11 bulk liquid cargo, and 63 buoy berths as well as 650 different cargo handling equipment.

3.1.5.2 Institutional Structure of the Maritime Sub-sector

The institutional and regulatory structure of the maritime industry is largely divided among two major agencies; Nigerian Ports Authority (NPA) and Nigeria Inland Waterways Authority (NIWA). NPA is vested with the responsibility of maritime transport while NIWA is in charge of inland water infrastructure and regulation of operations on the inland waterways.

NIWA regulatory activities include issuing licenses for inland navigation, piers, jetties, and dockyards; examining and survey of inland watercraft and shipyard operators, granting permits and licenses for sand dredging, pipeline construction, dredging of slot, and approve designs and construction of inland river crafts. NIWA also performs engineering services (such as the construction of inland river-port and jetties. It also undertakes capital and maintenance dredging; engineering design of river ports), environmental services (pursuing an ecologically sound waterway policy), and safety and security of the waterways.

3.1.5.3 Challenges of the Maritime Sub-sector

The poor state of the Nigerian maritime system can mainly be attributed to the following challenges:

- A high rate of sediment build-up along navigable channels;
- Physical obstruction, including wrecks, rocks, outcrops, and aquatic weeds;
- Inadequate government investment in infrastructure for inland water transport, including inadequate river port infrastructure;
- Poor landside connections to river ports;
- Poor communications and navigational aids;
- policy instability;
- The multiplicity of government agencies in the ports;
- Port congestion problems;
- Inadequate power supply for effective port operations;
- Absence of economic regulation; and
- Inadequate infrastructure to accommodate the current and emerging traffic in the seaports.

3.1.5.4 On-going Efforts to Improve the Maritime Sub-sector

Overcoming the challenges in this sector will require a holistic and comprehensive approach that takes into consideration the interrelation of seaports with other sectors of the economy. The planning of port infrastructure and the regulation should be achieved in the context of integration and inter-modalism to accomplish the desired transformation in the sector. It is imperative to ensure that about 3,000 km of seasonally navigable waterways are made operational all year round to make inland water transportation meaningfully impact the national economy, particularly in the area of cheap and affordable transport.

The Federal and State Governments of Nigeria through the Nigerian Ports Authority is partnering with the private investors to develop eight (8) deep seaports namely Lekki Deep Seaport, Ibaka Seaport, Age Deep Seaport, Badagry Deep Seaport, Olokola Deep Seaport, Ogidigbe Port, Bonny Deep Seaport and Bakassi Deep Seaport.

The Badagry Deep Seaport project is estimated at N216bn (USD1.35bn). The port will stretch across an area of 90 hectares and expected to handle 4mn tonnes of cargo. In its first phase of the three phases, the container terminal at the new port would have two berths totaling 650m, with a draught of 14.5m of water alongside it. Its annual box-handling capacity would be 1mn twenty-foot equivalent units (TEUs) initially and to be expanded in subsequent phases. Further to the container-handling facilities, the new port at Badagry would also be able to handle roll-on-roll-off (ro-ro) and general cargo and have a small free zone.

The government has embarked on some transformation process to improve inland waterways services as follows:
Dredging of the lower River Niger from Baro (Niger State) to Warri (Delta State), a distance of 532km, and provision of buoys for the dredged channel;

- Establishment of an Inland Waterways Police Command;
- Procurement of 14 security patrol boats;
- Initiation of the construction of 6 new river ports in Baro, Lokoja, Makurdi, Owerrita, Degema, Onitsha and Oguta which are to be developed as PPPs;
- Preparation of draft bill for the reform of the National Inland Waterways Authority which is currently undergoing final review; and
- Ongoing year-round maintenance and clearance of all navigable waterways.

3.1.5.5 Government Effort in Addressing the Sub-regional Safety and Security challenges

Government has taken steps to provide safety and security in the Nigeria maritime sub-sector and the Gulf of Guinea, with the deployment of the Integrated National Security and Waterway Protection Infrastructure, popularly called the Deep Blue Project. The Deep Blue Sea Project was borne out of collaboration between the Ministries of Transportation, Defence and Office of the National Security Adviser to the President (ONSA). This has brought a robust maritime safety and security architecture to ensure a conducive and sustainable environment for maritime business.

The implementation of the project began in 2018 and has progressed significantly within the period under review. Its full take-off in 2020 holds great benefits for the Nigerian maritime sub-sector.

The components of the Deep Blue Project are as follows:

i. **Facility:**
   a)Technology-driven Command and Control Communications and Computer intelligence (4i) Centre.
   b)Training facilities
   c)Operational bases.

ii. **Equipment:** Assets for monitoring, compliance and enforcement (Patrol and interdiction)

iii. **Process:** Training/capacity building for personnel/Intervention Teams.

3.1.5.6 Specific Achievement of the Maritime Sub-sector

i. Introduction of Eto: Electronic call-up system (E-call-up) to substantially address the problem of traffic gridlock using technology in Lagos Ports.

ii. Procurement of Marine Crafts Complements and Comprehensive Rehabilitation of Existing six (6) new Tugboats

namely; MT Majiya, MT Daura, MT Ubima, MT Uromi, MT Musawa and MT Ikoro-Ekiti to enhance the Authority's capacity to render efficient towage services and berth large vessels.

iii. Total reconstruction of Wharf Road Apapa that has not been attended to for well over 10 years;

iv. Rehabilitated 41km of road network in the ports and their environs;

v. Total infrastructure upgrade at the NPA Sports Ground with the reconstruction of a state-of-the-art Staff Club House;

vi. Rehabilitation of Ikorodu Lighter Terminal: The rehabilitation by NPA of this Terminal which is dedicated for exportation of Agro-produce will boost the country's agricultural productivity and promote the government's policy on economic diversification;

vii. Commissioning of the Port Training Institute, Simulator Facility which was conceived to boost human-capacity development and the training of marine personnel and simulation of operational capabilities of port facilities to handle vessels of uncommon size and configuration;

viii. Navigational Charting and Dredging of the Badagry Creek towards Ijegun-Egba-Ojo axis. Prior to the assumption of office of the present Management, the Badagry creek area was uncharted and considered risk to navigation. This has opened up new business opportunities to the authority and the shipping community;

ix. Remedial Dredging Works and Provision of Aids to Navigation for the Escravos Access Channel. This channel has not been dredged for over three decades, thereby reducing the optimization of operational potentials. Since dredging works was done, Warri port has started receiving liner vessels since the completion of dredging works;

x. Rehabilitation of Control Towers in Delta, Lagos and Tin Can Island Ports. These have not undergone any major maintenance to restore the facilities to original installation standard since construction in the 1970s;

xi. Construction of Signal Station Buildings at Ogulagha, Delta State and Calabar, Cross River State to aid collation, control and dissemination of signal information between vessels and Port harbour departments;

xii. Establishment of Repair and Maintenance Workshop at Onne Port Complex. This has boosted repair capacity of the Vessel Management Department for quick intervention repairs;

xiii. Berthing of Egina FPSO at LADOL: This is a milestone achievement considering the size of the vessel at LOA of 330 meters and GT of 219,830 which was calling at the Lagos Port Complex for the first time. The feat is unprecedented in the ship handling history of the Authority;

xiv. Creation of an Archive Department for better document management and preservation of institutional memory. The first of its kind since the inception of the Authority;

xv. All financing contracts for the Lekki Deep Sea Port Project were successfully signed and the project reached Financial close on 2nd December, 2019, after a lengthy transaction process.

Table 3.5: Specific Achievements of Inland Waterways Sub-Sector

S/N	PROGRAMMES/PROJECTS	LOCATION
1.	Completed and Commissioned Baro Inland Port	Baro, Niger State
2.	Construction of Ilama-iwopin Jetty, Ogun State.	Ilama-iwopin Jetty, Ogun State
3.	Construction of Jetty at Odekpe, ogbaru LGA, Anambra State.	Ogbaru, Anambra State
4.	Construction of NIWA Jetty at Marina, Lagos	Marina, Lagos
5.	Reconstruction of Staircase and Rehabilitation works at Yenagoa Jetty 1.	Yenagoa, Bayelsa State
6.	Completion of Jetty construction at Yenagoa Jetty 2	Yenagoa, Bayelsa State
7.	Construction of Internal Roads and Fencing of Yenagoa Jetty 2.	Yenagoa, Bayelsa State
8.	Construction of Shore protection works at Yenagoa Jetty 2.	Yenagoa, Bayelsa State
9.	Construction of Boat Terminal at Bakin-Kogi in Yola, Adamawa State.	Bakin-Kogi in Yola Adamawa States.
10.	Construction of Boat Terminal at Wuro-Boki, in Yola, Adamawa State	Boki in Yola, Adamawa State
11.	Improvement of berthing Facilities at Lokoja Dockyard Phase 1	Lokoja, Kogi State
12.	Provision of floating Jetties at Lekki Phase 1 and Oworonshoki to ease Commuters hardship as a result of the closure of the Third Mainland Bridge in Lagos State.	Lekki Phase 1 and Oworonshoki, Lagos
13.	Echo Sanding, Side Scanning, GPS studies and removal of shallow wrecks.	Agbara Water, Lagos
14.	Echo Sanding, Side Scanning, GPS studies and removal of shallow wrecks.	Oyingbo Water, Lagos
15.	Echo Sanding, Side Scanning, GPS studies and removal of shallow wrecks.	Porto Novo Creek, Lagos
16.	Mechanical clearing of floating debris, water hyacinth, waste etc.	Oworonshoki and Oyingbo Waterfronts, Lagos
17.	Mechanical clearing of floating debris, water hyacinth, waste etc.	Porto Novo Creek, Ijegun and Agbara Waterfronts, Lagos
18.	Mechanical clearing of floating debris, water hyacinth, waste etc.	Epe Waterfronts, Lagos
19.	Procurement and Development of 30-32 Passengers Moving Ferry	Yauri, Kebbi State
20.	Mechanical clearing of floating debris, water hyacinths, wastes etc.	Ebute Ipakodo Creek and Ikorodu Waterfronts, Lagos

Source: Federal Ministry of Transportation

3.1.6 Urban Transport

Urban transportation in Nigeria is largely an unregulated small-scale market, using a combination of para-transit modes consisting of shared taxis, mini-buses, motorcycles, and converted motorcycles known as 'Keke NAPEP'. It is in Lagos and Abuja that conventional buses like those in use in modern cities in other parts of the world are used. The use of para-transit modes is dominant in Nigeria. Nigeria is however one of the countries in the world with densely populated cities of over six million people where urban transport system is not fully developed.

Urbanization has been one of the dominant contemporary processes. A growing share of the global population now lives in cities. Considering this trend, urban transportation issues are of foremost importance to support passengers

and freight mobility requirements of large urban agglomerations. Transportation in urban areas is highly complex because of the modes involved, the multitude of origins and destinations, and the amount and variety of traffic. Traditionally, the focus of urban transportation has been on passengers as cities were viewed as locations of utmost human interactions with intricate traffic patterns linked to commuting, commercial transactions, and leisure/cultural activities.

Urban transportation takes place on land, waterways, and in the air. The movement on land is characterized by private automobiles, walking, bicycles, motorcycles, tricycles, buses, and coaches. The rail system comprises surface rail, tram, metro lines, subways, and underground while the inland waterways are made up of the lagoons, creeks, ports, and sometimes the lakes on which both ferries and hovercrafts are the major vehicles for mobility within the cities. City transport by air is usually by helicopter, especially in mountainous areas, and by overhead cables. The seaports serve as the interface between the land and the sea.

Nigerian roads are generally designed to accommodate prevailing and future traffic loadings over a period of 15-20 years. However, inadequate maintenenance, periodic flooding due to poor drainage tend to produce inadequate capacity and poor conditions, leading to traffic congestion, reduced vehicle productivity, loss of man-hour, and increased vehicle operating costs. Nigerian cities also feature inadequate road furniture such as pedestrian facilities and bus stops/shelters/public conveniences and lack of other infrastructures such as towing vehicles and traffic control devices.

Many cities are seriously challenged by growth in the urban population which is rising rapidly. More than half of Nigeria's population is estimated to live in urban regions. Lagos alone was estimated to grow by over 13.6 per cent between 2017 and 2020 and will continue to be one of Africa's largest cities.

The rapid growth of the urban population puts serious pressure on existing urban facilities and infrastructure of which physical mobility is included. The challenge, therefore, is how to use the available urban space to meet the conflicting and ever-increasing demands for infrastructure and services and the overall development of the city.

Demand is high in most cities relative to the capacity of the system to accommodate traffic flow. Traffic congestion in cities is widespread, with travel times over two hours in Lagos and Mararaba – Abuja corridor, among others. Traffic control devices need substantial improvement in some cities, due to high congestion levels, with traffic standing still for up to 30 minutes at a time. In Lagos alone, over 1.00 million trips are made daily. Car ownership is low, but congestion levels are still high, implying that saturation levels of car ownership in the cities have been exceeded. Nigeria's transport infrastructure stock is inadequate for the size of the economy and constitutes a major cost and constraint for both large and small businesses. Investments in strengthening Nigeria's infrastructure will make a significant contribution to building a competitive economy. Given the scale of the investment required, partnering with the private sector will be critical. Therefore, significant effort will be required to attract private sector investment to ensure that the execution of the agreed priorities are timely and effectively delivered.

Reforms are thus needed in the urban transport sector to institute an effective mass transit system and develop a capacity for public transport planning, operation, and regulation. Furthermore, a key requirement is the development of integrated spatial planning and urban transport policies as the basis for determining infrastructure and public transport service development needs/priorities.

Some of the challenges faced in urban transportation planning include:

- Lack of Legislative and policy frameworks that will enhance the entire transport sector guaranteed safety in every mode of transportation.
- Inadequate result-oriented and didactic training, research, and development in all areas of transportation, including transport policy administration and management.
- Mitigating pollution arising from all the modes of transportation.
- Making transportation affordable and accessible as a social right and to extend its benefit to the disadvantaged – the poor, elderly, school children, the physically challenged.

To address the above, it requires improvement of the virility of the urban transport system, to ensure its people-centeredness, which underlines a strategic conceptualization that sees the Nigerian urban transport system as part and parcel of national development aspiration.

Recently, the government had taken some steps to improve the sector by signing executive order covering the administration of the ports including the water sports and the seaports. The law amongst others provides for:

- Banning illegal reception for non-designated persons at airports.
- Processing of business visas within 2 days and Instant prosecution of bribe-takers
- Commencement of 24-hour operations at the Apapa Port, and
- An outright ban of touting by officials or unofficial persons at all airports, land, and seaports in Nigeria.

3.1.7 Specific Challenges across the Sub-sector

Air Transport

i. Poor utilization of the Bilateral Air Service Agreement (BASA) due to the absence of national carrier and the limited capacity of indigenous airlines.

ii. Most indigenous airlines do not have the required capital base which makes it difficult for them to procure aircraft that meet a world-class standard that will allow them to fly internationally. The absence of a national carrier for the utilization of BASA frequencies in reciprocity is a challenge.

iii. Exit and reduction in the frequency of foreign airline operations. Some foreign airlines recently withdrew their operation out of the country, while some reduced the frequency of their flights into the country due to difficulties associated with the repatriation of proceeds from ticket sales.

iv. Also, due to the high cost of aviation fuel, some foreign airlines have resorted to flying to neighbouring countries for technical stops.

Inland Waterways

i. The high rate of siltation and sedimentation has been the main limitation to navigation on the waterways as the required depth of water and average velocity discharge for vessels is drastically reduced by the accumulation of silt/debris (sand, gravels, boulders, etc.) resulting from sediments transported.

ii. Delay in the passage of outstanding National Inland Waterway Authority Bills at the National Assembly. The low rate of private sector investment in infrastructure development is a fall-out of the delay in the passage of the NIWA Act.

Maritime

i. The collapse of Cargo evacuation corridors leading to difficulties in cargo movement from the ports to their destination thereby resulting in high logistics costs.

ii. Delay in the passage of outstanding Bills at the National Assembly (National Transport Commission bill, port and harbour bill).

iii. Lack of berths for cadets' sea time training- This is the major challenge faced by the Maritime industry in bridging the indigenous manpower gap. Eighteen months' sea training is a mandatory requirement for STCW Certification training for cadets. This requirement is lacking because of absence of a training berth.

iv. Unfavourable Terms of Trade: Currently, our imports are based on Cost Insurance and Freight while exports are based on Free on Board. The implication is that our financial institutions and shipping companies are eliminated from participating in international trade.

Land

i. Uncompleted Narrow-gauge Track Rehabilitation: Several rail track rehabilitations and signaling projects are stalled and not progressing due to low budgetary provision.

ii. Inadequate rail connections to some of the seaports and non-rail links to the airports.

iii. Delay in the passage of the Nigerian Railway Authority Bill has slowed down the concession process.

iv. Non-approval of the National Transport Policy and the National Urban Transport Policy which makes the sector unregulated.

v. Weak synergy among the Ministries, Department, and Agencies (MDAs) in road planning, designs, funding, construction, and rehabilitation.

vi. Low patronage from the private and public sectors in the NITT training institution.

vii. Non-inclusion of the qualification of NITT graduates in the Scheme of Service.

3.1.8 Aspiration/Targets for the Transportation Sector

The overall vision of the transportation sector is "to achieve an adequate, safe, environmentally friendly, efficient, affordable, and sustainable integrated transport system within the framework of a progressive and competitive market economy for Nigeria". This vision has been broken down into the following sub-sector strategic goals.

Roads

i. Develop, operate, and maintain a safe, efficient, and effective road network;

ii. Facilitate economic and social development through the efficient movement of people and goods;

iii. Enhance connectivity between economic centres of the country;

iv. Improve linkages to other transport modes to enhance intermodal transportation; and

v. Secure and mobilize funds from the private sector, multilateral agencies, and concessionary loans for highway development.

Rail

i. Provide adequate rail infrastructure for even economic development of the country;

ii. Sustain continued rail network rebuilding and expansion so that rail services are commercially viable, both passenger and freight;

iii. Develop the capacity to sustain and continuously improve the quality of rail infrastructure; and

iv. Create an enabling environment for private sector participation in the provision of road and rail infrastructure.

Aviation

i. Provide a safe, secure, and comfortable air transport sector that is self-sustaining and pivotal to socio-economic growth, in line with international best practice;

ii. Transform the aviation industry into an efficient, profitable, self-sustaining, effective, and preferred mode of transportation;

iii. Establish Nigeria as the regional aviation hub in West Africa; and

iv. Fast-track the completion of airport cargo and passenger handling terminals to increase capacity from 208,424 to 276,848 tons and 15 million to 45 million passengers, respectively, by 2021.

Maritime

i. Provide safe, efficient, and cost-effective maritime transport services for the country, ensuring all waterways are fully navigable;

ii. Significantly increase the capacity of the maritime sector with an emphasis on inland waterways transportation;

iii. Attain enhanced performance and competitiveness of seaports;

iv. Improve port productivity and competitiveness;

v. Implement a port management model that attracts full private sector involvement and promotes market principles; and

vi. Establish Nigeria as a regional port hub.

Urban transport

i. Develop the capacity to sustain and continuously improve the quality of transport services, access control, and land use policy in major urban areas;

ii. Set the base for urban rail transport: introduce Rail Mass Transit in urban areas of over 1 million people (urban rail and rolling stock);

iii. Secure funding from the private sector, multilateral agencies, and concessionary loans to embark on Transit

Oriented Development (using Abuja transit-way as a model);

iv. Develop, operate, and maintain Urban Traffic Control systems; and

v. Improve public transport planning and regulatory function.

3.1.9 Priority Areas in the Transportation Sector

The priorities areas for the Transportation Sector as of 2020 are as follows:

i. **Priority Area 1:** Strengthen Legal Framework and approval of all Draft Policies within the sector to harmonize standard regulation and opening the sector to States/LGAs and the private sector participation;

ii. **Priority Area II:** Complete rehabilitation of all narrow-gauge rail lines and construction of standard gauge rail lines for the carriage of goods and passengers in line with the Twenty- Five (25) year Railway Master Plan;

iii. **Priority Area III:** Leveraging on Public-Private Partnership (PPP) arrangements for the development of Deep-Sea Ports, Inland Dry Ports and Vehicle Transit Areas (VTAs) to facilitate both local and international trade;

iv. **Priority Area IV:** Security and safety in the Ports and inland waterways nationwide; and

v. **Priority Area V:** Implementation of the ECOWAS protocol on trade facilitation.

3.1.10 Transport Sector Goals

Table 3.6: Transport Sector Short-term Goals

Subsector	2021	2022
Roads	• Upscale road infrastructure with most highway roads in a good state; • Enhance connectivity between economic centres of the country/ Refurbish and expand cross-national highways.	• Restore degraded sections of the Federal highway network to improve connectivity over a distance of 4,000km.
Rail	• Rehabilitate rail network; Increase emphasis on rail transportation, both passenger and freight.	• Construct strategic rail projects to connect major economic centres across the country. The target is to complete the construction of the Lagos- Kano, and Lagos - Calabar rail projects.
Aviation	• Rehabilitate existing airports; Construct a set of four airport terminal; Improve airport and airline safety.	• Offer concessions on the four major airports to improve infrastructure maintenance and boost operational efficiency
Maritime	• Increased capacity of inland waterways transportation; Enhance the performance and competitiveness of seaports.	• Dredge 1,000km of inland waterways and reinforce riverbanks to increase the capacity of inland waterways.
Urban	• Develop, operate, and maintain Urban Traffic Control (UTC) systems; Develop the capacity to sustain and continuously improve the quality of transport services.	

Source: Federal Ministry of Finance, Budget and National Planning (Review Team)

Table 3.7: Transport Sector Medium to long-term goals

Sub-sector	2023 (Medium-term)	2043 (Long-term)
Roads	Rehabilitate/dualize all major economic routes Rehabilitate major link roads Restore 70.0 per cent of Federal and State roads	Dualisation of North-South routes; Dualisation of all East-West routes Complete the construction of critical River Bridges (Ibi Bridge, Baro Bridge, Nupeko Bridge, Buruku Bridge) to improve road network connectivity. Restore 100.0 per cent %+ of Federal and State roads
Rail	Continue network rebuilding and expansion so that rail services are commercially viable	High-Speed rail network between major cities.
Aviation	Upgrade and expand International airports	Establish Nigeria as the regional aviation hub in West Africa
Maritime	Improve port productivity with further reduction in turnaround time for vessels. Enhance competition of the ports. Create a port management model that attracts full private sector involvement and promotes market principles.	A regional port hub in West Africa. All Waterways fully navigable
Urban	Improve synergies between land use planning and transportation planning in all cities. The set base for urban rail transport: Introduce Rail mass transit in urban areas of over 1.0 million people (urban rail and roiling stock) starting with Lagos, Abuja, Port Harcourt, Kaduna, and Kano.	Functioning urban transportation system in all major cities. The urban rail network in all urban areas with a population greater than 1.0 million people.

Source: Federal Ministry of Finance, Budget and National Planning (Review Team)

3.1.11 Strategic Objectives for Transportation

Nigeria's transport infrastructure is crucial to the development of other sectors of the economy. The current size of the infrastructure stock is inadequate for the size of the economy. Given the size of investments required, partnering with the private sector for investments in the sector is a key strategic objective of the Government. The key activities enumerated in this regard include:

- Establishment of a robust capital project development framework to encourage and increase PPPs to deliver critical projects, such as roads, rail, seaports, and airports;
- Review of Infrastructure Concession Regulatory Commission Act to resolve conflicting legislation with the Bureau of Public Enterprises and Bureau of Public Procurement Act and strengthen the Commission's regulatory mandate to facilitate private investment;

- Harnessing of the existing pool of sustainable development funds to assess the viability and bankability of critical infrastructure projects;
- Leveraging on the sustainable and alternative mix of funding for critical infrastructure projects, including project financing initiatives, infrastructure bonds, diaspora bonds, Pension funds and value-capture financing;
- Fast-tracking the completion of airport cargo and passenger handling terminals to increase capacity from 208,424 to 276,848 tons and 15.0 million to 45.0 million passengers, respectively, by 2021;
- Completing the road sector reforms to establish a Road Authority and a Road Fund to enhance best world practice in the administration of road network development and management in the country; and
- Taking advantage of the approval of the Federal Roads and Bridges Tolling Policy so that some of the major dual carriageways can be concessioned for maintenance and tolling while the government utilizes the saved funds from the concession for other critical roads in the federal road network linking to the nation's refineries, ports, NNPC depots, and agricultural hubs, etc.

Based on these strategic objectives, a set of objectives have been established for each sub-sector.

Roads

The dominating pillar of the Nigerian transport sector is the road network. With a road density of 21 km per 100 km2, Nigeria is ahead of the West African average but behind international and BRICS benchmarks. In spite of concerted Government efforts to improve the road netwok conditions, it is evident that a lot more still needs to be done. Hence improving the condition of most highway roads is a central priority; as is expanding the capacity of the national road network to significantly enhance connectivity between the northern and southern economic centres of the country in the short to medium term. Furthermore, the rehabilitation of all major economic routes is envisaged, with a subsequent dualisation of the major North-South and East-West routes and completion of construction of major River Bridges like Nupeko Bridge, Ibi Bridge, Baro Bridge and Buruku Bridge by 2043. The maintenance and rehabilitation of bridges along the Federal Road network is also critical to ensure that the bridges are always in good and serviceable condition. The Federal Ministry of Works and Housing has proposed to set up a Bridge Management Unit by 2022. The main function of this Unit is to ensure continuous inspection of bridges to plan maintenance programmes before the structural components become distressed and unserviceable.

Rail

In the short to medium term, the rail network needs to be completely rehabilitated or rebuilt, with significant expansions which will also cover linkages to other modes of transportation such as ports and airports. This will substantially increase the emphasis on rail transport. The long-term vision for 2043 envisages a high-speed rail network between major Nigerian cities, transforming the rail sub-sector into an adequate and viable transport option for passengers and freight, and for rail to connect to neighboring countries to become a viable transport option for the ECOWAS region.

Aviation

In the short term, the objective is rehabilitation and scaling up of the existing airport infrastructure, to meet the requirements of increased (and further increasing) air passenger traffic. Further emphasis is placed on improving airport and airline security to align with international standards by 2023 and coupling this with the expansion and improvement of the nation's international airports. The 2043 goal for Nigeria is to become the undisputed aviation hub in the region.

Maritime

The aspiration for the maritime sector is to significantly increase its capacity with emphasis on transportation of passengers and freight via inland waterways, expansion of current ports throughout Nigeria, and establish Nigeria as a regional Port hub. This requires investing significantly in port infrastructure, making the inland waterways network navigable all year round, and building human and physical capacity for inland water navigation and deep seaports in

the short-term. Ramping up the performance, efficiency, and competitiveness of the ports and inland waterways is also a central priority for 2023. For that purpose, a set of requirements have to be met, in particular, reducing vessel turnaround time, fostering inter-port competition, and improving safety and security at the ports. Nigeria's aspiration in the maritime sub-sector is to be the major seaport hub for West Africa by 2043.

Urban Transport

Urban transportation consists of core transport infrastructure (road and rail), public transportation infrastructure (bus lanes, walkways, bus stations), and fleet (buses, taxis, ferries). Urban transportation aspires to develop the capacity to sustain and continuously improve the quality of transport services in urban areas. In the short term, the focus will be to conduct maintenance on roads in urban areas, introduce high-capacity buses to alleviate congestion in the worst areas and modernize terminals, hubs, and motor parks. In the medium term, the focus will be on introducing Rail mass transit in urban areas of over 1.00 million people (urban rail and rolling stock) starting with Lagos, Abuja, Port Harcourt, Kaduna, and Kano. By 2043, the vision is to have functioning urban transportation in all major cities and an urban rail network in all cities with a population greater than one million.

3.1.12 Private Sector Expectations and Priorities

- Addressing the state of under capitalization, especially within the aviation sub-sector, and the sector's weak corporate governance;
- Reducing the high operational charges and tariffs needed to operate in the transport sub-sectors;
- Developing connectivity to address the limited intermodal connectivity between ports, airports, and roads, and limited connectivity with other African and regional hubs;
- Establishing coherent policies such as road standards, axle load policies, and ease of securing the right of way, to facilitate infrastructure development;
- Improving public contracting, tendering, and quality control;
- Revising laws that place the construction and management of road, rail, aviation, and maritime infrastructure under the exclusive purview of the federal government;
- Establishing fiscal incentives (e.g., pioneer status), particularly for ancillary and rolling stock in all sub-sectors; and
- Increasing the concession management of infrastructure, aligning with bilateral service agreements, reducing agency fees, and improving infrastructure maintenance capabilities.

3.1.13 Enablers

- A low-interest rate regime, especially for aircraft leasing and purchase;
- Ancillary infrastructure: power, airport hotels, scanners, radars, lighting on runways, etc., that allow for more efficient operations;
- Rail connections between key intra-city airports to aid transfers;
- Investments to improve aviation security, acquisition of newer planes and local aviation maintenance capability;
- Federal government commitment to adopting a PPP framework for road construction, maintenance, and management;
- Access to concessionary (cheap) financing and long-term capital, right of way and tax exemption and duty waivers;
- Adequate and efficient maintenance of the existing road network;
- Government support in terms of guarantees required to enhance the viability of projects in the sector;
- Reforms like the 2005 port reforms to encourage private sector participation in developing rail infrastructure;
- Reconnecting the railways to the ports and ensuring the provision of serviceable rolling stock;
- Policy stability;

- Reducing the number of government agencies at the ports;
- Improving port infrastructure to accommodate current and emerging traffic at the seaports;
- Continue with the remodeling of airports, focusing on maintaining the highest operating standards;
- Connect all the ports (air and sea) in Lagos with a monorail to allow for ease of access;
- Improve lighting on airport runways;
- Build transit parks for trucks along federal roads;
- Complete key projects in the roads sub-sector including – Lagos-Ibadan road; Second Niger bridge; Benin-Shagamu; East-West Road, Coastal Highway: Lagos - Warri - Port Harcourt - Calabar; Abuja - Ilorin; and 4th Mainland bridge;
- Complete key projects in the rail sub-sector including heavy-duty rail projects for cargo traffic; Lagos blue and red line projects; East-west rail line (Lagos-Calabar); Abuja light rail; Lagos Kano rail line (Lagos-Jebba and Jebba-Kano); Lagos-Ibadan rail line: Abuja-Kaduna rail line; Ajaokuta-Warri rail line; and
- For the maritime sub-sector, the priority would be to improve customs performance; tax exemption and duty waivers on equipment; ports infrastructure including greenfield development; deep seaports development; shipyards for shipbuilding and repairs; and inland waterways development to allow for an intermodal transportation system.

A review of the relevant infrastructure-related legislation in the transportation sector also identified the following **key legal enablers** for transportation infrastructure development:

- Federal Highways Act;
- Nigerian Railway Corporation Act;
- Nigerian Civil Aviation Authority Act;
- Nigerian Ports Authority Act; and
- Nigerian Inland Water Ways Act.

Federal Highways Act

The Act is investor-friendly as Section 2(4) empowers the Minister to engage other persons for the performance of functions set out in Section 2(1) -(3) of the Act. Furthermore, the Act does not conflict with the constitution, as section 2(9) fully recognizes the jurisdiction of the states to regulate the use of highways but asserts the superiority of the Act over the laws of any state on the subject. The Act is also flexible enough and encourages sub-national participation. The conflict area in the Act is in the enforcement of the penal enactments in the Act, which is Sections 5-18. There is no provision is made here to specify the court that has jurisdiction to try offenders. The Act cannot be said to be an obsolete law, but there is a need for legislation to ensure and enforce regular maintenance of federal highways. The Act is also flexible for legislative openness, but there is a need to legislate on the duty of government to establish a Fund for and to ensure regular maintenance and reconstruction of the federal highways.

Nigerian Railway Corporation Act

The Nigerian Railway Corporation bill was passed in 2016 to repeal the Nigerian Railway Corporation Act, Cap N129 LFN 2004, and to enact the Nigerian Railway Bill, 2015. The act now empowers the Directorate of the Corporation to implement the National Rail Policy of the Federal Republic of Nigeria; grant concessions and receives concession fees; monitor concessionaire investment obligations; determine public service obligations and payment of subsidies for passenger services; and undertake any other business which in the opinion of the Board is capable of improving the mandate of the Directorate. Subject to the provisions of the Act, the Corporation shall be responsible for the concessions of core operational assets such as rail tracks, stations, and other facilities shall be identified and concessioned to private rail sector operators within the framework of the vertically integrated concession model for proper funding and effective service delivery.

The corporation shall consider for concessioning the railway networks into separate parts as follows:

i. Western Railway
ii. Eastern Railway
iii. Central Railway
iv. Lagos Rail Mass Transit.

Subject to the provision of the Act concession may be granted in- commercial operation of the rail services; operation, maintenance, renewal, remodeling of existing railway system; operation of commercial freight and passenger service; operation of passenger service under public service obligation; and making railway infrastructure available to third parties for the operation of passenger service.

The holder of a commercial operator license may carry out commercial business or its ancillary services to passenger or cargo transportation within and outside the country specified in the license. The Corporation may issue Commercial Operation Licenses to: One or more of the commercial operation companies or one or more entities that are not major commercial operation companies within the rail transport sector.

Also, subject to such terms and conditions as the Corporation may fix in the license, and operation maintenance, renewal, remodeling of existing railway system shall authorize the licensee to carry on operations within Nigeria. The operation maintenance, renewal, remodeling licensee may have an obligation to carry out the operation, maintenance, and other ancillary services according to the provisions of the license issued by the Corporation to such licensee.

Nigerian Ports Authority Act

The Nigeria Ports Authority (NPA) is established by Section 1 of the Act, and Section 2(i)(e) provides for executive directors of the authority though without specifying their number. Section 7 of the Act empowers NPA to manage, supervise, and control or take part in the management, supervision, or control of any company or undertaking under its purview. The Act also allows for sub-national participation based on the provisions of Sections 7 and 8(b) and 9. The conflict area of this Act relates to the acquisition of land and compensation according to Sections 24 and 29(2) of the Act. The section places jurisdiction on the High Court exercising jurisdiction in the place where the land is located, while the Federal High Court does not have jurisdiction over land disputes.

The law is generally effective but being legislation on a subject that has international correlations, there will always be the need to stay abreast of international best practices, to ensure compliance. There are few or no restrictions in the Act; therefore, there is legislative openness for infrastructure development inherent in the Act.

National Inland Waterways Authority Act

Sections 13 and 23(i) of the Act limits participation by the private sector. Under this Act, activities, and functions of the National Inland Waterways Authority by any person other than the Authority is a punishable offence. The Act also prohibits persons from taking sand, gravel, or stone from the waterways, making this legislation unfriendly to investment.

Waterways are not defined in the Act, except in section 10 which lists out sundry rivers across the country. Private participation in the activities listed in Section 23 is prohibited without limitation even when it is obvious that such activities are the major economic activities of the locals in the affected areas.

The authorities are not equipped to perform all the functions listed in Section 23 without issuing licenses to the private sector. Again, provisions 23(i) (a) of the Act are a limitation of the powers of the states under the Land Use Act. Although the Act is not in conflict with the constitution, it does not encourage sub-national participation due to the

restriction expressly imposed by Section 23.

However, the National Assembly currently has a Bill for an act to repeal the national inland waterways authority act cap. N47, LFN 2004 and to enact the National Inland Waterways Authority act to provide for the management, regulation, and development of the national inland waterways and to promote private sector participation in the development of the national inland waterways in Nigeria and for other related matters. The objectives of this Bill are to:

- develop and improve the National Inland Waterways for water transportation and navigation purposes;
- increase and promote private sector investment and participation in the management and operation of the assets of the National Inland Waterways Authority;
- provide for the technical and safety regulations of the National Inland Waterways;
- promote inter-modalism in the transport sector; and
- provide an alternative mode of transportation for the evacuation of goods and persons, and implement the National Transport Policy as it concerns National Inland Waterways in Nigeria.

If the bill is passed into law, the Authority may grant a concession, lease, contract, or permit subject to such terms and conditions as the Authority may specify, authorizing any person to provide any service or facility or any National Inland Waterways Service or facility.

Nigerian Civil Aviation Authority Act

Section 1 of the Act establishes the authority and spells out its functions in Sections 7, 35, and 36.

There is no express provision enabling the authority to concession any aspect of its functions to the private sector. The Act is constitutional. However, the Act does not permit sub-national participation, as it is listed in the Exclusive Legislative List. Section 22 of the Act contains healthy provisions for land acquisition by the authority which removes or at least remits conflict, thus there is no legislative conflict. The law is not obsolete but there is a need to ensure that it is in line with global best practices. Regarding legislative openness, there is no limitation inherent in the Act, but there is a need for legislative flexibility to enable engagement of the private sector.

National Transport Commission Bill, 2016

The purpose of the Bill is to establish the National Transport Commission as an effective, impartial and independent regulatory authority in the transport sector and to set out the objectives, functions, and powers of the Commission; promote the implementation of the national transport policy; provide an economic regulatory framework for the transport sector or regulated transport industry; provide a mechanism for monitoring compliance of government agencies and transport operators in the regulated transport industry with relevant legislation and advice Government on matters relating to the economic regulation of regulated transport industry; provide for efficient economic regulation of the transport sector; protect the rights and interests of service operators and users within Nigeria, and create an enabling environment for private sector participation in the provision of services in the transport sector.

3.2 Energy Infrastructure

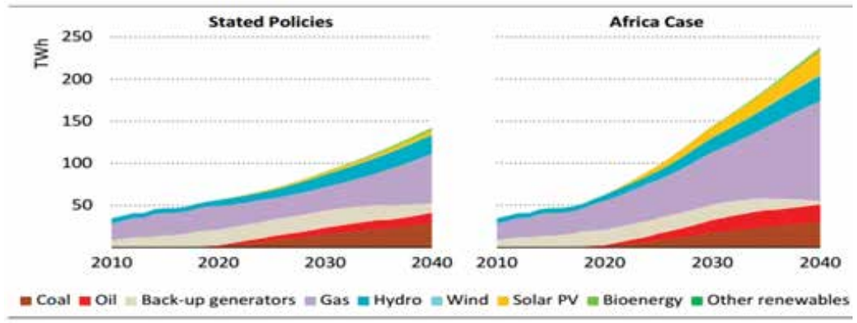
3.2.1 Profile of Nigeria's Energy Infrastructure

Nigeria is Africa's largest economy - and Africa's biggest chemical producer and most populous country - but also has

one of the widest energy gaps in the world. With its fast- growing population, the country is in clear need of improved power sector. The country's current installed capacity as at October 2020 is reported at 12,500 megawatts (thermal, 10,142 MW; and hydro, 2,380 MW), but in practice only about 3,200 megawatts is transmitted. The government's aim to boost electricity access from 45% (rural: 36% urban: 55%) in 2020 to 90% by 2030 will drive even more demand for electricity (IEA Africa Energy Outlook, 2019, 2020).

The country has an abundance of most of the energy sources (fossil fuels, hydro, solar, tidal, geothermal, nuclear, and biomass) for power generation, which if properly harnessed can meet the country's energy needs in the short to medium term as well as to export to other countries. The country's abundant energy sources have the potential to propel the economy into one of the top economies through its use in the industries, housing, and urban development; yet power generation by back-up-generators remain top on the list of Nigeria's electricity generation technology.
For instance, although about 80% of power generation comes from natural gas; most of the remainder comes from petrol oil with Nigeria being the largest user of oil-fired back-up generators in Africa (IEA Report (2019). Natural gas remains a key source of power in the country, notwithstanding the nascent shift towards solar power as the country starts to exploit its large solar potential. In particular, power generation from back-up-generators surpassed hydro power generation between 2010 to 2020 but the later is projected to rise of the next decade (2020-2030) given.

Figure 3.5: Nigeria Electricity Generation by Technology



Source: IEA Africa Energy Outlook, 2019.

The country's potential to become one of the world's largest economies will remain just an aspiration without the electricity required to pursue aggressive industrialization. The role of electricity in powering the growth of small and medium scale industries makes it even more imperative to transform the Nigerian power sector. In pursuance to this, the Nigerian Government has over the last decade embarked on comprehensive energy reforms to fast track the development of energy infrastructure and deregulates the energy market for effective competition and efficient service delivery. TheNigerian government identified five electricity policy priorities (to boost electricity supply), namely, to: (i) attract investment to the energy sector; (ii) solve barriers in the gas-to-power value chain; (iii) plan for renewable energy integration; (iv) boost revenue collection to support DisCo viability; and (v) understand demand which would guide prioritization (Energy for Growth Hub, 2018). In this regard, the Nigeria government in 2013 privatized part of the power sector which is hoped to promote efficiency, attract private investment, and increase generation, but this has yet to deliver results. As at October 2020, an estimated 20 million Nigerian household are without access to electricity (IEA Africa Energy Outlook, 2019, 2020).

Figure 3.6: Energy Power Plants in Nigeria

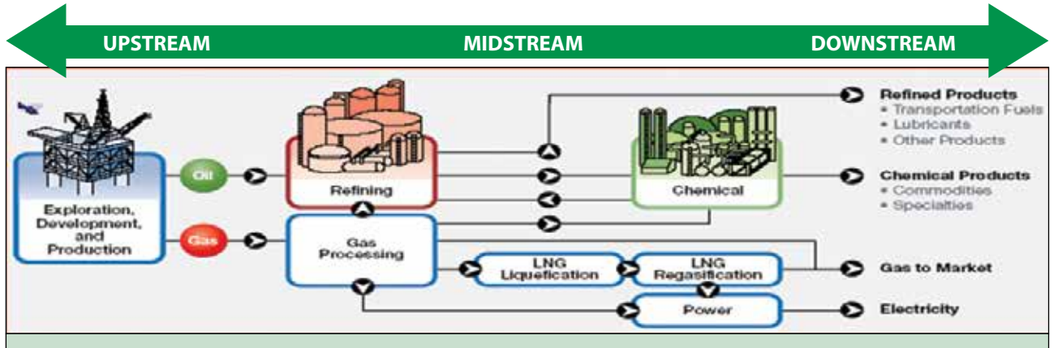
Source: Natural Earth; African Development Bank.

3.2.2 Oil and Gas Infrastructure

Nigeria's Oil and Gas infrastructure is divided into three main segments: the Upstream segment (production of crude oil and gas mostly for exports); the Midstream segment (refining and gas processing) and the Downstream segment (includes oil refineries, petrochemical plants, petroleum products distributors, retail outlets and natural gas distribution).

Nigeria is the 7th largest oil producer and 9th largest gas producer in the world with proven oil reserves of about 36.6 billion barrels and proven gas reserve estimated to be about 182.8 Trillion Cubic Feet [TFC]. Petroleum accounts for approximately 95.0 per cent of total foreign exchange earnings and 70.0 per cent of Government revenue, resulting in the country's near total dependence on oil and gas revenue for national development.

Figure 3.7: Nigeria Oil and Gas Infrastructure Landscape



SUMMARY OF ASSETS

Number of OPLs	61
Number of OMLs	113
Open Blocks	214
Fields in Production	235
Operating companies	85
Producing companies	46
Oil Producing wells	2176
Gas Wells (on Production	125
Production stations/ platforms	188
FPSO/ FSO	20

SUMMARY OF ASSETS

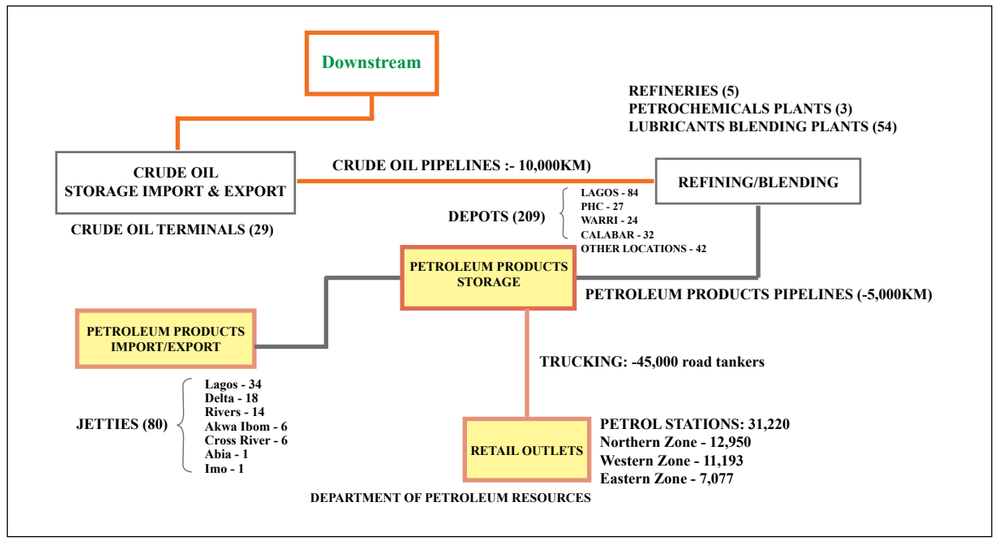
Crude Oil Terminals	29
Gas Terminals	3
Crude Pipelines (inc. flowlines)	> 10000km
Product Pipelines	~ 5000km
Gas pipeline	~ 5000 km
Refineries	5
Petrochemical Plants	3
Gas Refining/ Processing Plants	44
Gas Gathering/ Compression/Injection Facilities	45
Gas-Based Fertilizer/ Petrochemical Plants	3

SUMMARY OF ASSETS

Product Retail Outlets	31220
Product Tankers	> 45000
Product Depots	209
Product Jetties, (inc. LPG Jetties)	85
Coastal Vessel	130
LPG Refilling Plants	996
LPG Depots (Coastal and Inland)	17
CNG Compression Stations	13
CNG/LNG Refuelling Station	14
CNG Downloading/ LNG Regasification Station	93
Lubricant Blending Plants	54

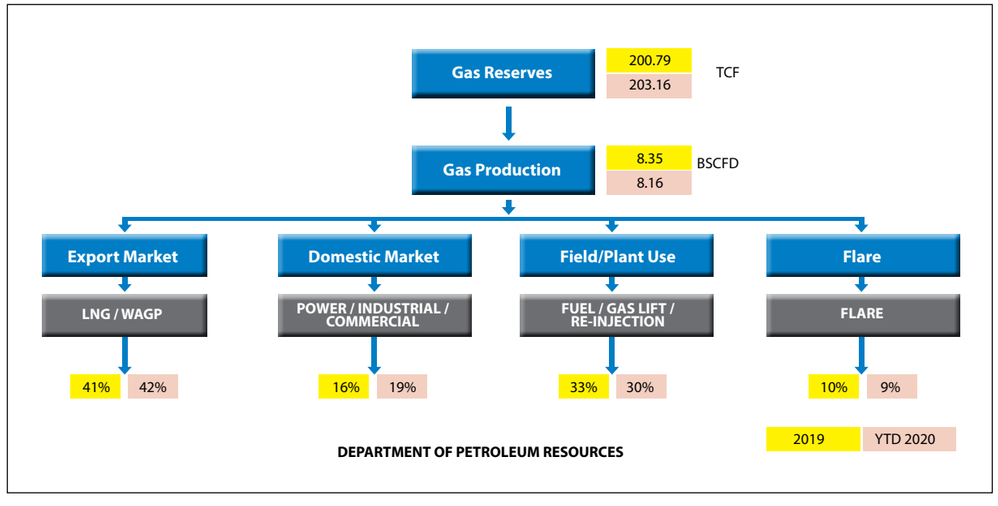
Source: Department of Petroleum Resources – DPR

Figure 3.8: Overview of Mid and Downstream Infrastructure



Source: Department of Petroleum Resources – DPR.

Figure 3.9: Dashboard of the Nigerian Gas Sector



Source: Department of Petroleum Resources (DPR).

Table 3.8: Nationwide Distribution of Liquid Petroleum Gas (LPG) Refilling facilities as December 31, 2019

Zones	No. of Plants	Total Plant Storage Capacity (Mt)
NORTH-WEST	77	4249
NORTH-CENTRAL	104	4659
NORTH- EAST	24	944.71
SOUTH- EAST	141	5799
SOUTH- WEST	292	10347
SOUTH-SOUTH	351	13663.02
TOTAL	**989**	**39661.73**

Source: Department of Petroleum Resources (DPR).

Table 3.9: Status of Compressed Natural Gas (CNG) Facilities Distribution as at 31st December, 2019.

STATE	Compression Station	Downloading Station	Refueling Station	Total
ABIA	1	3		4
AKWA IBOM	1			1
DELTA	2	9	1	12
EDO	1		7	7
ENUGU			1	1
IMO		4		4
KADUNA		1		1
KOGI			1	1

As at 2019, Nigeria's oil reserves stood at 1,980 thousand daily barrels. The crude oil reserves fell by 481 million barrels to 36.972 billion barrels in 2018 as a result of the fall in the global oil price and the drop to 29 from the initial 46 of the nation's oil rig in 2014. Also, Nigeria's gas reserves increased by 7.3 per cent from 187 trillion cubic feet (tcf) to 200.79. The country's daily production stood at 1.2 billion standard cubic feet with 41 per cent of it exported while 48.0 per cent went to the domestic market, and 11.0 per cent flared. Nigeria installed refining capacity is 446,000 bpd with contribution to Africa's total refining capacity at 12.6 per cent.

Table 3.10: Oil and Condensates Reserves (MMBbls) as at December 31, 2019

Year	Oil Reserves	Condensate Reserves	Total
2014	31,870.00	5,578.24	37,448.24
2015	31,643.91	5,418.15	37,062.06
2016	31,271.77	5,467.41	36,739.18
2017	31,419.71	5,552.20	36,971.91
2018	31,667.75	5,334.35	37,002.10
2019	31,417.74	5,475.81	36,8 93.55
New Oil Reserves Target: 40 Bln Bbls by 2025			

Source: Department of Petroleum Resources (DPR).

Table 3.11: Gas Reserves (Trillion Cubic Feet - TCF) as at December 31, 2019

Year	Oil Reserves	Condensate Reserves	Total
2014	90.094	97.904	187.998
2015	97.208	94.857	192.065
2016	97.253	101.485	198.738
2017	96.36	102.730	199.090
2018	101.98	98.81	200.789
2019	100.69	102.47	203.162
New Gas Reserves Targets: 210 TCF by 2025 and 220 TCF by 2030			

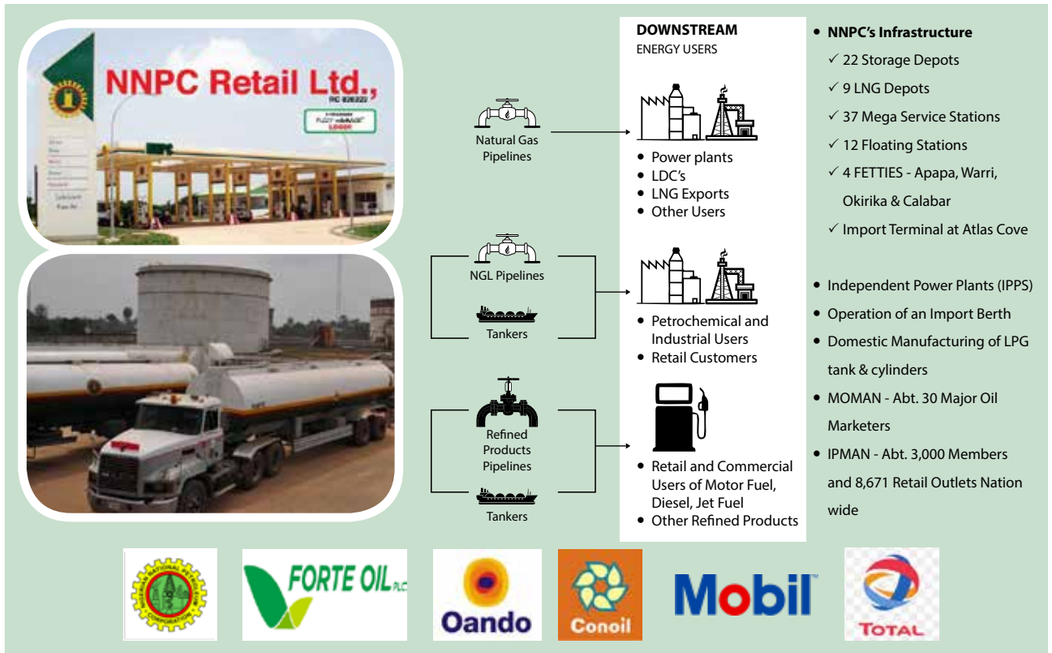
Source: Department of Petroleum Resources (DPR).

The Nigerian National Petroleum Corporation (NNPC) owns a 5,120 km network of pipelines from its refineries. The Pipeline network supplies crude oil to the Nation's Refineries and evacuates refined products for distribution across storage Depots. The storage facilities owned by the NNPC include 37 Mega stations and 12 Floating stations; 258 tanks in 21 storage depots, 1 Product Terminal at Atlas Cove and 1 Crude Oil Terminal at Escravos; 3 Jetties at Apapa, Calabar Jetty, New Atlas Cove Jetty (NACJ) and Single Point Mooring (SPM; 8 LPG Butanization Plants, with a combined holding capacity of 2.6 billion litres of PMS; and 8 Pump Stations to ensure desired flow rate and pressure. Other storage and transportation networks are owned by the Depots and Petroleum Marketers Association as well as the major petroleum companies and independent petroleum marketers across the country.

Nigeria has 4 Refineries (Port Harcourt I and II, Warri, and Kaduna) with a combined crude oil distillation capacity of 445,000 b/d. Nigeria maintained a deficit in total product supply with a large and growing deficit in gasoline, jet / kerosene, and diesel/gasoil. As a result, the country imports most of its petroleum products for domestic demand. Construction of new Refineries had been plagued by fuel subsidies concerns and lack of financing. Plans are on course for 200kpd Condensate refineries at Western Forcados Area and 2x300MMScfd Assah North Ohaji South Areas of Delta and Imo State respectively.

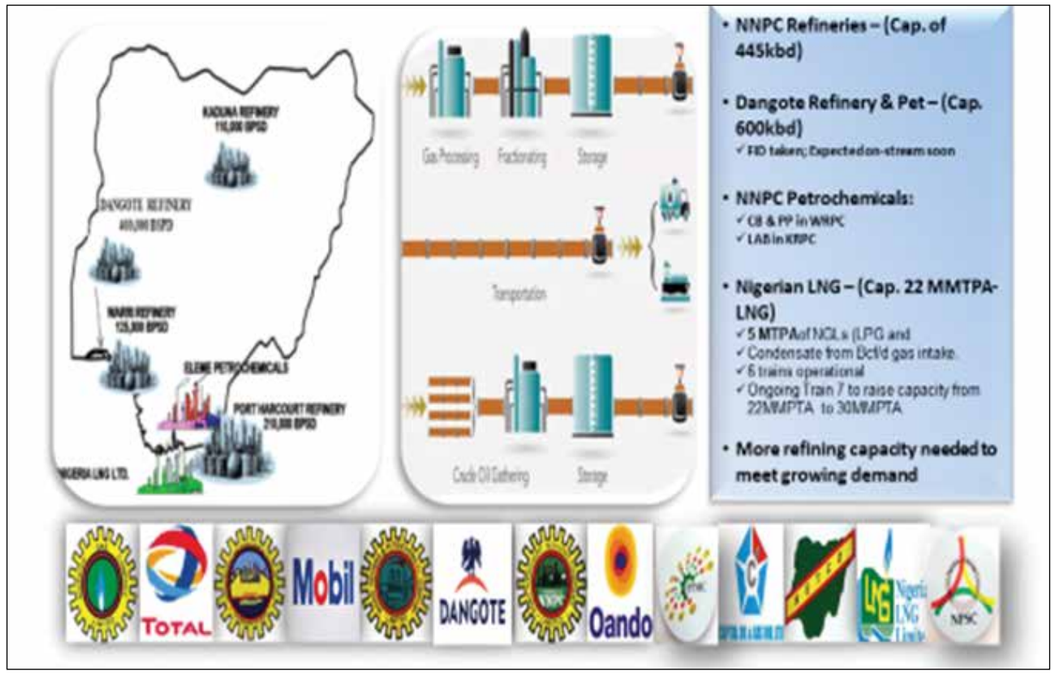
The country's plan is to open up the sector to investment, thereby increasing national reserves to 40 billion barrels at a production rate of 4mbpd by 2020. NNPC has begun significant turnaround maintenance (TAM) plan to revamp its deteriorated refineries. There are also plans for the private sector to construct additional refineries in Lagos, Bayelsa, and Kogi states. Investors within the country will be keen to seek out for alternative oil reserves for investment, thus, anticipating a higher return on investment. However, relative stability and rise in world crude oil price could contribute to foreign exchange earnings from the sector and encourage the increase in daily production.
The average refining capacity utilization in Nigeria increased to 55.0 per cent in the fourth quarter of 2019, which is expected to stand at 56.20 per cent and 58.70 per cent in 2020 and 2021 respectively. By 2025, Nigeria is expected to lead refinery capacity additions from planned refineries. 34 new-build sites are expected to start operations from 2020 to 2025 with a capacity of 2,135 mpd.

Figure 3.10: Oil & Gas Downstream Sector Value Chain of the NNPC



Source: NNPC.

Figure 3.11: Oil and Gas Midstream Sector Value Chain of the NNPC



Source: NNPC.

The Nigerian Petroleum Industry remains the largest & most vibrant in Sub-Saharan Africa with lots of potentials, especially in the deepwater and untapped gas resources. Nigeria offers unique opportunities for investment in refining, storage, transportation, distribution, and marketing of petroleum products. The Gas Reform is anchored on a robust strategic framework that is focused on maximum economic impact through gas which aims to drive linkages with agriculture, manufacturing, and dispersed small enterprise through Power. The downstream oil and gas value chain is the focus of government intention in creating the necessary business environment through price liberalization and strong independent regulation. The Nigerian Regulatory framework when passed will offer fiscal rules of general application and open access regulations for the domestic oil and gas activities. NNPC is being transformed into a fully commercialized NOC by imbibing, acquiring, and modifying its internal operational and organizational processes for a more significant role.

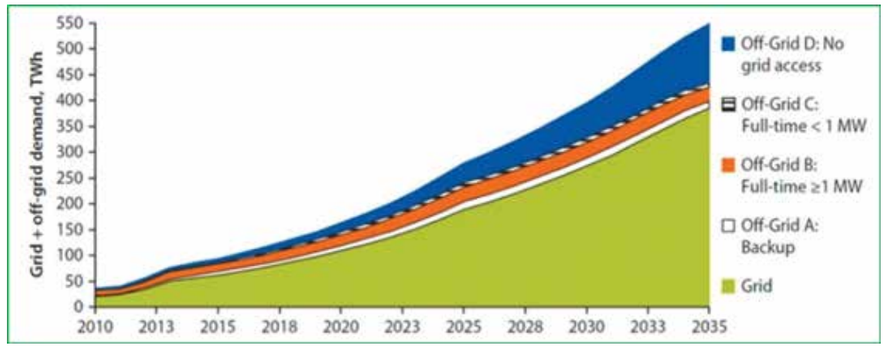
3.2.3 Power Infrastructure

3.2.3.1 Generation

The total installed generation capacity of the 29 grid-connected generating plants in Nigeria is 12,910.4MW. It is largely dependent on hydropower and fossil (gas) thermal power sources at the ratio of 14.5 per cent and 85.5 per cent respectively. Although it is important to note that currently only 3,500 MW to 5,000 MW is typically available for onward transmission to the final consumer due to recurrent challenges arising from gas constraint, maintenance and repair requirements, trips, faults, and leakages that make them unavailable for evacuation to the national grid.

The country's energy sector is faced with huge challenges, with the extensive losses attributable to the non-availability of the installed capacity and very high occurrence of significant technical and non-technical issues through the power supply value chain. The supplied electricity delivered to Nigerians is connected to the grid, while the consumers suffer from extensive power outages a situation that results in annual consumption of electricity per capita being amongst the lowest in Africa, estimated at less than 150 kWh. In response, however, the Government of Nigeria, in 2013 completed an extensive nine-year-long process of power sector reforms centered on the privatization of the country's main generation and distribution assets which have seen increased participation of private sector players. Fifty- five (55) licenses have been issued to private sector entities, out of which twenty (20) small private electric power generation plants are operational, while nine (9) are under construction. With the privatization of the PHCN and NIPP assets, there will be quite a few generation companies operating in Nigeria. In addition, to tackle the supply and distribution crisis, fifteen (15) Governments' owned generation and distribution companies were sold to private owners in 2013. This development has started to yield much-needed investment in generation assets.

Figure 3.12: Projected Electricity Demand in Nigeria 2010- 2035



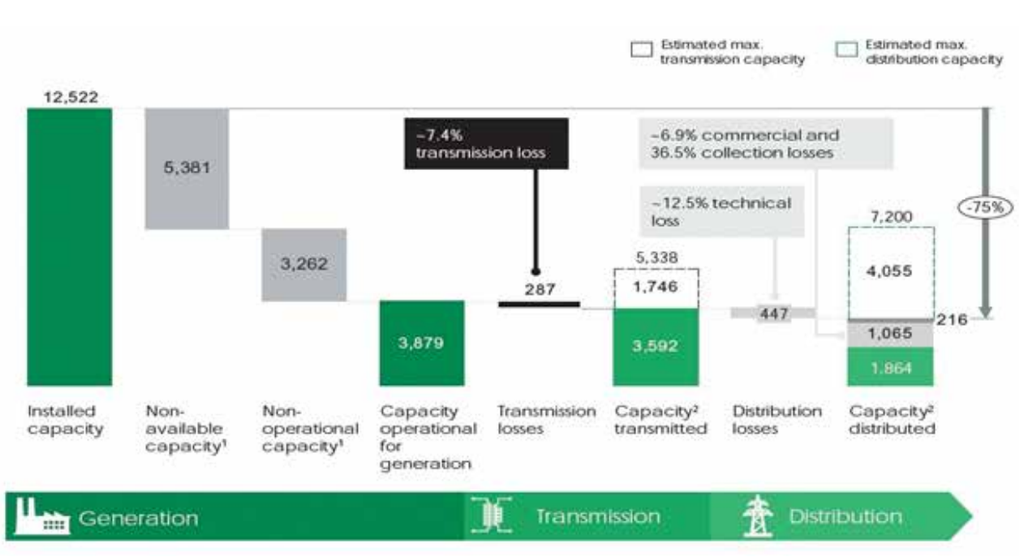
Source: GIZ, 2015 (FMP and Power Holding Company of Nigeria data and UN 2010 rural/urban population data (for off-grid D projections).

According to IEA (2019) projections, grid electricity demand in Nigeria is expected to increase at a very sustained rate from 2018. Additionally, grid demand will also be augmented by off-grid supply to meet consumption needs in the rural areas.

3.2.3.2 Transmission

Turning to the Transmission segment of the electricity value chain which remains fully government-owned by the Transmission Company of Nigeria (TCN), a management contract was signed with Manitoba Hydro International in 2012 to reduce technical and commercial losses of the TCN. This was also aimed at fostering improvement in the business process and to split the company into the Transmission Service Provider (TCP) and Independent System Operator (ISO). As noted, the Nigeria's transmission network has the capacity to wheel about 5,300MW of power. However, due to generation constraints, less than this capacity gets wheeled. Underinvestment in building new infrastructure and lack of appropriate maintenance of the current infrastructure has constrained the transmission network expansion. Transmission losses on the line stand at ~7.4% (based on January to July 2015 NESISTAT data). Nigeria's transmission network comprises of 159 substations and 15,022 km of transmission lines. The transmission network has recorded a decline in system collapse incidents (partial and total) on the transmission grid between 2010 and 2015.

Figure 3.13: Nigeria Power Sector Energy Flow (MW)



Source: Nigerian Electricity Supply Industry Statistics (NESISTAT).

Table 3.12: Installed Generation Capacity per Power Station (MW)

Power Station	Installed Capacity (MW)	Average Available Capacity (MW)	Average Operational Capacity (MW)
Egbin	1,320	941	539
Afam VI	685	587	455
Okpai	900	536	375
Transcorp Ughelli	480	463	374
Jebba	570	431	262
Olorunsogo Gas	335	277	189
Ihovbor NIPP	434	374	182
Geregu NIPP	450	328	179
Kainji	720	444	173
Olorunsogo NIPP	760	260	171
Omotosho NIPP	500	306	169
Omotosho Gas	335	280	163
Shiroro	600	508	153
Geregu Gas	414	159	131
Sapele NIPP	450	184	111
Ibom	190	91	76
Sapele	504	219	69
Alaoji NIPP	720	158	67
Odukpani NIPP	561	234	64
Afam IV-V	724	3	2
Asco	294	270	0
Omoku	110	0	0
Trans Amadi	150	0	0
AES Gas	180	175	0
RIVERS IPP (Independent	136	0	0
Power Producer)			
TOTAL	**12,522**	**7,141**	**3,879**

Source: NESISTAT.

3.2.3.3 Off-Grid Electrification

In terms of off-grid electrification, important initiatives are rapidly emerging. In February 2017, the Federal Government of Nigeria launched an initiative to distribute 20,000 solar powered lighting systems to rural communities in the country. Further, Nigeria Intended Nationally Determined Contribution (INDC) to the United Nations Conference of Parties 21 (COP21) shows that the Federal Government plans to work towards adding 13GW of off-grid solar power by 2030.

At the state level, Lagos State Government remain the leader in terms of solar power via the Lagos Solar project which is a joint investment of Lagos State Electricity Board (LSEB) and the UK Department for International Development (DFID). It has an installed capacity of nearly 5 MWp of solar generated off-grid power for 172 schools and 11 clinics within Lagos State. An additional 1.5 MWp is being installed at public health clinics in Kaduna State under the Solar Nigeria programme by DFID. Several other off-grid schemes with support from international partners has also

emerged across the country.

As part of a broader set of COVID-relief measures, leading off-grid energy providers, including Power Africa partner's Lumos Nigeria and Zola Electric, as well as Sholep Energy, Arnergy, Cloud Energy LTD, and Sosai Renewables distributed free solar home system units to the most vulnerable communities in Lagos through the State Ministry of Energy and Mineral Resources.

Figure 3.14: Free Solar Home System Distribution by Major Off-grid Energy Providers in Nigeria

Source: USAID Power Africa Initiative (2020).

A) **New Policy Formulated with their Current Implementation Phase for Transmission**

i. Presidential Power Initiative (PPI)

ii. The PPI was conceived to upgrade and modernize the grid infrastructure of the bulk system from the high voltage lines to the low, making the operational grid to 7GW in the first phase, 11GW in the second phase and 25GW in the 3rd phase.

iii. 20 Years Transmission Expansion Master Plan

iv. The transmission network requires a robust plan for expansion and growth. With this in focus, TCN commissioned a world-class consultant (Messrs Fichtner of Germany) to carry out a 20-year Transmission Least Cost Expansion Master Plan. This plan which has been completed addressed in detail the following: demand forecast, projection of existing generation capacities availability, future generation candidates to be considered in the transmission and generation optimization studies, power system analysis (load flow, fault analysis and dynamics simulations), least cost generation and transmission analysis, cost estimations, financial analysis and environmental impact scoping. This report has been forwarded to NERC for approval for implementation to commence.

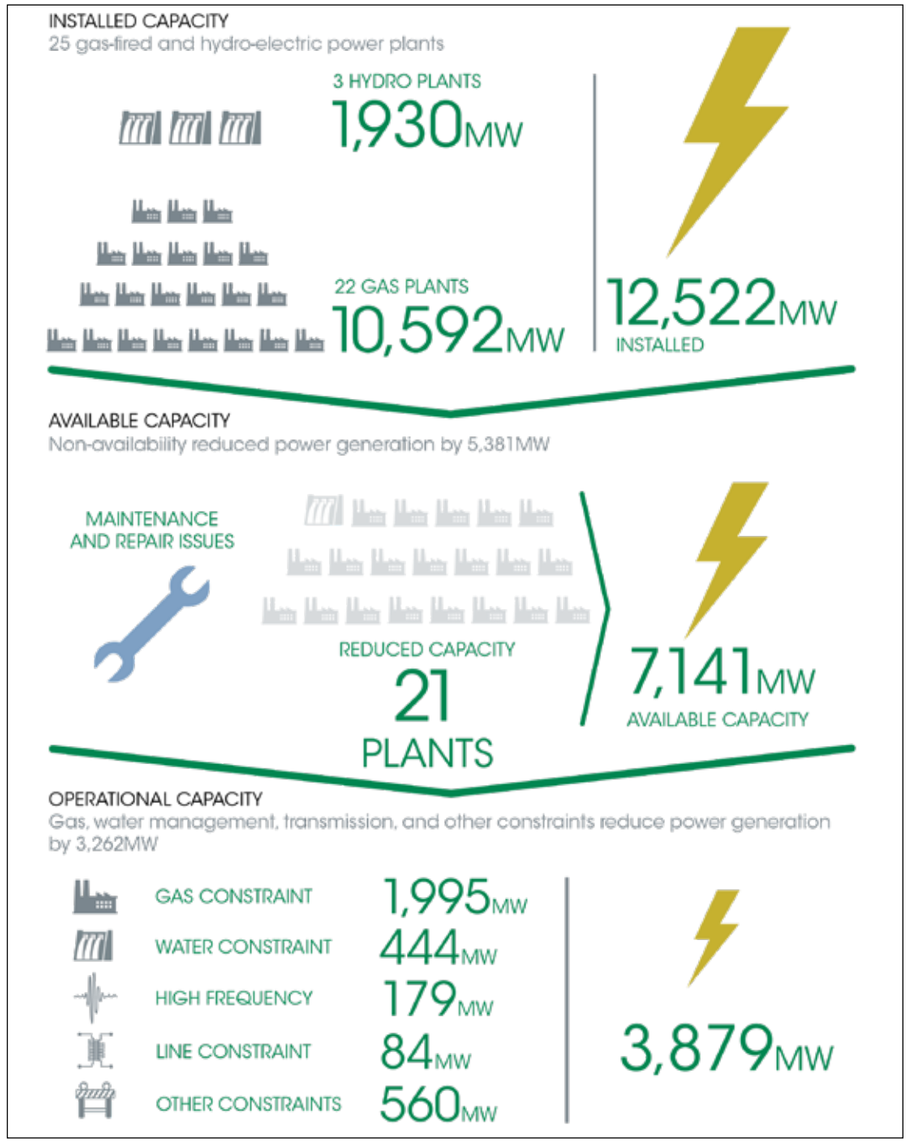
v. Transmission Rehabilitation and Expansion Program (TREP)

vi. The Management looked at the existing infrastructure of the grid and identified lines and substations that require rehabilitation and also areas that require expansion. These projects were identified and put in the scheme called TREP. These projects are spread across the country and it is to expand the capacity of the grid by 20,000MW by 2022.

vii. Procurement of Supervisory Control and Data Acquisition SCADA and Automated Meter Reading AMR

viii. The procurement process for a full SCADA system across the grid is currently in its final stages. When completed and deployed it will allow operators to control operations locally or at remote locations, monitor, gather, and process real-time data. This is very critical in the implementation of the Transmission Expansion Master Plans as clear and real-time visibility of the grid is important. Similarly, the procurement of an Automated Meter Reader AMR is at its final stage and when procured, the Market operator will have real-time visibility of all trading meters on the grid which will ensure accurate and undisputed data from the points.

Figure 3.15: Nigeria´s Power Generation Efficiency in Transmission and Distribution



Source: NESISTATS.

B) **Implemented Activities achieved under the Transmission Segment of the Power Sub-sector by the TCN**

i. **Transmission Wheeling Capacity**
TCN has steadily within the last one year increased its capacity to wheel power from 5,000MWN to 7,500MW. This is evident in the capacity of the grid to record above 5,000MW monthly peak generation in the first half of 2018. Also, the capacity of TCN is being increased with the construction and commissioning of additional transmission substations across the country and the upgrade currently going on in some substations.

ii. **Increase of Eligible Customer on the Grid**
The commencement of eligible customers trading in the Wholesale Electrical Market has enabled TCN to effectively register customers and administer their registered contract. Currently, ten (10) companies have registered as eligible customers, while five (5) of them have commenced commercial operations. TCN is also in talks with customers on 132KV and 330KV network, to encourage them to consider the eligible customer framework to free up stranded power on the grid.

C) **Enforcement of free Governor Control**
The enforcement proved to be one of the game-changers in the reduction of frequency limit violation and the system collapses. This was done by instructing generating stations to ensure that they activate the free governor mode on their generating units which ensured immediate compensation in the frequency fluctuation in the network preventing frequency limit violation and eventual system collapse.

D) **Decentralized Project Management Function to Regional Offices of Transmission Company of Nigeria**
The Management reviewed the administrative structure of the establishment after several studies on the need for decentralization was considered and implemented. This gave the regions full authority over the project in their regions. This also created a sense of responsibility for the regions on the project and ensured timely completion of projects. The regions were instructed to take over the projects that were non-performing and complete them, using in-house Engineers.

3.2.3.4 Distribution

Distribution infrastructure is made up of distribution lines and substations of varying capacities. The distribution grid operates mainly on 33 kV, 11 kV, and 0.416 kV level, i.e. medium voltage (MV) and low voltage level (LV).
The distribution network accounts for an additional 12.5per cent of technical losses before electricity reaches the final consumer. The distribution networks consist of 759 33kV feeders that receive power from TCN's 330kV and 132kV national grid; 843 33/11kV injection substations of total capacity 12,389MVA; 2,040 11kV feeders, 34,311 33/0.415kV distribution transformers of total capacity 10,356MVA; and 53,775 11/0.415kV distribution transformers of total capacity 16,897MVA.

Notwithstanding these capacities, recent studies identified further technical restrictions within the distribution networks that limited the power transfer capability to 7,423.5MW. The overall capacity of the distribution networks to receive power from the national grid and supply to consumers is demonstrably 5,375MW, which is the highest power delivery from the national grid to consumers achieved in 2019.

In the wake of the power sector privatization that took place in 2013, 11 distribution companies covering a regional grid were sold to new private owners. Notwithstanding the privatization, most of the distribution companies do not receive enough electric power to operate at high enough volumes and recover their investment cost.

Table 3.13: Customer, Distance and Energy Allocation Variation of the 11 Distribution Companies

Area	Number of customers (thousands)	Distribution network (km)	Allocation to the network (% of grid supply)
Abuja	755	107,254	12%
Benin	1,187	104,702	15%
Eko	581	8,093	13%
Enugu	819	25,078	9%
Ibadan	1,750	24,355	9%
Ikeja	1,128	12,466	11%
Jos	466	12,227	8%
Kaduna	459	26,653	7%
Kano	598	21,041	6%
Port Harcourt	557	17,989	8%
Yola	345	6,505	4%

Source: Discos.

3.2.4 Specific Achievements across the Sub-sector

Table 3.14: Specific Achievements across the Sub-sector

A. Transmission

S/N	PROJECT	SCOPE	STATUS
1.	Abuja Feeding Scheme	Construction of 132KV and 330 KV lines and substations in TCN's Abuja Region	Construction
2.	Nigeria Electricity Transmission Access Project (NETAP)	Rehabilitation and reinforcement of Substations, reconductoring of lines, procurement of spares and SCADA implementation	Procurement, Loan effective
3.	Lagos/Ogun Project	Giant plus loan to reconstruct substations and lines in Lagos and Ogun	Construction
4.	Northern Corridor	330KV and 132KV Transmission lines and substation projects in Shiroro, Kaduna, Abuja TCN Regions	Planning
5.	North Core Transmission Project	330KV Birnin-Kebbi-Niamey/ Ouagadougou line to interconnect Nigeria, Togo, Benin, Niger and Burkina Faso	Planning
6.	Nigeria Transmission Expansion Project	i. 330KV DC Quad Mando (Kaduna) - Rimin Zakara (Kano) ii. 330KV DC Quad Alaoji - Onitsha iii. 330KV DCQuad Binin - Ughelli iv. 132KV Transmission lines and substation in Yobe, Borno and Adamawa States	Planning

Source: Transmission Company of Nigeria (TCN)

B. Renewable Energy

i. Construction for thr evacuation of 40MW from Kashimbila Hydropower Station, Taraba State;
ii. Construction of Inter-Connected 60KWP mini-grid at Torankawa, Sokoto State;
iii. Construction of 60KWP Mini-Grid in Kuchi, Niger State;
iv. Construction of 50KWP Mini-Grip at Pakau, Kaduna State;
v. Construction of Off-Grid/On-Grid Renewable Energy (Solar) Micro Utility in Umuchiaka, Lowa Autonomous Community in Ihite, Uboma LGA, Imo State;
vi. Construction of Off-Grid/On-Grid Renewable Energy (Solar) Micro Utility Tella Village or Bantage Village in Wukari LGA Taraba State;
vii. Construction of Off-Grid/On-Grid Renewable Energy (Solar) Micro Utility at Bumoundi - Ekpetiama, Yenagoa LGA, Bayelsa State;
viii. Construction of 40Kw Solar Mini Grid in Anwase, Kwande LGA, Benue North East Senatorial District, Benue State;
ix. Provision and Installation of Solar Hybrid Mini Grid Supply in Anwase Kwande LGA, Benue State;
x. Provision and Installation of Solar Powered Street Lights at Ozom, Umuoke, Okamkpam, Umuagur, Nkwo, Ezeagu, Okposi, Umueze, Obodii, Umuomarigi, Enugunagu, Amaogbu, Umuobo, Ihuezi, Umuonaga, Onuiyi, Ozom, Umuagibo and Uguwakuru in Eziagu LGA of Enugu State;
xi. Electrification of different location in Ayetoro Gbede, Ijumu LGA with installation of five (5) 500KVA Transformers in Kogi West Senatorial District; and
xii. Electrification of Federe, Gudus, Fobour, Fadan Fobur, Bashar and Brder Communities, Plateau State.

C. Distribution

i. Construction of 215MW LPFO/Gas Power Station in Kaduna;
i. Construction of 2x60mva Substation at Kudenda for Kaduna and Gurara Power Station Connection Gurara to National Grid;
iii. Construction and Installation of 10km of 33kv lines and associated 2x15MVA Injection Substation at Ibusor, Delta State;
iv. Supply and Installation of 6nos. of 500kVA,33/0.415kV; 1no. 200kVA,33/0.415kV distribution transformers; rehabilitation/clearing of vegetation on existing Ijesa 33kV feeder line of 50km including upgrade of 2nos. Upriser line and replacement of 800A feeder pillar;
v. Completion of construction of 33KV line from Gombe to Federal University, Kashere, Gombe State;
vi. Construction and Rehabilitation of Damboa-Askira Uba-Madagali 33kV line;
vii. Supply and installation of 8 nos. 500kVA, 33/0.415kV Transformers and substations material;
viii. Supply and installation of 7 nos. 500kVA, 33/0.415kV Transformers in Katsina State;
ix. Construction of 20km of 33kV feeder from Damataru 330/132kV substation to Islamic center in Damaturu, Yobe State;
x. Construction of 13.50km of 33kV feeder from Molai 330/132kV substation to NTA Maiduguri Feeder in Maiduguri in Borno State;
xi. Construction of 11km of 33kV feeder from Molai 330/132kV substation to Bakasi feeder in Maiduguri, Borno State;
xii. Construction of 18km of 33kV feeder from Molai 330/132kV substation to Gombole feeder in old GRA Maiduguri, Borno State;
xiii. Construction of 18km of 33kV feeder from Molai 330/132kV substation to University of Maiduguri feeder in Maiduguri, Borno State;
xiv. Construction of 23km of 33kV feeder from 10MW Katsina Wind Power Plant to 132/33kv TCN Substation and construction of 17km of 33kv line from TCN 132/33kv substation to Umaru Musa Yar'Adua University, Katsina with 33KV Bus Bar Extension and Interlocking Bus Coupler, Katsina State;

xv. Construction of 15.2km Line Upgrade from 11kVto 33kV and dualization of section of Harbour 11kV Feeder from Harbour/Ogbaru Industrial Cluster at Onitsha, Anambra State;
xvi. Construction of 18.5km, 33kV Line from Dakpa Transmission Station to University of Abuja Main Campus (14km and 4.5km) and Tee Off to Mini Campus, Abuja, FCT. (b) Supply and Installation of 1no. 2.5MVA 33/11kV Distribution Transformer at University of Abuja Mini Campus, Abuja, FCT;
xvii. Construction of 11.4km 33kV Line from Ihovbor Substation to University of Benin, Benin City, Edo State. (b) Supply and Installation of 1no. 5MVA 33/11kV Transformer to a new plinth at University of Benin, Benin City, Edo State. (c) Extension of the 33kV Line from University of Benin to Technical College (4km) and Installation of 1no. 500KVA 33kV/400V Substation at Benin City, Edo State; and
xviii. Upgrading of the existing 1X 7.5MVA 33/11KV Substation to 2X 7.5MVA 33/11KV at Ahmadu Bello University, Zaria, Kaduna State.

Table 3.15 Specific Achievement in the Power Sub-sector

S/N	PROJECT TITLE	LOCATION	DESCRIPTION	STATUS	APPROPRIATION (BILLION N)	RELEASE	START DATE	END DATE	REMARK
1.	CONSTRUCTION OF 215MW LPFO/ GAS FIRED KADUNA POWER PLANT	Kaduna	Increase Generation Capacity by at least 215MW ensuring the completion of this power generation projects.	Ongoing	609.00		2012	2025	a) All 8 GTs installed and pre-aligned b) 8 Control Cabins on foundation c) Air Compressors installation d) Admin, Canteen, Clinic Building and Car Park e) Perimeter fence work and gate house f) 3x75MVA Installation Completed g) HV switchyard gantry and equipment structures installation h) Black-start/EDG foundations completed i) LPFO 1.5 million litre day tank j) Underground drain tanks for GT k) HV Switchyard Equipment installation. l) Fire Water Tank Foundation. m) Switchyard control Building. n) Fuel transfer skids ready on foundation o) Power Control Module on foundation p) 88.67%
2.	CONSTRUCTION OF 2X60MVA SUBSTATION AT KUDENDA FOR KADUNA AND GURARA POWER STATION CONNECTION GURARA TO NATIONAL GRID	Kaduna	TO CONSTRUCT 2X60MVA SUBSTATION AT KUDENDA FOR KADUNA AND GURARA POWER STATION CONNECTION GURARA TO NATIONAL GRID	Ongoing	191.40		2011	2021	Project is completed and awaiting commissioning
3.	Construction and Installation of 10km of 33kV lines and associated 2x15MVA Injection Substation at Ibusor Delta State	Delta	To Construct and Install 10km of 33kV lines and associated 2x15MVA Injection Substation at Ibusor Delta State	Completed			2021	2022	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.
4.	Supply and installation of 6nos of 500kVA, 33/0.415kV; 1no 200kVA, 33/0.415kV distribution transformers; rehabilitation/ clearing of vegetation on		To Supply and install 6nos of 500kVA, 33/0.415kV; 1no 200kVA, 33/0.415kV distribution transformers; rehabilitation/ clearing of vegetation on	Completed	128.00		2021	2022	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.

S/N	PROJECT TITLE	LOCATION	DESCRIPTION	STATUS	APPROPRIATION (BILLION N)	RELEASE	START DATE	END DATE	REMARK
	existing Ijesa 33kV feeder line of 50km including upgrade of 2 nos upriser line and replacement of 800A feeder pillar		existing Ijesa 33kV feeder line of 50km including upgrade of 2 nos upriser line and replacement of 800A feeder pillar						
5.	Completion of Construction of 33kV line from Gombe to Federal University kashere, Gombe	Gombe	To Complete and Construct 33kV line from Gombe to Federal University kashere, Gombe	Ongoing	1.00		2014	2022	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.
6.	Construction of 15.2km Line Upgrade from 11kV to 33kV and Dualization of Section of Harbour 11kV Feeder for Harbour/Ogbaru Industrial Cluster at Onitsha, Anambra State	Anambra	To Construct 15.2km Line Upgrade from 11kV to 33kV and Dualization of Section of Harbour 11kV Feeder for Harbour/Ogbaru Industrial Cluster at Onitsha, Anambra State	Ongoing			2018	2022	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.
7.	(A) Construction of 18.5km 33kV Line from Dakpa Transmission Station to University of Abuja Main Campus (14km and 4.5km) and Tee Off to Mini Campus, Abuja, Federal Capital Territory. (B) Supply and Installation of 1No 2.5MVA 33/11kV Distribution Transformer at University of Abuja Mini Campus, Abuja, Federal Capital Territory Construction of 23km of 33kV Line from 10MW Katsina Wind Power Plant to 132/33kv TCN Substation And Construction of 17km of 33kv Line from TCN 132/33kV Sub Station to Umaru Musa Yara'dua University Katsina with 33KV Bus Bar Extension and Interlocking Bus Coupler, Katsina State	Abuja	To Construct18.5km 33kV Line from Dakpa Transmission Station to University of Abuja Main Campus (14km and 4.5km) and Tee Off to Mini Campus, Abuja, Federal Capital Territory. (B) Supply and Installation of 1No 2.5MVA 33/11kV Distribution Transformer at University of Abuja Mini Campus, Abuja, Federal Capital Territory To construct 23km of 33kV Line from 10MW Katsina Wind Power Plant to 132/33kv TCN Substation And Construction of 17km of 33kv Line from TCN 132/33kV Sub Station to Umaru Musa Yara'dua University Katsina with 33KV Bus Bar Extension and Interlocking Bus Coupler, Katsina State	Ongoing Completed			2018	2022	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.
8.	(A) Construction of 11.4km 33kV Line from Ihovbor Substation to University of Benin, Benin City, Edo State. (B) Supply and Installation of 1No 5MVA 33/11kV Transformer with Injection Substation Equipment and Relocation of 1No 5MVA 33/11 Transformer to a New Plinth at University of Benin, Benin City, Edo State. (C) Extension of the 33kV Line from University of Benin to Technical College (4km) and	Edo	To Construct11.4km 33kV Line from Ihovbor Substation to University of Benin, Benin City, Edo State. (B) Supply and Installation of 1No 5MVA 33/11kV Transformer with Injection Substation Equipment and Relocation of 1No 5MVA 33/11 Transformer to a New Plinth at University of Benin, Benin City, Edo State. (C) Extension of the 33kV Line from University of Benin to Technical College (4km) and	Ongoing			2018	2022	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.

S/N	PROJECT TITLE	LOCATION	DESCRIPTION	STATUS	APPROPRIATION (BILLION N)	RELEASE	START DATE	END DATE	REMARK
	Installation of 1No 500KVA 33kV/400V Substation at Benin City, Edo State		Installation of 1No 500KVA 33kV/400V Substation at Benin City, Edo State						
9.	Upgrading of the existing 1X 7.5MVA 33/11KV Substation to 2 X 7.5MVA 33/11KV at Ahmadu Bello University, Zaria, Kaduna State	Kaduna	To Upgrade the existing 1X 7.5MVA 33/11KV Substation to 2 X 7.5MVA 33/11KV at Ahmadu Bello University, Zaria, Kaduna State	Completed			2018	2020	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.
10.	Construction of 6km of 33kv Line from Kukuwaba 132kV/33kV Transmission Station to Economic and Financial Crimes Commission (EFCC) Corporate Headquarters at Idu, Abuja, Federal Capital Territory	Abuja	To Construct 6km of 33kv Line from Kukuwaba 132kV/33kV Transmission Station to Economic and Financial Crimes Commission (EFCC) Corporate Headquarters at Idu, Abuja, Federal Capital Territory	Completed			2018	2020	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.
11.	Construction of 20km of 33kV feeder from Damaturu 330/132kV substation to Islamic center in Damaturu Yobe State	Yobe	To Construct 20km of 33kV feeder from Damaturu 330/132kV substation to Islamic center in Damaturu Yobe State	Completed			2018	2020	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.
12.	Construction of 13.50km of 33kV feeder from Molai 330/132kV substation to NTA Maiduguri feeder in Maiduguri in Borno State	Borno	To Construct 13.50km of 33kV feeder from Molai 330/132kV substation to NTA Maiduguri feeder in Maiduguri in Borno State	Completed			2018	2020	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry
13.	Construction of 11km of 33kV feeder from Molai 330/132kV substation to Bakasi feeder in Maiduguri Borno State	Borno	To Construct 11km of 33kV feeder from Molai 330/132kV substation to Bakasi feeder in Maiduguri Borno State	Completed			2018	2020	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.
14.	Construction of 18km of 33kv feeder from Molai 330/132kV substation to Gombole feeder in old GRA Maiduguri Borno State	Borno	To Construct 18km of 33kv feeder from Molai 330/132kV substation to Gombole feeder in old GRA Maiduguri Borno State	Completed			2018	2020	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.
15.	Construction of 18km of 33kV feeder from Molai 330/132kV substation to University of Maiduguri feeder in Maiduguri Borno State	Borno	To Construct18km of 33kV feeder from Molai 330/132kV substation to University of Maiduguri feeder in Maiduguri Borno State	Completed			2020	2020	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.
16.	Supply and installation of 7Nos 500kVA 33/0.415kV Tranformers in Katsina State	Delta	To Supply and install 7Nos 500kVA 33/0.415kV Tranformers in Katsina State	Completed			2016	2016	This project will invest in the development of much needed infrastructure and would open up the capacities of the distribution end. To evacuate 2000MW plus stranded power. This will improve the liquidity situation in the Nigeria Electricity Supply Industry.
17.	EMERGENCY IMPROVEMENT OF POWER SUPPLY	FCT & Nassarawa	Installation of 60MVar Capacitor Bank in Apo &	Completed	JICA GRANT, FGN Counterpart Funding	0.15	2016	2018	it improved the voltage profile of Abuja & Keffi and wheeling Capacity by 40MW

S/N	PROJECT TITLE	LOCATION	DESCRIPTION	STATUS	APPROPRIATION (BILLION N)	RELEASE	START DATE	END DATE	REMARK
18.	FACILITIES ABUJA & KEFFI (ABUJA FEEDING SCHEME PROJECT) BY (AFD)	FCT, Nassarawa & Kogi	25MVar Capacitor Bank in Keffi Substation Reinforcement of the High Voltage Transmission Ring around Abuja Project	Ongoing	AFD, FGN Counterpart Funding	Nil	2016	DECEMEBER 2022	Increase wheeling capacity by about 2300MW
19.	NIGERIA ELECTRICITY TRANSMISSION PROJECT	Kano, Kebbi, Niger & FCT	Rehabilitation and Reinforcement 330/132kV Transmission Substations	Ongoing	World Bank, FGN Counterpart Funding	Nil	2016	DECEMEBER 2023	Increased in Transformation Capacity by 3,975 and 4,387.5 MVA at 132/33kV voltage levels, 50 existing substations will be impacted and Reconductoring of 11nos. 132 kV Transmission Lines of about 1,195km route length aimed at achieving 880MW. Funding for Payment of Compensation urgently needed to allow for progress of work
		Lagos and Ogun	Rehabilitation and Reinforcement 330/132kV Transmission Substations	Ongoing	World Bank, FGN Counterpart Funding	Nil	2016	DECEMEBER 2023	
		Rivers, Benue, Enugu, Cross River, Abia, Eboyi	Rehabilitation and Reinforcement 330/132kV Transmission Substations	Ongoing	World Bank, FGN Counterpart Funding	Nil	2016	DECEMEBER 2023	
		Osun, Kwara, Delta & Edo	Rehabilitation and Reinforcement 330/132kV Transmission Substations	Ongoing	World Bank, FGN Counterpart Funding	Nil	2016	DECEMEBER 2023	
		Adamawa, Borno, Yobe & Bauchi	Rehabilitation and Reinforcement 330/132kV Transmission Substations	Ongoing	World Bank, FGN Counterpart Funding	Nil	2016	DECEMEBER 2023	
		Taraba, Gombe & Plateau	Rehabilitation and Reinforcement 330/132kV Transmission Substations	Ongoing	World Bank, FGN Counterpart Funding	Nil	2016	DECEMEBER 2023	
20.	NORTHERN CORRIDOR TRANSMISSION PROJECT BY (AFD)	Niger, Kebbi	Construction of 330kV DC transmission line Kainji-Birnin Kebbi (following the existing ROW of the SC 330kV line)	Ongoing	AFD, FGN Counterpart Funding	Nil	Dec-20	31ST MAY 2027	Not yet effective. The Credit Facility Agreement (Financing Agreement) was signed on 21st December 2020 and effectiveness conditions are in the process of being fulfilled. Funding for Payment of Compensation urgently needed to allow for progress of work
		Kebbi & Sokoto	Replacement of 9 spans of Sky wire for 330kV Jebba-Osogbo lines 1 & 2 and 330kV Jebba-Ganmo line	Ongoing	AFD, FGN Counterpart Funding	Nil	Dec-20	31ST MAY 2027	
		Katsina, Jigawa & Kano	Construction of Birnin Kebbi – Sokoto 330kV DC transmission line on the existing 132kV Birnin Kebbi Sokoto ROW and reconducting the existing 132 kV single circuit Birnin-Kebbi line to double its capacity	Ongoing	AFD, FGN Counterpart Funding	Nil	Dec-20	31ST MAY 2027	
		Niger & Kaduna	Construction of length of 330kV DC twin line between Katsina – Daura – Gwiwa – Jogana – Kura. The Kaduna-Kano 330kV line will be intercepted at Kura and taken into Jogana for a turn in / out.	Ongoing	AFD, FGN Counterpart Funding	Nil	21st DECEMEBER 2020	31ST MAY 2027	

S/N	PROJECT TITLE	LOCATION	DESCRIPTION	STATUS	APPROPRIATION (BILLION N)	RELEASE	START DATE	END DATE	REMARK
		Niger & Kaduna	Reconstruction and upgrading of 1 of the 2 single circuits 330kV transmission lines 1 or 2 from Shiroro PS to Mando (Kaduna) to a Double Circuit, Quad conductor Shiro-ro-Mando (Kaduna) transmission lines 1 or 2. The line bay extension at Mando and Shiroro.	Ongoing	AFD, FGN Counterpart Funding	Nil	Dec-20	31ST MAY 2027	
		Niger, Sokoto & Kebbi	Replacement of 28 spans of Sky wire for 330kV 330kV Shiroro- Jebba line 2	Ongoing	AFD, FGN Counterpart Funding	Nil	Dec-20	31ST MAY 2027	
		Niger & Kaduna	Replacement of 32 spans of Sky wire for 132kV Minna-Bida line	Ongoing	AFD, FGN Counterpart Funding	Nil	21st DECEMEBER 2020	31ST MAY 2027	
21.	Lagos – Ogun Transmission Project (JICA)	Lagos and Ogun		Ongoing	JICA, FGN Counterpart Funding	Nil	2018		Line Route Studies, Enviromental and Social Impact Assessment, Resettlement Action Plan & Enviromental Social Management Plan Completed Since 2018. Now awaiting counterpart fund for payment of Compensation to Project Affected Persons (PAPs)
			b. Construction of about 104.59 km of new 132kV double circuit lines	Ongoing	JICA, FGN Counterpart Funding	Nil	2018		
		Ogun	a. Construction of 2No. 150MVA, 330/132/33kV AIS substation at Likosi equipped with 10 x 330kV line bays, 2No. 100MVA 132/33kV transformers including 6 x132kV and 6 x 33kV line bays and Termination works with the existing 330 KV Transmission lines	Ongoing	JICA, FGN Counterpart Funding	Nil	2018		
			b. Construction of complete new 2No.x 60MVA, 132/33kV substation at Abule Oba (Redeem) including 6 x 33kV line bays	Ongoing	JICA, FGN Counterpart Funding	Nil	2018		
		Ogun	a. Construction of complete new 2No. 150MVA, 330/132/33kV AIS substation at Ejio to be equipped with 12 X 330kV line bays, and 2No. 60MVA, 132/33kV transformers including 2 x 132kV and 6 x 33kV line bays and	Ongoing	JICA, FGN Counterpart Funding	Nil	2018		
			i. Construction of 2 x 330kV line bays extension at Olorunsogo switchyard	Ongoing	JICA, FGN Counterpart Funding	Nil	2018		
			ii. Construction of 2 x 132kV line bays extension at New Abeokuta 132/33KV substation	Ongoing	JICA, FGN Counterpart Funding	Nil	2018		

S/N	PROJECT TITLE	LOCATION	DESCRIPTION	STATUS	APPROPRIATION (BILLION N)	RELEASE	START DATE	END DATE	REMARK
			b. Construction of complete new 2No. 150MVA, 330/132/33kV AIS substation at Makogi (MFM) to be equipped with 4 X 330kV line bays, and 2No. 60MVA, 132/33kV transformers including 6 x 33kV line bays	Ongoing	JICA, FGN Counterpart Funding	Nil	2018		
		Lagos	a. Construction of complete new 2No. 150MVA, 330/132/33kV AIS substation at Ajegunle (New Agbara) to be equipped with 6 X 330kV line bays, and 2No.60MVA, 132/33kV transformers including 4 x 132kV and 6 x 33kV line bays and Construction of 2 x 132kV line bays extension at the existing Agbara 132/33KV substation	Ongoing	JICA, FGN Counterpart Funding	Nil	2018		
			b. Construction of complete new 2No. x 60MVA, 132/33kV substation at Badagary including 2 x 132kV and 6 x 33kV line bays	Ongoing	JICA, FGN Counterpart Funding	Nil	2018		
22.	JICA Lagos Transmission Substation (Apapa/ Akangba)	Lagos	Emergency Rehabilitation and Reinforcement of Lagos Transmission substation	Ongoing	JICA GRANT, FGN Counterpart Funding	0.30	2018		Increase power supply to the industrial areas
23.	FED. Ministry of Power	Akwa Ibom	Construction of 2x30MVA Substation with associated line bay at Ibiono, Akwa Ibom	Ongoing	FGN Appropriation	Nil	2019		Increase wheeling capacity by about 48MW and improve social economic activities in the area
24.	Contract for the evacuation of 40MW from Kashimbilla Hydropower Station, Taraba State	Taraba and Benue States	Construction of 56Km 132KV Double Circuit (DC) from 132kV Yandev Substation to 330kV Apir Substation in Makurdi, Construction of 2x60MVA, 132/33KV substations at Ugba, 33/11KV substations at Buruku, Zaki Biam and Ugba and the electrification of 24 host communities (10 villages) at Kashimbilla	Ongoing			1/2/ 2015	1/12/ 2021	Project essential to the evacuation of the 40MW Kahimbilla Hydropower statin and will also serve as a corridor for the evacuation of the 3050MW Mambilla Hydroelectric power plant
25.	Construction of Inter-connected 60kWp mini-grid at Torankawa, Sokoto State	Torankawa, Sokoto State	Construction of Grid-connected mini-grid renewable energy micro utility project	Completed			1/10/ 2018	31/12/ 2018	Commissioned in February 2019
26.	Construction of 60kW Mini-grid in Kuchi, Niger State	Kuchi, Niger State	Construction of a Solar PV Interconnected Mini grid project at Kuchi, Niger State	Ongoing			1/8/ 2020	1/3/ 2021	Increase electricity access to Communities in Jlingo and Environs in accordance with our electricity vision 30:30:30
27.	Construction of 50kWp Mini-grid	Pakau, Kaduna State	Construction of 50kW of Solar	Completed			23/10/ 2014	15/02/ 2018	Increase electricity access to communities in Pakau

S/N	PROJECT TITLE	LOCATION	DESCRIPTION	STATUS	APPROPRIATION (BILLION N)	RELEASE	START DATE	END DATE	REMARK
	at Pakau, Kaduna State		PV Distribution Networks for 100 households and 7 businesses, power house PV setup wich comprises of solar inverters, charge controllers, monitors, wifi network deployment, customer connection and smart meter installations						and environs which are far from the national grid through renewable energy in accordance with electricity vision 30:30:30 and Paris Agreement commitment for climate change action
28.	Construction of Off-grid/On-grid Renewable Energy (Solar) Micro-utility in Umuchiaka, Lowa Autonomous Community in Ihite, Uboma LGA, Imo State	Ubuma LGA, Imo State	Off grid/On grid solar micro utility	Ongoing			1/6/ 2020	1/12/ 2021	Increase electricity access through renewable energy in accordance with our electricity vision 30:30:30 & the Paris Agreement commitment for climate change action
29.	Construction of Off-grid/On-grid Renewable Energy (Solar) Micro-utility in Tella Village or Bantage Village in Wukari LGA, Taraba State	Wukari LGA, Taraba State	Off grid/On grid solar micro utility	Ongoing			1/6/ 2020	1/12/ 2021	Increase electricity access through renewable energy in accordance with our electricity vision 30:30:30 & the Paris Agreement commitment for climate change action
30.	Construction of Off-grid/On-grid Renewable Energy (Solar) Micro-utility at Bumoundi-Ekpetiama, Yenegoa LGA, Bayelsa State	Yenegoa LGA, Bayelsa State	Off grid/On grid solar micro utility	Ongoing			1/6/ 2020	1/12/ 2021	Increase electricity access through renewable energy in accordance with our electricity vision 30:30:30 & the Paris Agreement commitment for climate change action
31.	Construction of 40kW Solar Mini-grid in Anwase, Kwande LGA, Benue North East Senatorial District, Benue State	Kwande LGA, Benue Stae	Solar Mini-grid	Ongoing			1/6/ 2020	1/12/ 2021	Supply of 40kW Solar Mini-Grid
32.	Provision and installation of Solar Hybrid Mini-grid supply in Anwase, Kwande LGA, Benue State	Kwande LGA, Benue Stae	Solar Hybrid Mini-grid	Ongoing			1/6/ 2020	1/12/ 2021	Supply of Solar Hybrid Mini-grid
33.	Provision and Installation of Solar Powered Streetlights at Ozom, Ummuoke, Okamkpam, Umuagor, Nkwo, Ezeagu, Okposi, Umueze, Obodii, Umuomrigi, Enuguagu, Amaogbu, Umuobo, Ihuezi, Umuonaga, Onuiyi, Ozom, Umuagibo, and Uguwakuru in Eziagu LGA of Enugu State	Eziagu LGA, Enugu State	Solar powered street lights	Ongoing			1/6/ 2020	1/12/ 2021	Installation of solar powered street lights
34.	Electrification of Emekutu, Ikebe, Ochella, Uferane, Ufer-Ane-Alumeji, Ogbaloto, Ojapala 1 & 2, Iga-Ebiji, Alaka, Ogbapiala, and Ojuwo at Ankpa LGA Kogi State	Ankpa LGA, Kogi State	Electrification	Ongoing			1/6/ 2020	1/12/ 2021	Electrification of selected locations
35.	Electrification of different locations in Ayetoro Gbede, Ijumu LGA with	Ijumu LGA, Kogi State	Electrification via Installation of Transformers	Ongoing			1/6/ 2020	1/12/ 2021	Installation of transformation to improve electrification

S/N	PROJECT TITLE	LOCATION	DESCRIPTION	STATUS	APPROPRIATION (BILLION N)	RELEASE	START DATE	END DATE	REMARK
	installation of five (5) 500kVA transformers in Kogi West Senatorial Distriction								
36.	Electrification of Feder, Gudus, Fobour, Fadan Fobur, Bashar, and border communities, Plateau State	Plateau State	Electrification	Ongoing			1/6/ 2020	1/12/ 2021	Electrification of selected locations

SOURCE: Federal Ministry of Power

3.2.5 Aspiration, Goals and Targets for the Energy Sector

a) Aspirations/Goals

Nigeria has set ambitious aspirations for the Energy sector.

i. Power

For the power sub-sector, the priorities identified are as follows:

- Increase power generation from the current 3,500MW to 7,000 MW by 2021, 11,000MW by 2023 and to 25,000MW by 2025, with focus on gas as the immediate priority and adding alternative sources after 2025;
- Improve energy efficiency and diversify the energy mix, including through greater use of renewable energy;
- Facilitate private sector investment in generation, transmission, and distribution;
- Improve access to electricity to all Nigerians;
- Increase rural electrification through the use of off-grid renewable solutions;
- Restore financial viability in the electricity market;
- Implement a data-driven approach in power sector development planning;
- Eliminate sabotage of gas and power infrastructure;
- Strengthen and increase transmission capacity, with an immediate focus on the national backbone;
- Increase distribution capacity, with priority placed on making power available for industrial users and reducing distribution losses;
- Finalize privatization of power generation and distribution, and extend privatization to include NIPP assets;
- Build capabilities, increasing human capacity 20 times by 2025 and 40 times by 2043; and
- Implement all power infrastructure projects in compliance with available international best practices.

ii. Oil and Gas

For oil and gas, the priorities are to:

- Provide a robust gas distribution infrastructure to deepen gas penetration and increase gas monetization;
- Grow Oil and Gas production and reserve, enhance Oil recovery, with minimal environmental degradation;
- Increase oil production capacity from 2.57MMbbls/d in 2020 to 3 MMbbls/d in the short term and 4 MMbbls/d in the medium term;
- Increase local refining capacity to meet domestic demand and provide optimum petroleum products distribution networks;

- Become a net exporter of petroleum products by 2025;
- Enable NNPC operate commercially in line with the proposed Petroleum Industry Bill, part of which has been passed by the Legislature;
- Build sustainable Oil and Gas Infrastructure, (Gathering, Processing, Storage, Distribution facilities, etc);
- Explore alternative and innovative Project Financing mechanisms;
- Reform key Oil and Gas institutions to anchor sustained growth in the industry;
- Expand domestic gas production to meet growing demands for power generation, Gas-Based Industries (GBIs), and gas to people Subsectors;
- Promote LPG for domestic use through National Gas Expansion Programme;
- Increase local content in the upstream, midstream, and downstream oil and gas sectors;
- Promote deep offshore and Inland Basins exploration activities for oil and gas reserves growth;
- Promote Ease of Doing Business in the Oil and Gas industry to attract new entrants;
- Reduce the average unit production costs of crude oil by at least 5.0 per cent in the short-term and 20.0 per cent in the medium-term;
- Eliminate routine gas flaring via the National Gas Flare Commercialisation Programme;
- Commence and strengthen the implementation of the Nigerian Gas Transportation network code;
- Deregulate and liberalize the downstream sector and entrench price freedom;
- Ensure industry compliance with global health, safety and environmental standards;
- Ensure passage of the PIB;
- Reform and create commercially oriented and profit-driven oil and gas entities;
- Increase the percentage of capital expenditure in-country to meet growing production capacities;
- Increase the use of sustainable fuels; and
- Establish links to the regional gas network (West African Gas Pipeline, Nigerian phase of the trans-Saharan gas pipeline).

The specific strategic goals for the plan periods (2020-2025 and 2026-2043) are shown in Table 3.16 below.

Table 3.16: Energy Sector Goals

Sub-sector	2020-2025	2026-2043
Power	Ramp up and stabilize capacity additions at a very high rate of 8-10 GW per annum	Reduce transport and consumption losses to global standards
Oil and Gas	Expand the national grid line with capacity addition and implement smart grid technologies	Increase the share of alternative energy to 35.0 per cent
	Develop hydro and other alternative generation capacity to maintain 70:30 fossil fuels to alternative ratio	Export electricity to ECOWAS countries
	Develop human capacity	
	Increase local refining capacity to fully meet national demand	Increase production and refining capacity in line with national demand growth
	Increase gas production, handling and transport capacity in line with power sector needs	Reduce greenhouse gas emissions to be in line with the Kyoto Protocol
	Increase oil and gas reserves and productions Zero oil/crude oil theft and minimal oil spill	Eliminate operation-related oil spill Aline with global health and safety practices
	Promote the use of sustainable fuels	
	Link to the regional gas network	

Source: Reviewed NIIMP Energy TWG

b) Targets/Strategies

i. Power

For the power sub-sector, there are several targets for the period 2020 – 2043. The overarching target is to increase power generation from the current 3.5GW to 350GW by the end of 2043 by optimizing non-operational capacity, encouraging small-scale projects, and pursuing long-term capacity. Also, there is a need to improve the commercial viability of the GenCos and DisCos. To achieve this target, Nigeria will need to implement the following strategies:

- Optimize the existing installed capacity available for generation;
- Restore lost gas supply through the Gas Flare Commercialization Programme;
- Produce strategy towards the elimination of gas infrastructure vandalism;
- Complete major gas infrastructure lines to plants and main trunk lines to facilitate gas supply for power generation;
- Improve NBET's financial capability to support the electricity market;
- Introduce strategy for capital market and banking programmes that ensure all upstream industry operators get paid for each contract;
- Encourage electricity distribution companies (Discos) to procure embedded generation directly;
- Reach financial close on the 15 solar plants that have recently signed power purchase agreements (PPPs);
- Accelerate standardization of the process for executing independent power projects (IPPs), including defining pricing, to encourage private-sector participation;
- Deploy a clear, legal, and commercial framework for investments in power projects;
- Mobilize investments to execute renewable off-grid power solutions to improve energy mix;
- Reduce transmission and distribution losses/ energy theft;
- Restructure the Transmission Company of Nigeria to improve management and operational efficiency;
- Achieve privatization of NIPP generation assets;
- Implement the Rural Electrification Strategy and Implementation Plan;
- Implement the National Renewable Energy and Efficiency Policy (NREEP); and
- Implement Power Sector Recovery Plan.

ii. Oil and Gas

The main goal in the oil and gas sub-sector is to advance "gas to power" to meet the rapidly growing energy demand of the country. The target is to increase oil production to 3.0 and 4.0 MMbbls/d, and increase refining capacity to a level that would meet local demand and export potential, estimated at 4.0MMbbls/s by 2043, with the target of becoming premium motor spirit (PMS) self-sufficient by 2030. Similarly, Nigeria plans to increase its gas production capacity from 8.16 BSCFD in 2020 to 15 BSCFD by 2025 and 30 BSCFD by 2043. The increase in gas production is necessary to meet supply sufficiency to gas-powered plants, Commercial sub-sectors, and gas-based industries, e.g., fertilizers, agro-processing, and petrochemicals.

The corresponding manufacturing capacities of the gas-based industries are set to grow accordingly. In terms of exploration, the goal is to grow natural gas reserves from 203.16 TCF in 2019 to 210 TCF by 2025 and 220 TCF by 2030.

To achieve these targets, Nigeria will need to implement the following strategies:

- Revamp refineries to increase local production capacity and facilitate the coming on stream of new refineries;
- Revolutionize gas as fuel of choice by launching development projects and increasing production;

- Strategically reduce government equity in NNPC refineries and other downstream subsidiaries (such as pipelines and depots);
- Conclude downstream liberalization and entrench price freedom;
- Implement new business models for refineries;
- Robust gas and petroleum products distribution networks;
- Encourage private-sector participation through co-location and JV arrangements;
- Implement the seven key critical gas development projects to ramp up domestic supply to meet growing domestic gas demands and export commitments;
- Entrench gas expansion programme and facilitate gas-based industrialization;
- Ensure petroleum products supply sufficiency and effective products transportation;
- Promote indigenous capacity and participation in the oil and gas industry;
- Pass the Petroleum Industry Reform Bill;
- Improve and sustain Niger Delta security;
- Facilitate rigorous oil and gas exploration activities for reserves growth and energy security;
- Ensure Environmental best practices and sustainable resources development; and
- Entrench Ease of Doing Business in the oil and gas industry

Table 3.17: Energy Sector Targets (Power)

Name	Unit	Definition	2019 Current	2025	2030 Targets	2043
Generation Capacity	GW	Total installed generation Capacity	3.5	20	56	350
Transmission route lines: 330 KV	km	Total length of 330 KV transmission lines	5,552	8,000	10,000	16,600
Transmission route lines: 132 KV	km	Total length of 132 KV transmission lines	7,040	12,000	15,000	22,000
Transmission Capacity	MW	The total transmission transformer capacity	5,000	40,000	75,000	470,000
Distribution Capacity	MW	The total distribution transformer capacity	6,000	36,000	67,000	420,000
Access to Electricity	Per cent	Proportion of population that have access to electricity where access	40	75	90	100

Source: Reviewed NIIMP Energy TWG.

Table 3.18: Energy Sector Targets (Oil and Gas)

Name	Unit	Definition	Current 2019	Target 2025	Target 2030	Target 2043
Production capacity - oil	kbpd	Facilities required to safely and sustainably produce discovered volumes	2,500	2,750	3,000	4,000
Production capacity - gas	mcfpd	Facilities required to safely and sustainably produce discovered volumes	8,000	11,000	15,000	30,000
Refining capacity	kbpd	Totality of facilities required to refine crude Oil	446	750	1,000	4,000
Refined products storage capacity	billion litres	Total stock of storage facilities/depots required to hold strategic number of days of a national daily consumption	2.60	3.2	3.8	5.2
Pipeline length (refined)	km	Length of pipeline installed for transportation of refined products	5,120	6,000	7,000	10,000
Pipeline - (crudeoil)	km	Length of pipeline installed for transportation of crude Oil	3,000	3,300	3,600	4,800
Pipeline capacity (crude oil)	kbpd	Daily volumetric throughput	1.65	1.815	1.98	2.64
Pipeline capacity (refined)	m litres	Daily volumetric throughput	30	38	47	60

Source: Reviewed NIIMP Energy TWG.

3.2.6 Challenges of the Sector

i. Oil and Gas Subsector

Major infrastructure challenges in the oil and gas subsector include:

- **The poor state of the refineries:** Some of the refineries in the country are in very poor state of disrepair accounting for the poor capacity utilization and underscores the infrastructure challenge in the sector, especially the need to improve maintenance and revamp the refineries for optimal capacity utilization.
- **Ageing oil production facilities** that were built in the early and mid-seventies requiring modernization.
- **Low level of investments in the Sub-sector:** Transport and storage infrastructure in the oi l and gas sector is capital intensive, and investment in Nigeria has been low compared to other countries with similar potentials
- **Lack of sustenance of public sector investment in oil and gas:** Besides the low level of government investment, there is the challenge of sustaining government funding of oil and gas infrastructure amidst increasing financial constraints and competing social needs.
- **Security issues:** Insecurity especially vandalism of critical infrastructure in the Niger Delta region poses a substantial threat to oil and gas infrastructure consolidation and development in the sub-sector
- The high cost of environmental remediation from years of militancy and pipeline vandalism.
- **Inadequate legal enablers:** Weak legal, institutional and regulatory framework, including delay in the passage of the PIB by the National Assembly which has continued to impact negatively on oil and gas infrastructure development, through the slow inflow of investments in the sub-sector.
- **Inadequate Funding:** Dwindling budgetary provisions arising from fluctuations and increasing uncertainty in global oil prices reduce capital investments in infrastructure development in the subsector.
- Building indigenous technology capability in complex deep-water environments
- Other issues that militate against oil and gas infrastructure development are;
- Unsustainable pricing regimes, which makes long term infrastructure planning difficult
- **Unstable crude oil prices:** Global oil prices have remained volatile and unpredictable. The production of shale oil in North America continues to threaten global price stability thereby creating a high degree of uncertainty in the industry, which invariably deters domestic and foreign investment inflows in the sector
- Crude Oil theft and reduction in crude oil exploration and production due to militancy attacks reduce investments in infrastructure in the industry through a reduction in revenue generation
- Shortage of indigenous human capital that is required to build need indigenous technology for oil and gas infrastructure development.

ii. Power Subsector

Major Infrastructure challenges in the Power subsector include;

- **Obsolete Equipment and Poor Maintenance Culture:** The country has so far fallen short of attaining the Vision 2020 and ERGP (2017-2020) expectations of a large, strong, and diversified economy mainly as a result of the huge infrastructure deficit, especially in the power sub-sector. The infrastructure deficit is exacerbated by frequent breakdowns of the power generation plants due to obsolete equipment and poor maintenance culture. There is also the challenge of an acute shortage of spare parts for the maintenance of existing facilities when required.
- **Inadequate Power Mix:** Power generation relies mainly on hydro and thermal sources to the neglect of the country's large endowment in coal, solar, and wind resources. As a result, there is a huge shortfall in power generation in the dry season. The unabated demand for power supply coupled with the inability of the thermal power generating plants to meet the regular requirement for gas supply puts a lot of pressure on existing infrastructure further reducing their performance.

- **Electricity Supply/Demand Gap:** The wide gap in electricity supply vis-a-vis demand is one of the leading issues in the on-going effort to move the economy towards the desired state of development. One clear manifestation of growing disequilibrium in the demand/supply scenario is the persistent increase in the demand for private power generating plants by households, private sector establishments, and government institutions at all levels. It is estimated that total self-generated electricity is about 6000MW almost thrice the amount of electricity that was fed into the national grid system.
- **Inappropriate Electricity Pricing:** Relatively low tariffs compared with the cost of production is a major challenge. The prevailing tariff ranged from N6.0/kwh for the lowest category of Residential Consumers with Single Phase Meter to 15,8/kwh for Commercial/ Industrial Users vis-a-vis the average cost of about 23.0/kwh. The inability to cover the cost of production gave rise to huge indebtedness to the National Gas Company (NGC) which supplied gas to four of the six generating companies (gencos) located at Egbin, Sapele, Afam Delta. The shortage of gas supply gave rise to a huge amount of unutilized capacity in all segments of electricity service delivery.
- **Inadequate Transmission System:** The transmission system has a wheeling capacity of about 5000MW (less than 50% of the prevailing level of electricity demand). Total transmission network (330kv and 132kv) is about 11000kms compared to about 23000kms of the distribution network (33kv and 11kv lines). Total power losses on account of long-distance transmission and distribution lines, vandalism, and pilferage are estimated at over 50.0 per cent of generated power.

iii. Other challenges include the following;

- The huge backlog of indebtedness to Discos by nearly all segments of public sector institutions;
- High incidence of voluntary retirement due to uncompetitive staff remuneration;
- A relatively low tariff rate is a major challenge. In 2012, power was sold to final consumers at about N12/kWh vis-à-vis the average tariff of N8/kWh as of 2010. Currently, the average tariff has increased to an average of above N23/kWh;
- Inadequate gas supply to the power plants due to pipeline vandalism and inability to pay for gas supplied; and
- Poor estimated billing system occasioned by the inability of Distribution Companies (Discos) to provide meters to consumers.

3.2.7 Private Sector Expectations and Priorities

The private sector recommendations on the enablers for private sector participation and priorities for the Energy sector include:

i. complete privatization of power generation and distribution assets;
ii. create a clear path for the development of the Transmission Company of Nigeria (TCN), including a mandate to lead future industry planning and allow for private sector investment;
iii. implement the Transmission Reinforcement Plan to address transmission constraints and improve grid capability;
iv. complete implementation of the Gas Master Plan;
v. progress LNG projects that have viable economics and adequate gas supply; and
vi. enable completion of joint venture gas supply projects (funding, incentives, etc.).

3.2.8 Enablers

i. An effective and efficient regulatory environment for timely approval of projects, contracts, permits, licenses, etc., related to infrastructure development;
ii. Guarantee of Right of Way for infrastructure development and reduced cost of securing access rights;

iii. Improved regulation of gas pricing to attract investment in gas supply infrastructure;
iv. Government credit enhancement for IPPs (e.g., secure World Bank PRG);
v. Incentives for private sector investment and
vi. Passing the Petroleum Industry Bill to accelerate expected reforms.

A review of the relevant infrastructure-related legislation in the Energy sector revealed 24 principal legislations, 16 amendments, and 10 sub-legislations governing the oil and gas industry in Nigeria. The key ones are the NNPC Act, the Petroleum Act, and the Petroleum Control Act which were found not to be investor-friendly.

Furthermore, it was identified that the provisions of Sections 7(4), 11(2) and 12 of the NNPC Act are all in breach of the provisions of Section 162 of the Constitution which requires that revenues collected by the government should be paid into an account called the Federation Account. Also, Paragraph 2 of the Deep Water Block Allocation (back-in rights) regulation 2003 (subsidiary legislation under the Petroleum Act) that gives the Federal Government the right to acquire five-sixths of an OPL (Oil Prospecting License) or OML (Oil Mining Lease) interest is invalid to the extent that it is inconsistent with paragraph 35, First Schedule to the Petroleum Act which provides that such participation must be made on terms to be negotiated between the Federal Government and the holder of the OPL or OML.

The laws in the sector cannot be said to be sub-national-friendly as minerals, gas, and oil rights are all vested in the Federal Government of Nigeria. Furthermore, most of these laws are out-of-date as they are not in line with modern practice. These informed the need to bring this multiplicity of laws into one document in the form of the Petroleum Industry Bill (PIB) which is currently before the National Assembly. The Petroleum Industry Governance Bill (PIGB) 2017 was passed on 25 May 2017 to create efficient and effective governing institutions, establish a framework for the creation of commercially oriented and profit-driven petroleum entities; promote transparency and accountability of petroleum resources, and foster a conducive business environment for petroleum industry operations.

3.2.9 Required Infrastructure Investments

Nigeria's aspiration and infrastructure target for the next 23 years (2020-2043) is aimed at increasing the current infrastructure stock from 30.0 per cent of the GDP to at least 70.0 per cent by the year 2043. To achieve the goals and objectives, the largest investment needs are in the energy (N1.2 trillion) and transportation sector (N900 billion) per annum, representing more than 50.0 per cent of the required infrastructure investments over the plan period. In the first 5 years of the Plan, it is expected that investments in the Energy sector will grow at an annual growth rate of 50.0 per cent. Estimates using international benchmarks indicate that USD 3,120 billion will be required over the next 23 years to achieve the specific sector targets – USD 1.872 billion for power and USD 1.248 billion for oil and gas, which include maintenance cost.

On power, the bulk of the investment will be required to increase generation capacity from current levels of about 3.5 GW to 350 GW (which will be largely funded by the private sector), to build the transmission network to transfer the generated electricity across the country and to distribute electricity to Nigerians.

Nigeria's per capita power consumption is only 144.52 kWh per year, one of the lowest globally, thus impacting negatively on economic growth and productivity. Based on the implementation of the ongoing power projects by the current Administration, the per capita power consumption in Nigeria will only reach 433 kWh per year in 2025. (Source: PwC - Powering Nigeria for the Future). Achieving this objective will require investment in the power sector in Nigeria, with the following substantial 'leaps' over the next ten years: Accelerating growth in power generation capacity and improving utilization; Expanding the power transmission network and driving better efficiencies, and Establishing and scaling up efficient power distribution capabilities.

In the case of oil and gas, the biggest cost drivers will be increasing existing refining utilization to match the 446 kbpd

capacity, increasing refining capacity to meet local crude production capacity, building additional pipelines, increasing oil production capacity, and developing the infrastructure to increase production capacity in oil and gas. The urgent need for a cleaner energy mix must be balanced against the equally urgent need to meet the rising energy demands of a growing population and deliver affordable energy to all. The disbursement of USD200 million from the Nigerian Content Intervention Fund to indigenous manufacturers and service providers in the oil and gas sector was made by the current Administration in June 2020 as part of the Federal Government's effort to boost indigenous participation in the oil and gas sector to continue to grow local content and invariably increase investment in the sector. As at July 2019, the Nigerian Content Development and Monitoring Board (NCDMB), which has the responsibility to manage this fund had disbursed about USD160 million to local oil firms.

Over the first 5 years, Nigeria will spend USD 37 billion: USD 12 billion to increase gas production from current levels of 8,000 BSCFD to 11,000 BSCFD, USD 16 billion to increase oil production capacity from 2.57 mbpd as at June 2020 to at least 3 mbpd by 2025 and USD 9 billion to increase refining capacity from current levels of 446,000 bpd as at August 2020 to at least 600,000 bpd by 2025. Most of the refining and oil production increase will be funded by the private sector, whereas a significant part of the gas expansion will be funded by the public sector.
To ensure that Nigeria reaches its ambitious targets, it will need to ensure an appropriate cost-reflective tariff for power, drive transmission and distribution losses down to a reasonable level to make the tariff more affordable, put appropriate gas contracts in place to ensure gas is delivered to power stations and make adequate upfront investments in skills and capabilities to deliver and operate the necessary infrastructure.

3.3 Information and Communications Technology (ICT)

3.3.1Current State of Infrastructure

Information and Communications Technology (ICT) Sector comprises Telecommunications and information Services, Postal and Courier Services, among others. ICT infrastructure plays a major role in the creation of an enabling environment for socio-economic growth and development of the country. An efficient ICT network enables the delivery of ICT services that drive productivity, innovation, and social inclusion. ICT facilitates the production of goods and services, creates business opportunities, improves the ease of doing business, and enhances access to markets thereby contributing to the growth of the economy. It also delivers a wealth of information, increases efficiency gains across all sectors of the economy, and enhances connectivity and social interaction.

Today, ICT is an umbrella term that encompasses all technical means for processing and communicating information such as digital technology including computers and the internet; mobile telephony; different electronic applications (e-banking, e-governance, e-commerce, etc.); digital media and broadband technology. The sector's forte includes ample coastline and continental shelf, serving as landing points for submarine cables; more-than-adequate undersea cable capacity; and substantial indigenous satellite capacity and coverage.

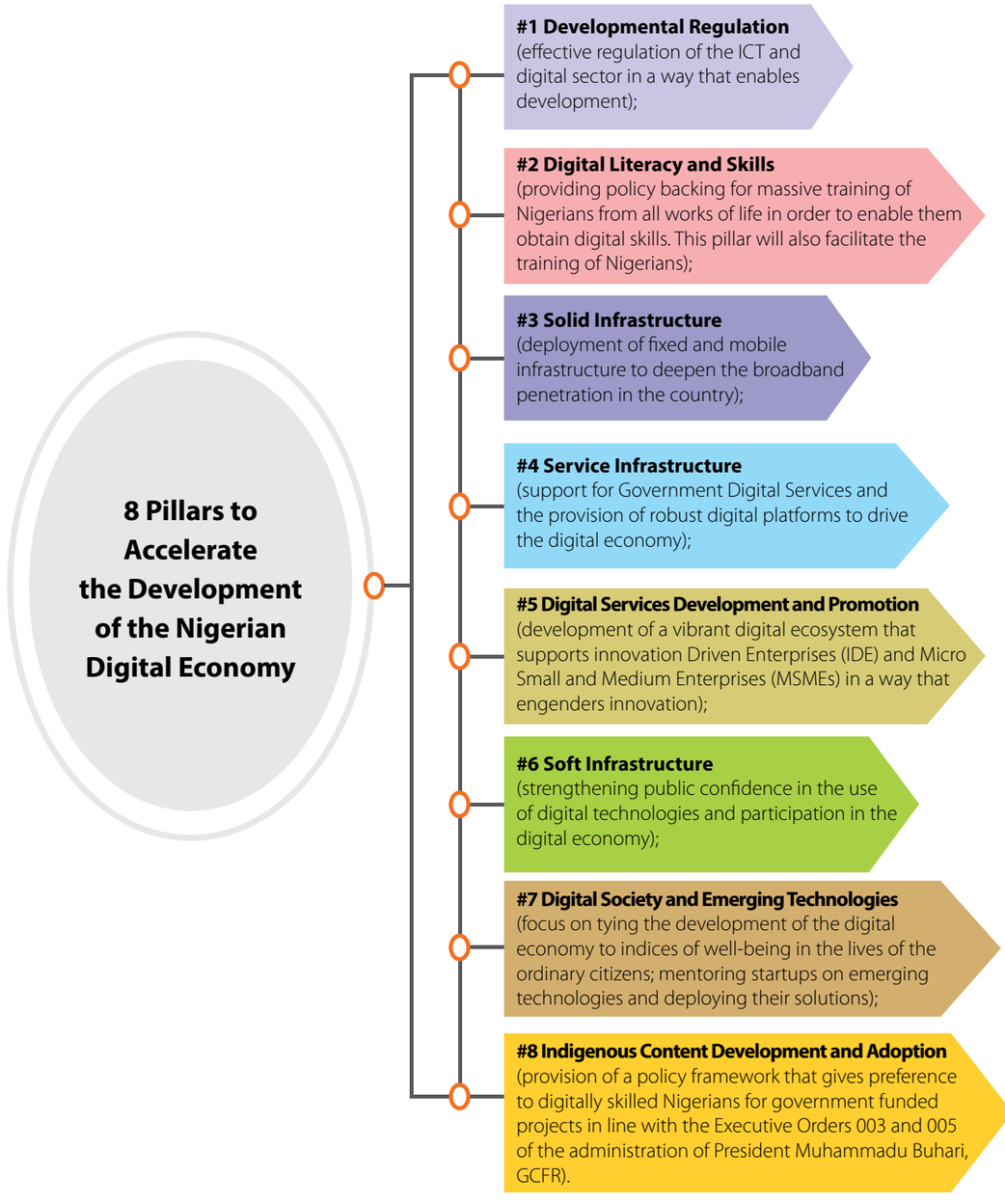
The priority of the ICT sector is to ensure the provision of universal access and delivery of quality services through the nationwide development of ICT infrastructure and services. Of prime importance are basic voice/data services and last-mile connectivity for broadband internet access.

COVID-19 has had an impact on the digital economy in several ways. A few of them include Education, Work-Life, e-commerce, Cybersecurity, Healthcare and Connectivity. The closure of educational institutions in most states across the country has compelled educators to adopt a digital approach for the delivery of their lectures.

According to a May 2020 Report by UNESCO, 70 per cent of enrolled students, or about a 1.2billion students in 150 countries had their education disrupted. Digital technologies have been used to mitigate the adverse effects of this closure.

The work-at-home policy that became popular as a result of the pandemic has led to the use of several remote working platforms. A similar trend of the rapid adoption of the work-at-home policy by Nigerian institutions, where access to technology and relevant infrastructure permit. Incidentally, a recent by OWL Labs in the United States indicated that 31 per cent of respondents credited COVID-19 as being the catalyst for remote work. The National Digital Economy Policy and Strategy (NDEPS) 2020-2030 is a document that outlines the approach of the Federal Government towards the development of Nigeria's digital economy as shown in Figure 3.16 below:

Figure 3.16: Pillars to Accelerate the Development of the Nigerian Digital Economy



Remote work is addressed in Pillars 4 (Service Infrastructure) and Pillar 5 (Digital Services Development and Promotion). In addition to NDEPS, the Federal Executive Council also approved a National Policy on Virtual Engagements in Federal Public Institution. The Policy institutionalises virtual engagements in public institutions.

E-commerce has become the default mode of shopping and digital payments are fast becoming the payment method of choice for most individuals, shops, and institutions. Unfortunately, cybercriminals have increased the vulnerability of these systems. The Ministry of Communications and Digital Economy has addressed this in Pillar 6 (Soft Infrastructure) of the NDEPS and has increased surveillance and the advisories are provided.

COVID-19 is primarily in the domain of healthcare but it has overwhelmed the healthcare system to such an extent that non-COVID-related illnesses no longer enjoy the level of care and attention that they used to enjoy before COVID-19. Telemedicine is now being used to address many such illnesses.

IT connectivity grew to 11 terabytes as at 2017 (from 9.8 terabytes as at 2012) following Nigeria's internet bandwidth capacity provided by five submarine cables which include South Atlantic 3 (SAT-3), West Africa Submarine Cable (WASC), Main One Cable, Glo-1 Cable, West Africa Cable System, and the African Coast to Europe cable (ACE) which have all their landing points in Lagos. Today, Nigeria has become the largest telecommunication market in Africa, and its biggest internet user. According to Internet World Statistics, it reveals that Nigeria ranks 7th in the world and 1st in Africa with a total of 111.6 million internet users that is about 56.0 per cent of its total population as at March 2019, this is expected to rise over the years given the expected growth in population as well as the trends of e-platform in the commercial system of the country.

Despite the growth in internet penetration in Nigeria, a large proportion of Nigerians who live in rural communities do not have access to basic ICT services. Also, many urban areas are either not served or underserved.

According to the Nigerian Communications Commission (NCC) teledensity, which is a measure of the level of adoption of telephony usage, was at 104.41per cent as at July 2020 and broadband penetration was 45.43 per cent in November 2020. Nigeria had 52,160 base transceivers stations and colocation towers, microwave radios covering 334,314km with 151 gateways in use in the industry and 84,580.7km Fiber Optics Deployment (73,157.7 terrestrial fiber and 11,423km submarine cable).

The industry has also witnessed a substantial improvement in the quality of service and network coverage across the country. Infrastructural deployment and upgrade were commendably improved, as most Mobile Network Operators (MNOs) embraced massive investments in 4G networks and rollout of services, which culminated in improved consumer satisfaction and increase in revenue streams.

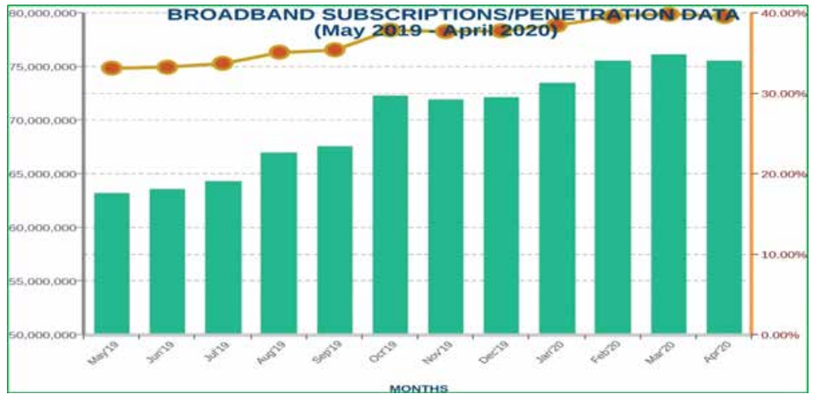
Despite improvements in the sector, there are still a number of challenges that need to be addressed. For example, the inadequate power supply, relatively high cost of devices for the rural poor, limited access to broadband connectivity in underserved areas and low digital literacy in some parts of the country have stifled the overall growth of the ICT sector.
In addition, the provision of connectivity services requires adequate infrastructure, high maintenance costs resulting from fiber-cuts occurring due to theft and poor urban and regional planning, accessibility and security issues, as well as complexities in obtaining right of way in some States. This results in low penetration, slow connectivity speeds as well as an acute need for additional terrestrial distribution infrastructure.

i. Internet and Broadband

As a member of the International Telecommunications Union (ITU), the Federal Government of Nigeria recognises the potential of broadband as a catalyst for improving socio-economic development in Nigeria. The Government

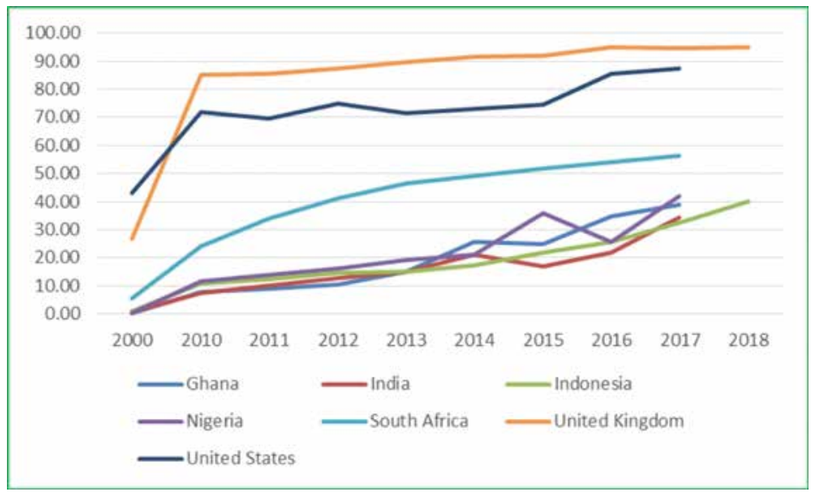
communicated this in a policy document titled the 'Nigerian National Broadband Plan (NNBP)'. Having achieved the target of 30 per cent broadband penetration of the Nigerian National Broadband Plan (2013-2018), the Ministry of Communications and Digital Economy developed another broadband policy document 'Nigerian National Broadband Plan (2020-2025). The NNBP provides a roadmap and timelines to deliver a five-fold increase in broadband penetration over five years (2020 – 2025) which aims at addressing 3 of the 8 priorities that the Federal Government assigned to the Federal Ministry of Communications and Digital Economy and the parastatals under its purview, for implementation. These priorities are the implementation of broadband connectivity and execution of a plan to deploy 4G across the country, as well as the development and implementation of a digital economy policy and strategy. This new broadband plan is designed to deliver data download speeds across Nigeria, at a minimum of 25 Mbps in urban areas, and 10Mbps in rural areas, with effective coverage available to at least 90.0 per cent of the population by 2025.

Figure 3.17: Broadband Subscription/Penetration (May 2019 – April 2020)



Source: NCC.

Figure 3.18: Percentage of Individuals using the Internet (PII) in selected ITU Member States.



Source: International Telecommunication Union (ITU).

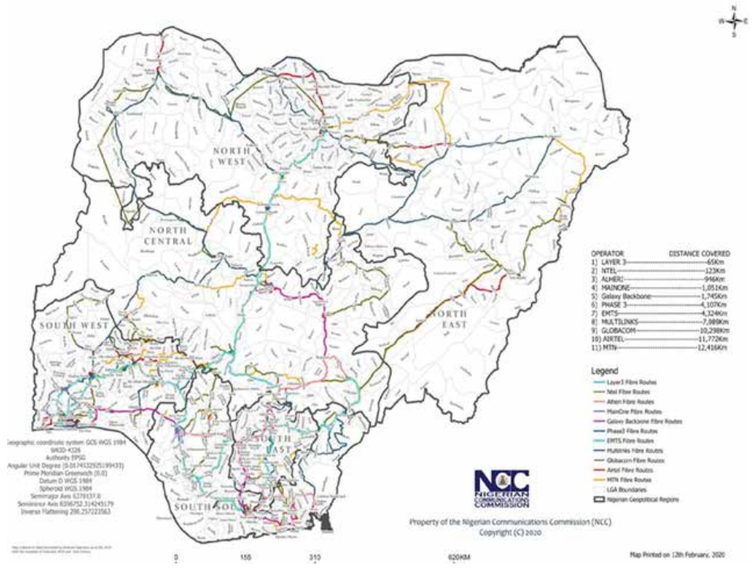
Of all internet access in the country, 75.0 per cent is served by mobile broadband, at a relatively high cost. The

Presidential Committee on Broadband recently redefined broadband as a minimum speed of 1.5 mbps. The NNBP (2020 - 2025) aims to reduce the cost of 1GB of data to not more than N390 per 1GB of data (2% of median income or 1% of minimum wage), by 2025. According to a Report by NCC, the average cost of 1GB of data reduced from the January 2020 cost of N1,000 to N487.18 in November 2020 – indicating 51.3% reduction.

While there are several initiatives aimed at deploying internet and broadband in Nigeria, many challenges remain, especially with the deployment of a national fiber-optic network to distribute the approximately 40 terabytes of capacity already delivered to Nigeria.

According to the Nigerian Communication Commission, the presence of deployed broadband fiber-optic infrastructure has not sufficiently covered the entire geographical landscape of Nigeria as depicted in Figure 3.19 below.

Figure 3.19: Map of Nigeria Showing Fibre Network Routes



Source: Nigeria National Broadband Policy 2020-2025.

In order to improve internet and broadband penetration in Nigeria, the Nigerian Communication Commission has carried out the following:

i. Articulated a robust regulatory framework for strategic and systematic licensing and deployment of broadband infrastructure across the country – 'The Open Access Model'; and
ii. Established a Broadband Implementation and Monitoring Committee to give a proper assessment on a regular basis of broadband infrastructure deployment.

Furthermore, as part of the implementation of the NNBP (2020-2025), a Broadband Implementation Steering Committee (BISC) was constituted by the Honourable Minister of the Ministry of Communications and Digital Economy. The BISC is to monitor the implementation of the Broadband Plan.

ii. Mobile Telephony

Nigeria's mobile penetration is increasing along with the nation's population. Only in few years ago, it lagged behind countries like Brazil, which had similar demographics. However, there is a positive change and the metrics are much similar. For example, Brazil's 2020 teledensity and subscriber base were respectively 97 and 234.07 million. This is quite similar to Nigeria's teledensity of 98.39 and subscriber base of 187.8 million. However, it is worth noting that Nigeria's mobile penetration is not evenly distributed, as most lines are concentrated in the urban and sub-urban areas. Although it is positive that the country's mobile subscriber base is fast approaching the 200 million mark, this also increases the need for further capacity expansion by mobile network operators.

iii. E-Governance

e-governance is the application of ICT for delivering government services, exchange of information, communication transactions, integration of various stand-alone systems and services from Government-to-Citizens (G2C), Government-to-Business (G2B), Government-to-Government (G2G), as well as back-office processes and interactions within the entire government framework.

e-governance is growing in Nigeria and there are over 450 government institutions currently participating in the e-government programme, up from 265 institutions in 2019. This 69.8 per cent increase is a step in the right direction but more effort needs to be channelled towards ensuring that most public-facing government services become available online. The services.gov.ng platform has been developed to host these services. The Federal Government has also provided funding for Galaxy Backbone (GBB) to improve connectivity across government institutions. This step is expected to enhance e-government readiness and support digital transformation efforts in these institutions. The Federal Ministry of Communications developed the Nigeria e-Government Master Plan with its vision and objectives linked to the Federal Government Economic Recovery Growth Plan (ERGP) which seeks to build on the SMART Nigeria Digital Economy Project to increase the contribution of ICT and ICT related activities to the GDP.

The overall purpose and rationale of the e-Government Master Plan is to enhance transparency, efficiency, the quality of public service administration and cost-effectiveness of public service delivery in Nigeria by developing the legal system, organizational framework, government service delivery, human capital, technology infrastructure, and awareness.

3.3.2 Aspiration and Targets of the ICT Sector

The ICT sector's vision is centred on 3 pillars:

i. Fostering a digital economy - To build the technological capabilities and capacity to support a knowledge-based economy

ii. Increasing ICT's contribution to GDP
   a) To increase ICT contribution to the economy:
   b) Using ICT as a wealth creation platform through job creation and entrepreneurial development; and
   c) Establishing Nigeria as a regional hub for ICT-based services (call centres, BPO/micro-working, analytics).

iii. Enhancing E-governance - To enable efficiency, transparency, and accessibility across government in Nigeria.

Table 3.19: Goals for Fostering a Digital Economy

Short-Term Goals (2020-2025)	Projects Completed/Achievement so far
Provide Universal Access to computing devices and connectivity Improve computer literacy and proficiency for all	Within the period under review, the Federal Ministry of Communications and Digital Economy and its parastatals completed 1,667 ICT projects and centres, including the following: • Digital Capacity Training Centres (DCTC) - 80 • E-Learning Facilities for DCTCs- 80 • School Knowledge Centers (SKC)- 249 • Digital Awareness Program (DAP) Centres- 80 • Digital Economy Centers (DEC)- 80 • E-Learning Facilities attached to DECs- 80 • Educational Content Development and Deployment- 114
Improve computer literacy and proficiency for all Develop a larger cohort of specialized IT professionals	Creating a critical mass of highly skilled citizens is a key requirement for developing a vibrant digital economy. As part of the digital skills drive of the Federal Government, about 220,000 citizens benefited from direct digital skills trainings. These include the following: • Digital Capacity Training Centres (DCTC)- 80 • E-Learning Facilities for DCTCs- 80 • Digital Job Creation Training- 960 • VSAT Installation Core Skills- 600 • GSM Phone Repairs Training in Partnership with Nigerian Content Development and Monitoring Board (NCDMB)- 1,858 • Capacity Building Programme for Artisans-1120 • Digital Nigeria and NITDA Academy Online Academies- 212,000 • ICT Training and Empowerment for Women-200 • Training of Persons Living with Disabilities -102

Source: Ministry of Communications and Digital Economy

Table 3.20: E-Governance Goals

Short-Term Goals (2020-2025)	Projects Completed/Achievement so far
Create seamless access to data and services from Federal, States and Local Government to all citizens, businesses, and employees	Implementation of the Single Treasury Account by the Federal Ministry of Finance. Harmonization of Database
Automate Government processes and systems to improve efficiency (G2G, G2C, G2B)	Implementation of GIFMIS Implementation of E-government Master Plan
Create guidelines and provide support to enable all Government institutions digitise their operations and services by 2023	Implementation of E-government Master Plan

Table 3.20: E-Governance Goals

Initiatives	KPIs	2020 (%)	2023 (%)	2043 (%)
Fostering a digital economy	• Devices - Homes (Per cent of homes with access to computing devices) - Schools (number of computers per pupil) - Institutions (number of hospitals, police headquarters with access) • Connectivity - Population with access to 3/4G mobile service - Population with access to broadband service Cities and State Capitals (metropolitan Rural) - Schools and Institutions • Population with access to active public access points (<2 km away)	 50 5 50 100 80 65 65	 75 0 75 100 100 95 100	 95 1 100 100 100 100 100
Increasing ICT's Contribution to GDP	• Ratio of ICT sector gross revenues to GDP • Ratio of revenue from locally developed software to total software market	9.85	12 10	15 20
Enhancing E-governance	• Percentage of government institutions that have been Computerized • Percentage of government services Online • Percentage of government MDAs with online presence • Percentage of government MDAs with interactive/ transactional Services • Percentage of MDAs linked to central database	60 40 70 50 70	100 100 100 100 100	100 100 100 100 100

Source: NIIMP (2014-2043)

The current infrastructure stock will not be able to support the outlined targets. Hence, Nigeria needs to expand its current infrastructure stock in line with international benchmarks, especially last mile connection infrastructure (base stations, microwaves, fibre optic and satellites) and the national backbone.

3.3.3 Private Sector Expectations and Priorities

The recommendations offered by the private sector on the enablers for private sector participation and priorities for the ICT sector include:

- reducing the high barriers to entry, including the high costs of Right of Way permits and the multiple taxes and licenses required;
- reviewing the high cost of deployment and lack of supporting infrastructure (especially in power and transport);
- addressing the dearth of local ICT-related skills and competence;
- implementing the Open Access Shared Infrastructure framework;
- reducing the costs of duct building and duct infrastructure leasing;
- accelerating Right of Way permits;
- harmonizing multiple taxes, and reducing taxes on computing hardware and locally produced software;
- integrating ICT infrastructure into estates and commercial districts;
- harmonizing the BTS roll-out;
- releasing the spectrum for LTE/wireless data;
- ensuring consistent minimum provision of 18 hours of power supply per day;
- unbundling of metro access;
- unlocking broadband to cater for bandwidth issues;
- deepening fiber-optic technology; and
- expanding fiber-optic links to neighboring capitals and submarine cables.

3.3.4 Required infrastructure investments

According to the NCC, investments in the fast-growing telecommunications sector were put at USD68 billion as at 2018, of this sum, USD35 billion was from Foreign Direct Investments.

Nigeria needs to spend USD5 billion annually on ICT infrastructure over the next 10 years, mostly on base stations and fiber. Nigeria needs to invest USD12.5 billion annually in the sector to boost base stations and fiber, and USD15 billion annually during 2034– 43, with an increasing share of maintenance, spend and technology upgrade.

A substantial part of the expected spending is to be provided by the private sector. Therefore, the returns on investment need to be able to sustain large-scale private investments. Further investments in key sectors, especially in the power infrastructure will be required to support the development of competitively priced IT services by bringing down input costs for the sector.

The key investments for the public sector will be in computerizing the public sector and setting up e-government infrastructure and services.

3.3.5 Legal enablers

A review of the relevant infrastructure-related legislation in the ICT sector reveals that the Nigerian Communications Act (NCA, 2003) and the National Information Technology Act 2007 are the primary legislations that relate to ICT infrastructure. The ICT sector is a very vibrant and evolves at a very fast pace. As such, it is necessary to ensure that the laws are in tune with advances in the sector across the globe. Along with the NCA and NITDA Acts, the Nigerian Postal Service Act is another legislation that should be amended. The current Act gives NIPOST monopoly and this can lead to complacency. Furthermore, it is important to ensure that NIPOST does not play the role of a regulator and a player at the same time. The NIPOST and NITDA Acts are currently in the process of being amended.

3.4 Agriculture, Water and Mining

3.4.1 Water Resources

3.4.1.1 Current State of Infrastructure

The relevance of water to the national development of Nigeria is progressively increasing with rapid population growth, urbanization, agriculture, and industrial development. Water's usefulness in different capacities for direct human consumption, agricultural irrigation, fisheries, hydropower, industrial production, environmental protection, and industrial effluents establishes the paramount importance of effectively managing this resource.

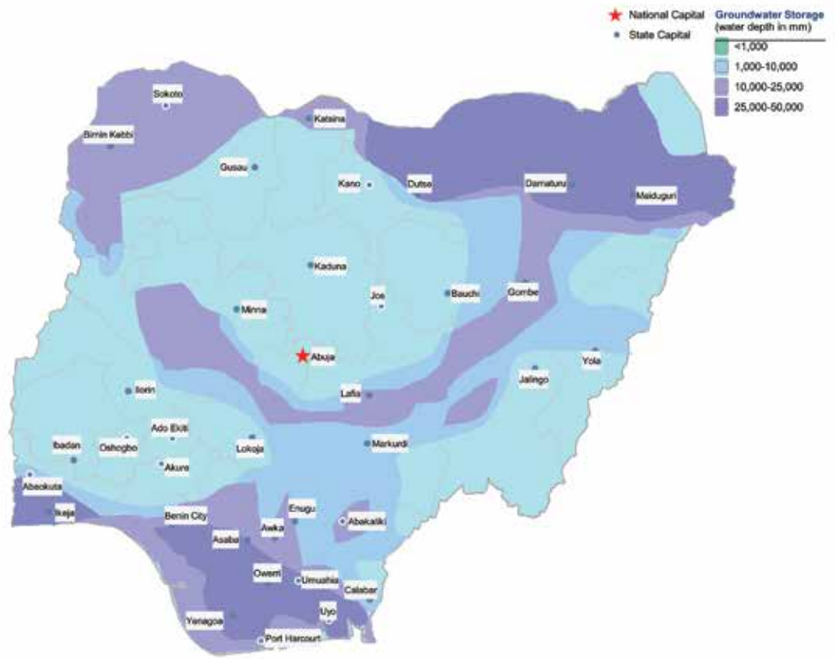
There are abundant water resources in Nigeria to meet all needs if properly harnessed (estimated at 286.2 billion cubic meters out of which 214 billion cubic meters constitute surface water and 87billion cubic meters of groundwater). There are also more than 200 dams with a combined storage capacity of about 36 billion cubic meters and the capability to irrigate 500,000 hectares of land. Currently, just under 200,000 hectares are equipped for irrigation and 50,000 hectares of the equipped and developed area were lost due to failed infrastructure and poor operations and maintenance, out of 3.14 million hectares of irrigable land in Nigeria. It is only about 10 per cent of Nigeria's irrigable land that is irrigated. Furthermore, out of the existing 200 dams, 19 of them have small hydropower facilities, with the combined potential capacity to generate about 3,600 MW of electricity.

However, Nigeria's water resources are not yet effectively utilized. National access to basic water is currently 70.0 per cent, while sanitation is only 44.0 per cent, based on Water, Sanitation Hygiene National Outcome Routine Mapping (WASH-NORM), 2019 Survey result released by NBS in collaboration with Federal Ministry of Water Resources and UNICEF. Nigeria was unable to meet the MDGs target on access to water supply, particularly with the decline in access to piped water . It became necessary that concerted effort must be put in place to improve the trend towards achieving 100.0 per cent access to basic water supply by 2030 (at a time when the population is estimated to grow to 257 million), following the United Nations Sustainable Development Goals (SDGs) as well as for poverty reduction in Nigeria. This will be achieved by the Partnership for Expanded Water, Sanitation, and Hygiene (PEWASH) and other WASH initiatives. Current low levels of access can be attributed to inadequate infrastructure to meet demand, inadequate use of the existing infrastructure, and poor operation and maintenance of that infrastructure.

The National Water, Sanitation and Hygiene (WASH) Response Committee for COVID-19 pandemic in Nigeria was inaugurated on 16th April, 2020. The proposal for National WASH response to COVID-19 was developed and approved by the Federal Executive Council (FEC) and formed part of the National Economic Sustainability Plan (NESP). National Guideline for WASH Sector Response to COVID-19 was designed in close collaboration with Development Partners and shared with all 36 States and the Federal Capital Territory (FCT).

There are currently twelve River Basin Development Authorities (RBDAs) under the supervision of the Federal Ministry of Water Resources. The RBDAs were modelled after the United States Tennessee Valley Basin development concept. Their primary function is to serve as the operators, managers, and developers of water resources infrastructure within their catchments to bring prosperity as integrated rural development enablers, especially in areas of food production and employment generation. However, one of the major challenges militating against the optimum performance of the RBDA as of today is the issue of land acquisition and encroachment by States and communities.

Figure 3.20: Water in Nigeria



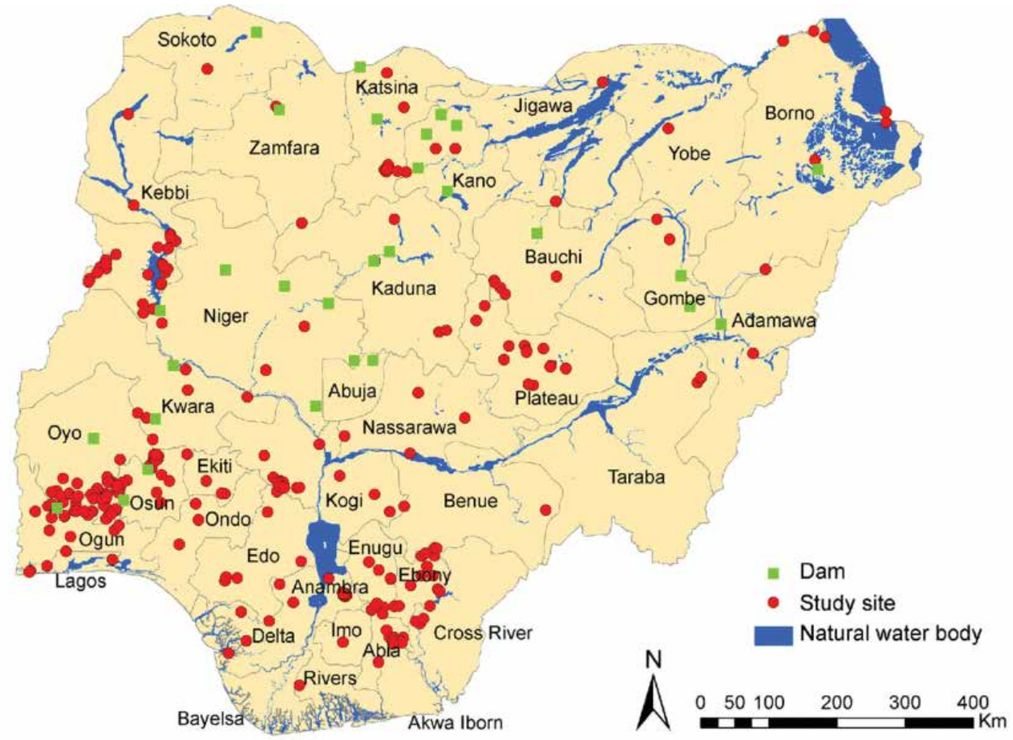
Source: Natural Earth, African Development Bank

There are currently about 30 ongoing new dam projects (Ogbese, Nkari, Adada, Otukpo, Kashimbila, Ile-Ife, Galma, among others), and about 32 ongoing irrigation projects as well as rehabilitation with some already operational while others are between 80 per cent to 98 per cent completion status (Ejule-Ogbe, Middle Rima Valley, Sepeteri, Lower Mamu-Awka, Sabke, Zobe, Jibiya, Sepetiri, Hadejia Valley, Kano River, and middle Ogun, among others).(These Irrigation projects have been completed as at June 2020) The Federal Ministry of Water Resources has completed the construction of seven dams as at March 2020, including Kashimbila in Taraba State, Amla-Otukpo in Benue State, Ogwashi-Uku in Delta State and Amauzari in Imo State, Gimi in Kaduna State, Sulma in Katsina State and Ibiono Ibom in Akwa Ibom State. (Rehabilitation of additional two dams have been completed- Kampe Omi dam in Kogi state and Kargo dam in Kaduna state). Also 42 Earth dams have has been completed to support irrigation agriculture and water supply by the 12 RBDAs

Water Supply projects already completed across the country and operational are among others in Takum, Mangu, Ekeremore, Kwami, Gadam, and Bojude. Completion of 82 water supply projects, Construction of 444 Rural Water Supply Schemes in the North-East, IDP camps and some Federal Institutions and Establishments;

Currently, there exists no structure for revenue generation by the Ministry of Water Resources largely because the irrigation component of the existing dams is not completed. The Integrated Water Resources Management Commission Bill is in the process of being signed into law. The commission is expected to promote the effective and efficient management of water resources in Nigeria

Figure 3.21: Dams in Nigeria



Source: Natural Earth, African Development Bank.

There are seven operational National Water Quality Reference laboratories currently existing in the country and evenly distributed across geo-political zones. Additional five laboratories are also being constructed to reduce the workload on the existing laboratories.

3.4.1.2 Aspirations and Targets for Water Resources

The aspirations of the Water sub-sectors are to:

- ensure sustainable access to enough water resources for diverse uses by the population both in urban and rural areas;
- provide effective and efficient management of water resources in Nigeria;
- make various water sources affordable for diverse uses;
- make clean and potable water available to all Nigerians;
- provide water to farmers for irrigation/dams;
- research inter-basin water transfer within Africa;
- intensify and update water statistics;
- implement the National WASH response to COVID-19 projects;
- Intensify the Campaign against Open Defecation; and
- Ensure the elimination of Open Defecation in Nigeria by 2025.

The central aspirations of the water sub-sector cover the areas of water supply, water sanitation, water treatment, irrigation, and hydropower. By 2043, 100.0 per cent coverage of water supply and sanitation access is targeted (up from today's 70.0 per cent for water supply access and 44.0 per cent for sanitation access). The Federal Ministry of Water Resources is expected to complete the construction of 10 dams between March 2020 and 2021. The current annual water treatment capacity is 0.7 trillion cubic meters – it is targeted to reach 1.4 trillion cubic meters by 2043. Irrigation and hydropower targets are directly related to the agriculture and energy sectors respectively.

Other targets for water resources by 2043 include the following:

- To increase water treatment capacity by 20.0 per cent;
- To increase water distribution capacity by 20.0 per cent;
- Access to potable water will be raised from 60.0 per cent (70 per cent) to 100 per cent;
- Construction of 10 new dams; and
- Construction of Sanitation Facilities in Public Places 7 no in each State including FCT.

The National Irrigation Development Programme (NIDP) of the Federal Ministry of Water Resources was initiated in 2016 as part of the Water Sector Roadmap to support the diversification of the economy, guarantee food production, food security and create employment. It is aimed to accomplish the following:

- establish additional 100,000 Ha of irrigated farmland by 2021 and achieve a total of 500,000 Ha by 2030; and
- an additional 1,000,000 Ha of irrigable land to be developed by the private sector and State Governments by 2030.

The World Bank is supporting the implementation of Transforming Irrigation Management in Nigeria Project (TRIMING) with a credit facility of US$495 million. The Project involves rehabilitation and expansion of about 42,000 Ha of Irrigation land under the first phase, to be completed by 2022 as follows:

- Bakolori Irrigation Project (Works commenced in 2017) - with 13,000Ha capacity out of which 2,000 ha have being completed and currently being utilized by farmers;
- Kano River Irrigation Project (Works commenced in January 2019) with 14,444 Ha capacity out of which 2,023 Ha have been completed and currently being utilized by farmers;
  Hadejia Valley Irrigation Project (Works commenced in January 2019) 6,000 Ha

In terms of irrigation, the rate of expansion (which has been about three per cent per annum in recent years) needs to increase substantially (beyond three per cent). The goal is to extend facilities to realize the national potential of about 3.14 million hectares of irrigable land.

In terms of hydropower, the goal is to achieve 95.0 per cent development of generation potential, leading to the production of up to 10,000 MW of electricity by 2030.

Table 3.22 further summarized the aspirations, targets as well as Nigeria's achievements in the provision of water resources

Table 3.22: Water Resources – Aspirations, Targets and Achievements to date

S/N	Aspirations and Targets	Achievements to date
1.	Ensure sustainable access to sufficient water resources for diverse uses by the population both in urban and rural areas.	• The Federal Ministry of Water Resources is currently reviewing studies on the proposed inter-basin water transfer from the Congo River Basin to the Lake Chad Basin. However, an MoU has been signed with the Power China Limited to conclude plans for the actualization of the project on the transfer of water from the Congo River. • Completed 2,300 water supply scheme across the country serving a total population of 7,213,406 with combined jobs creation of 12,435 direct jobs and 24,870 indirect jobs
2.	Provide effective and efficient management of water resources in Nigeria.	• The Federal Ministry of Water Resources also facilitated the signing of an MoU with Cameroon for the joint management of water resources of the Benue River Basin. MoU was also signed between LCBC and Italian Government that has committed €1.5M towards finalizing the feasibility studies on the propose Inter basin Water transfer project
3.	Make various water sources affordable for diverse uses.	• Completion of Central Ogbia Regional Water Project, in Bayelsa • Completion of Ojirami Water Supply Project in Edo State • Rehabilitation/Upgrading of Vom Water Supply Project • Rehabilitation/Upgrading of Takum Water Supply Project in Taraba State • Completion of Federal University of Agricultiure, Markurdi Water Supply • Completion of Ekeremore Water Supply Project • Completion of Zobe Water Supply Project Phase I&II in Katsina • Completion of Gambaki/Chinade/Hardawa/Bulkachuwa Water Supply Project, in Bauchi State • Completion of Ahmadu Bello University(ABU) Zaria, Water Supply Project, Phase I, Kaduna State • Completion of Otor-Iyede Water Supply Project, Delta State • Completion of Inyishi Regional Water Project • Completion of Mangu Regional Water Supply Scheme (Intake Works and Distribution Network) in Plateau State • Completion of Water Supply Scheme for Kwami, Gadam and Bojude • Rehabitation/Upgrading of Hadejia Water Supply Scheme (Phase I&II) • Mini Water Scheme: Complete with BHs and Water Treatment Plant for Osogbo • Completion of Small-Scale Water Schemes in Jigawa North Senatorial District (Kazuare Water Supply)

S/N	Aspirations and Targets	Achievements to date
		• Rehabilitation and Reticulation of Fugar Water Works, Etsako East Local Government, Edo State • Completion of Dukku Regional Water Supply Project, Phase I • Rehabilitation of Agenebode Water Works, Etsako East LGA, Edo State • Completion of Water Supply Project for Fadan Kagoma, Gwodo-Gwodo, Gwantu in Jamaa and Sanga in Kaduna State • Rehabilitation and Upgrading of Ofeme Water Supply Scheme in Umahia North LGA, Abia State • Rehabilitation and Upgrading of Obafemi Awolowo University (OAU) Wter Supply Scheme • Rehabilitation and Upgrading of Ianre LGA Water Supply Scheme in Ondo State • Completion of Gashua Water Supply Scheme • Completion of Sabke/Dutsi/Mashi Water Supply Project, in Katsina Northern • Completion of Ishan Regional Water Supply Project, serving Ugboha and Uromi communities of Edo State • Completion of Kashimbila Dam, Taraba State • Completion of Ogwashi-Uku Dam, Delta State and also spillway discharge channel • Completion of Phase 1 of Galma Dam in Kaduna State • Rehabilitation of Ojirami Dam Water Supply Project, Edo State
4.	Make potable water available to all Nigerians and Sanitation Facilities available in Public Places (Markets & motor Parks) and institutions (Health Centers & Schools).	• The Partnership for Expanded Water Supply, Sanitation and Hygiene (PEWASH) is being implemented for improving access to water supply and sanitation in Nigeria • 20 LGAs in Cross River, Bauchi, Jigawa, Benue and the Osun States have achieved Open Defecation Free (ODF) status up from one LGA. 27 ODF LGAs as at June, 2020: Cross River State (6), Benue State (6), Osun State (1), Bauchi State (2), Jigawa State (6), Akwa Ibom State (1) and Katsina State (5); Constructed 712 toilets and 150 bathrooms nationwide; • Constructed 106 Sanitation and Hygiene facilities in the North East, North Central, and South West Regions • Launch of the "Clean Nigeria: Use the Toilet" campaign • Establishment of a National ODF Secretariat • The signing of Executive order 009 to end OD by Mr. President • Partnerships with entrepreneurs resulted in Latrines constructed in 105 markets and motor parks (23 more are on-going). • States flag-off Campaign to end OD

S/N	Aspirations and Targets	Achievements to date
		• 13 States so far have flagged off their campaign to end open defecation (include- Osun, Benue, Ekiti, Ondo, Enugu, Cross River, Ebonyi, Anambra, Imo, Gombe, Katsina).
5.	Increase access to irrigable farm land for food security in Nigeria	• The Songhai Integrated Model farming schemes have been developed in 4 RBDAs, while several others are at various levels of development. The Songhai Model Farms will serve as training centres for the Graduate Youth programme and provide job opportunities to teeming Nigerians. The Songhai model farm will be developed in each of the 109 Senatorial Districts of the country. • Coordination of the Graduate/Youth Empowerment Programme in the RBDAs. • The process of partial commercialization of the RBDAs to enhance their sustainability currently at the pilot stage, being implemented in 4 RBDAs
6.	Research inter-basin water transfer within Africa	• Strategic Plans (2017 – 2020) developed by the respective RBDAs based on the Ministry's guidelines are being implemented.
7.	Intensify and update water statistics	• The Ministry through the World Bank-Assisted National Water Urban Sector Reform Project established the National Resources Information System (NAWIS) Data Centre as a repository of data and information for water resources planning, development and management. The data centre at the Ministry's Headquarters, is supported with other subsidiaries being housed by the River Basin Development Authorities, in the six geopolitical zones in the country. The NAWIS Project Work stations have been expanded for improved data production, management and dissemination across the sector.
8.	National WASH response to COVID-19 projects	• Rehabilitation of 185Nos. Water Supply Projects (5Nos. Nos. for each of the 36 States & FCT) • Construction of 185Nos. Solar Powered Water Supply Projects (5Nos. Nos. for each of the 36 States & FCT) • Construction of 370Nos. Public Sanitation Facilities (10Nos. for each of the 36 States & FCT) • Support to State Water Agencies to support their operations and to ensure uninterrupted Water Supply • Supply of 370 Contactless Handwashing Facilities with Soap and Sanitizers (10Nos. for each of the 36 States & FCT) • Active engagement of 77,400 Youth Volunteers for Handwashing and ODF Campaign.

Source: Federal Ministry of Water Resources

3.4.1.3 Private Sector Expectations and Priorities

Private-sector expectations and priorities are as follows:

- Develop land for large and small-scale irrigations
- Complete various water projects across the country
- Develop new, manageable projects targeted at communities
- Execute a PPP framework through the government procurement process.
- FMWR collaborating with FMP for development, under PPP arrangement, of the following:
- Makurdi – 1,500 MW
- Lokoja – 750 MW
- Katsina-Ala – 460MW
- Gurara II – 360 MW
- Tede – 220MW
- Mangu – 182 MW
- Itisi Dam – 40MW
- Kiri – 36MW
- Farin Ruwa – 20MW.

3.4.1.4 Enablers for Water Resource Development

- Water infrastructure policy/well-articulated reform.
- Water Resources Master Plan (2016-2030).
- Water Sector Roadmap (2016-2030)
- Donor support through grants
- Effective staffing of the water corporations
- Regional projects implemented across the states to allow for the sharing of resources
- Adoption of technology for the collection of bills.

The National Water Resources Bill 2020 (to repeal Water Act 101 of 1993) was passed by the House of Representatives in 2018 but could not scale through the 8th Senate. The Ministry is currently re-engaging with the 9th National Assembly to ensure passage of the Bill. When passed into Law, it is expected to provide effective water sector governance in Nigeria. It will also among other issues, provide for effective catchment management, greater participation of farmers in irrigation management and a regulatory framework for private sector participation in water supply delivery in the country. Furthermore, it is expected to create a stable and attractive environment for investors and development partners. The Bill will provide the much required legal and regulatory framework for the water sector to optimally stimulate investment for job creation and poverty alleviation.

3.4.2 Agriculture

According to the National Bureau of Statistics (NBS), Agriculture contributed 25.16 per cent to 2019 annual GDP compared with its contribution of 25.13 per cent in the corresponding period in 2018. It grew to 2.36 per cent in 2019 from 2.13 in 2018, representing an increase of N17,958.59 billion from N17,544.15 billion respectively. On a quarter-by-quarter basis, Agriculture contributed 21.96 per cent in the first quarter of 2020 compared with the contribution of 26.09 per cent in the fourth quarter of 2019. It decreased to 2.20 per cent from 2.31 per cent in the fourth quarter of 2019, representing a reduction to N3,677.15 billion from N5,093.98 billion respectively. The sector employs over 70.0 per cent of the active population. Nigeria has 79 million hectares of fertile land, however, only 34 million hectares (ha) (43 per cent) of these are cultivated and less than 10.0 per cent of irrigable land is currently under irrigation. 90.0 per cent of agricultural output is accounted for by smallholder farmers with less than 2 hectares (ha) under cropping and

low per hectares (ha) yield of crops.

There is therefore potential to transform agriculture from subsistence farming into a commercial and profitable business venture (agribusiness). Special attention would be directed to managing the factors of production efficiently, as infrastructure development is a major lever to reduce the production cost in order to increase the agricultural sector production and productivity.

Despite the abundance of arable land and water for the production of crops, fisheries, forestry and livestock, harnessing the nation's agricultural potentials has been weakened by factors such as:

- Activities of bandicts and other forms of insecurity
- Infrastructure deficiency;
- Synergy gap;
- Inadequate inputs;
- High-interest rate;
- Late budgeting/ disbursement of funds; and
- Low investment.

Other issues include:

- Poor seedling quality, obsolete processing technology, and inadequate market information system coupled with the threat of diseases to crops, livestock, and fisheries.
- Insufficient harnessing of Nigeria's surface and underground water for use during the dry season, due to inadequate irrigation facilities;
- high levels of post-harvest losses, especially during transportation due to poor infrastructural linkages to markets;
- Lack of processing facilities responsible for post-harvest losses
- Very little value addition of agricultural commodities value chain via industrial processing, which is a crucial requirement to become a continental powerhouse in agriculture and related industries.

Government intends to unlock the potential in Nigeria's agricultural sector, by addressing the various challenges in the sector particularly, infrastructure deficiency. The indicative cost for infrastructure investment in the agriculture sector is about USD 18 billion. This translates to an average annual spend of about USD 4.5 billion. However, agriculture has substantial linkages with other sectors such as transport and water, and the corresponding investment amounts are not fully separable.

3.4.2.1 Current State of Agricultural Infrastructure

Agriculture infrastructure includes irrigation networks, Rural Feeder roads, post-harvest storage facilities, warehouses, Rural electricity (provision of Solar Power Light for Rural Communities), and telecommunication facilities that impact directly on agricultural productivity.

i. Irrigation Network

Currently, less than 10.0 per cent of irrigable land is under irrigation accounting for low crop production in the agricultural sector. Moreover, some of the existing irrigation networks are in poor states. Prolonged lack of rainfall due to climate change and in the absence of a good irrigation network will have devastating consequences on the farmers and the economy in terms of income loss and government revenue losses, as well as shocks on the economy resulting from a shortage of food.

ii. Rural Road Infrastructure

Nigeria's road network remains a major source of concern due to the poor state of some of the roads. This is particularly worse in the rural areas where it is estimated that over 70.0 per cent of the existing rural road network is unpaved with a significant proportion in deplorable conditions and often impassable thereby hindering smooth and timely access of farmers to markets. This is particularly worse in the rural areas where it is estimated that over 70.0 per cent of the existing rural road network is unpaved with a significant proportion in deplorable conditions and often impassable. It also accounts for wide price variations between the rural and urban areas of the country.

iii. Post-Harvest Storage Facilities

The Federal Government over time has put in place a total of 33 N0s Silos complexes with a combined capacity of 1,336,00 MT. A total capacity of 18 Nos Silos (661,000 MT) out of the 33 N0s were concessioned 8 Nos of 425MT capacity for future concessions, while 7 N0s Silos of 250 capacity were retained of a total food stock of 109,657mt of assorted commodities by May 2021. 70,000 mt was released to assist the vulnerable, while 5,000mt was equally released to support poultry farmers during the Covid-19 lockdown period in 2020.

In addition, the Federal Government also approved the list of 25 N0s community warehouses in 2016, to be managed by the Nigerian Commodity Exchange Commission (NCX) for inspection and evaluation for her Warehouse Receipt System operation. 17 N0s of the warehouse were selected and rehabilitated by NCX for their operations while the remaining 8 Nos. require rehabilitation.

As a corollary, the Nigerian Stored Products Research Institute (NSPRI) posted that Nigeria loses about US$8.9 billion or equivalent of N2.7 trillion annually to post-harvest losses (Olufemi Peters, 2017). It is estimated that the reduction of post-harvest losses by 50.0 per cent will drastically reduce food importation in Nigeria.

iv. Utilities

Nigeria's huge infrastructure deficit, particularly in the Power sector remains a big challenge in the agriculture sector. Electricity and telecommunication facilities are vital for enhancing productivity in the sector. Apart from their direct impact in facilitating agricultural service delivery, utilities in the rural areas are needed to stem youth migration to urban areas thereby ensuring that the youthful population provides the labour and entrepreneurial skills required to engender growth in the sector.

Figure 3.22: Agriculture in Nigeria

Source: Natural Earth, African Development Bank.

The Nigerian Government, as part of its broader Agricultural development initiatives, is implementing Special Agro-industrial Processing Zones (SAPZ) as a tool for creating integrated, crop-focused platforms for accelerating private-sector investment in value-added agro-processing. This addresses a set of central objectives, i.e. reducing food imports, increasing value-addition through processing reducing post-harvest losses, reducing operative costs for agro-processors, and creating jobs as well as driving rapid rural growth. An initial set of SAPZs in 19 states is planned.

Current agricultural infrastructure development plans include the establishment of:

- 15 Nos Special Agro-Industrial Processing Zones;
- 80 Nos One-Shop Agro Input centres;
- 8 Nos agro-processing centres along with existing strategic grain reserves;
- 18 Nos Agro-Industrial Estates;
- 6 Nos Export Crop Conditioning Centres;
- 17 Integrated Large-Scale Rice Mills;
- 40 Rice Processing Plants and 18 High-Quality Cassava Flour Plants;
- 9 Nos Farmers Markets;
- 10 Nos Agribusiness Incubation Centres;
- 5 N0s Animal Health Care Centers;
- Upgrading of Abattoirs;
- 40.5 (KM) of roads;
- 75 units of water;
- 2,537 units of electrification

In line with the ERGP, there has been investment in agriculture to drive food security by achieving self-sufficiency in tomato paste (in 2017), rice (in 2018), and wheat (in 2019 and 2020) to make Nigeria a net exporter of key agricultural products including rice, cashew nuts, groundnuts, cassava, and vegetable oil. While some of the targets were met (e.g., self-sufficiency in rice), moderate progress has been recorded on others.

Figure 3.23: Selected Special Agro-industrial Processing Zones (SAPZ)

Selected **Sites and Anchor Crops**

Source: Natural Earth, African Development Bank.

In a bid to achieving local production of fertilizer, the Federal Government flagged off the Presidential Fertilizer Initiative1 producing more than 4,000 metric tonnes of locally blended fertilizer in its first week of operation. The Initiative is aimed at achieving the local production of 1,000,000 metric tonnes of blended Nitrogen, Phosphorous, and Potassium fertilizer. The Federal Ministry of Agriculture and Rural Development also inaugurated 11 members into the National Fertilizer Technical Committee to ensure the availability of good quality fertilizer products that conform to the provisions of an existing legal and regulatory framework.

The Federal Government launched the Smart Farmer Scheme, an ICT based scheme geared to create over 490,000 jobs as well as boost agriculture. The scheme is expected to scale up the creation of jobs under the auspices of the National Directorate of Employment (NDE).

The Youth Employment in Agriculture Programme was inaugurated by the Federal Government to boost agricultural productivity. The programme is expected to create jobs for over 758,500 youths across the country. The three-year programme is supported by the Food and Agriculture Organization (FAO).

In line with the plan for food security, the Federal Government has signed a Memorandum of Understanding with 32 firms including L&Z Integrated Dairy Farms and Arla Foods for the development of the dairy sector in Nigeria. The MOU is aimed at developing the dairy sector and helping to tackle the recurring farmers' herdsmen clashes in Nigeria. The Federal Ministry of Agriculture and Rural Development also set aside 5,000 hectares of farmland from the Federal Capital Development Authority's 15,000 hectares of farmland for youths and women, as part of a 'Farm for Life Scheme' of the Ministry1. The scheme is aimed at creating opportunities for women and youth farmers to support them with the necessary infrastructure to attract various levels of agro investments.

3.4.2.2 Aspiration and Targets for Agriculture

The aspirations for the agriculture sector are:

- Improve the national economy by substantially growing the agricultural sector, thus creating more jobs and wealth;
- Secure agriculture transport infrastructure for sustainable food expansion and security for all Nigerians and develop into the main food exporter in the continent;
- Promote the production of agricultural raw materials to meet the needs of an expanding industrial sector and export market as well as mechanized agriculture;
- Develop agro-minerals and build soil-fertilizer-network;
- Collaborate regionally within Africa for mineral fertilizer development, i.e., phosphates, limestone, phosphorus, potash, etc.

For Nigeria to first achieve domestic food security, and then subsequently transform into a continental powerhouse in terms of food exports, the agricultural sub-sector aspires to substantially increase total domestic production of key food staples (such as cassava, sorghum, milk, fish, and eggs) and cash crops (such as cocoa, rubber, and cotton). This aspiration is to be achieved by increasing the percentage of arable land cultivated and increasing crop yields. The national food import bill is targeted to decrease by 30.0 per cent, while food export earnings are intended to grow threefold. A total of 15 million additional jobs in agriculture are envisaged over the next 10 years.

Other targets for the Agricultural sector by 2043 include the following:

- Provide infrastructure for Agro Industrial Processing Zones (SCPZ);
- Increase infrastructure investment (irrigation, rural feeder roads, Electricity) by 100.0 per cent;
- Maximize the use of existing Silos to the level of installed capacity;

- Increase the per centage of irrigable land from 10.0 per cent to 40.0 per cent and;
- Increase kilometres of paved rural roads by 20.0 per cent annually;
- Increase the number of Fish Farm Clusters;
- Increase Fish Mills;
- Increase Milk Processing Centres;
- Increase Primary Animal Health Care Centres;
- Increase the number of Federal Veterinary Medical Centre;
- Increase Livestock Breeding and Modification;
- Achieve Technological Agricultural

The priority areas to guide agricultural policy targets by 2043 and activities as identified by the Policies, Programmes, and Projects Audit Committee (PPPAC) to drive sustainable agricultural growth of 6.90 per cent and create millions of jobs are summarized in Table 3.19.

Table 3.23: Key Activities, Milestones and 2043 Targets

	2020	2021-2025	2026-2030	2043 target
Mechanization & Agro-Industrialization (Green Imperative & AfDB Agro-Industrial Processing Zones)	Select private sector service centre operators from established agriprenueurs (148 agro-processing SC, primary 632 mechanization	Establish 111 privately operated service centres Reactivate 2 privately owned tractor assembly plants 2 agro-industrial zones	Establish 669 privately operated service centres Reactivate 4 privately owned tractor assembly plants 8 agro-industrial zones 100 million jobs	780 service centres established (148 processing, 632 mechanizations) 6 functional tractor assembly plants 10 agro-industrial zones established
Access to markets and trade	Handover concessioned public silos to private operators Reactivate strategic Food reserve Prepare lease agreement for 22 public warehouses	Establish post concession management committee for the silos Procure and stock grains in the Seven public silos Lease public warehouses	Concession 7 public silos Expand strategic grain reserves beyond the 6 public silos Establish comm. Exch.	Concession 16 public silos 6 public silos stocked 22 public warehouses leased
Productivity Management (National Livestock Transformation Plan & Water Mgt)	Finalize State-Level implementation plan for 7 pilot states (NLTP) Commence flood management master plan for Rivers Niger and Benue	Conduct needs assessment within 28 grazing reserves establishment of 7 pilot cluster ranches Start TRIMM irrigation models in 3 River Basin Authorities (RBAs)	Establish 12 cluster ranches Start TRIMM irrigation in 9 River Basin Authorities (RBA)	Establish 28 pilot cluster ranches TRIMMM irrigation model in 12 River Basin Authorities (RBA) 65,000 ha of land smart irrigated

Source: Derived from PPPAC.

Table 3.24: Aspirations and Achievements in the Agricultural Sector

S/N	Aspirations	Achievements so far
1.	Improve the national economy by substantially growing the agricultural sector, thus creating more jobs and wealth.	• Federal Government diversification through agricultural transformation and sustained implementation of the initiatives under the Agricultural Promotion Policy (APP) and the Economic Recovery and Growth Plan (ERGP) improved agricultural output growth to 2.36 per cent in 2019 from 2.13 per cent in 2018. • The Anchor Borrowers Programme (ABP), domiciled with the CBN has made available more than 200 billion Naira in funding to more than 1.5 million smallholder farmers of 16 different commodities (Rice, Wheat, Maize, Cotton, Cassava, Poultry, Soy Beans, Groundnut, Fish), cultivating over 1.4 million hectares of farmland. • The ABP has substantially raised local production of rice, doubling the production of paddy as well as milled rice between 2015 and 2019. Between 2016 and 2019, more than 10 new rice mills came on-stream in Nigeria. Many of the existing Mills have expanded their capacity; several new ones are under construction. • More than a billion dollars of private sector investments have been injected in the production of Rice, Wheat, Sugar, Poultry, Animal Feed, Fertilizers, etc since 2015 • The ABP created 2,807,775 and 8,423,325 direct and indirect jobs, respectively. • The signing of a Memorandum of Understanding (MoU) between Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL) and Petkus Technologie of Germany, aimed at significantly reducing the incidence/impact of post-harvest losses in Nigeria's Agriculture Value Chain
2.	Secure agriculture transport infrastructure for sustainable food expansion and security for all Nigerians and develop into the main food exporter in the continent.	• Sukuk Bond (1st Tranche – 100 billion Naira in 2017; 2nd Tranche of 100 billion Naira in 2018 and 3rd Tranche of N162.557 billion Naira were issued). The proceeds were used to fund major road projects across the six geopolitical zones of Nigeria which will provide access road for the movement of farm produce by farmers to the market • Government is revamping the cotton, textile and garment sector via a CBN Textile Revival Intervention Fund that would considerably reduce foreign exchange spent on cotton and other textile imports • To protect our farming investments, the Government deployed five thousand (5,000) Agro-Rangers and employed thirty thousand two hundred and eighty-nine (30,289) in our para-military agencies. • The government is integrating rural communities into the formal economy by extending access to credit and inputs to rural farmers and building feeder roads.
3.	Promote the production of agricultural raw materials to meet the needs of an expanding industrial sector	• Federal Executive Council approval in 2020 for a National Agriculture Mechanization Programme, "the Green Imperative", in partnership with the Government of Brazil and multilateral financing institutions

S/N	Aspirations	Achievements so far
	and export market as well as mechanized agriculture.	
4.	Develop agro-minerals and build soil-fertilizer-network.	• Flagging off planting of over 400,000 fertilizer trees known as (Gawo) in August 2020. This was scientifically proved to have a lot of potentiality in soil improvement and protection and also mitigates effects of climate change
5.	Collaborate regionally within Africa for mineral fertilizer development, i.e., phosphates, limestone, phosphorus, potash, etc.	• The Presidential Fertilizer Initiative, Government-to-Government agreement with the Kingdom of Morocco, created more than a million metric tonnes of fertilizer produced since 2017 • This translated to the distribution of more than 18 million 50kg bags of NPK fertilizer in the first three years of the PFI • The PFI revived 31 blending plants with a combined installed capacity of more than 2.5m MT. This initiative has created a significant number of direct and indirect jobs across the value chain. • Price reduction of fertilizer from between N9,000-N11,000 per bag, to N5,500 • Forex savings of US$150m annually through the substitution of imported components with locally manufactured ones and Subsidy savings of 50 billion Naira annually

Source: The FMARD Website and Presidential Speech June 12, 2020.

3.4.2.3 Private Sector Expectations and Priorities

i. Generation and adoption of research technologies and use of research consortia;
ii. Farming equipment procured by the FMARD to be sold to farmers at a 50.0 per cent discount to actualize food sufficiency;
iii. Employment generation and foreign income earning; and
iv. Training for agriculture extension personnel

3.4.2.4 Enablers for Agricultural Development

i. Water for irrigation projects and fertilizer plants
ii. Economic corridors to target commodity value chains by region
iii. Revitalization of the commodities exchange market
iv. A price support mechanism for guaranteed minimum prices
v. Revision of the Land Use Reform Act to accommodate the certification of farmlands
vi. Construction of Roads connecting farms to markets and storage silos
vii. Agri-industrial parks and Special Agro-industrial Processing Zones (SAPZ) to drive food manufacturing. The Government could enable this by putting in place appropriate fiscal, investment and infrastructure policies for Special Agro-industrial Processing Zones (SAPZ)
viii. Tax breaks on import of agricultural processing equipment;
ix. Tax holidays for food processors that locate in these zones;
x. Support infrastructure, especially complementary investment by the government in roads, logistics, storage facilities, and power;

xi. Infrastructure will focus on power, irrigating, flood control, roads, rail, air, etc;
xii. SAPZ will link farmers in clusters to food manufacturing plants;
xiii. Develop Agricultural Investment Code, in partnership with the Ministry of Finance and Ministry Industry, Trade and Investment as well as the CBN;
xiv. The location of SAPZ will be dependent on a combination of State support and an analysis of the comparative advantage of the region to produce the identified commodity;
xv. Knowledge exchange networks;
xvi. Farm support centres.

3.4.3 Mining Sector

3.4.3.1 Current Developments in the Mining Sector

Mining infrastructure plays a crucial role in the overall development of the sector and the enhancement of its contribution to the economy. Nigeria has a rich deposit of solid minerals. The mining sector has identified over 44 solid mineral deposits across the country, including gold, iron ore, coal, limestone, dolomite, kaolin, barites, tin, as well as gemstones and dimension stones. Critical mining infrastructure such as transportation (Roads and Rails), energy generation and transmission, water pipelines and others, are virtually non-existent or in deplorable conditions. Adequate and reliable infrastructure is imperative to enhancing global capital inflow and attracting foreign direct investment required for the development of the sector. It is also important in meeting the national objective of diversification of the nation's revenue base and job creation.

Nigeria has, among others, deposits of coal, gold, columbite, tantalite, bitumen, iron ore, and uranium. Coal is found in Kogi, Nasarawa, Enugu, Gombe, Adamawa, Akwa Ibom, Bauchi, Cross River, and Benue states. Gold deposits are found in Northern Nigeria, most prominently near Maru, Anka, Malele, Tsohon Birnin, Gwari-Kwaga, Gurmana, Bin Yauri, Okolom-Dogondaji. Columbite and tantalite are found in Nasarawa State near the Jos Plateau, as well as in several areas in southeast Nigeria. Bitumen deposits are found in Lagos, Ogun, Ondo, and the Edo States. Uranium deposits are found in Cross River, Adamawa, Taraba, Plateau, Bauchi, and the Kano States. Nigeria has several deposits of iron ore, but the purest deposits are in and around Itakpe in Kogi State.

The Mining and Quarrying sector in Nigeria has four sub-activities which include Crude Petroleum and Natural Gas, Coal Mining, Metal Ores and Quarrying, and other Minerals. The sector contributed 8.91 per cent to 2019 annual GDP compared with its contribution of 8.74 per cent in the corresponding period in 2018. It grew to 4.26 per cent in 2019 from 1.17 per cent in 2018, representing an increase of N6,362.63 billion from N6,102.56 billion respectively. This increase could be attributed to the positive impact of Government policy implementation aimed at revamping the sector.

On a quarter-by-quarter basis, mining contributed 9.54 per cent in the first quarter of 2020 compared with the contribution of 7.48 per cent in the fourth quarter of 2019.

The growth of the mining sector decreased to 4.58 per cent in the first quarter of 2020 from 6.07 per cent recorded in the fourth quarter of 2019.

The development in the sector following collaborative efforts of all stakeholders as well as a shared vision for the sector led to the creation of a road map in 2016 for the growth and development of the Nigerian Mining Industry (On the Road to Shared Mining Prosperity). Other notable activities in the last few years include the following:

i. The Ministry of Mines and Steels Development (MMSD) secured access to the revolving mining sector component of the Natural Resources Development Fund of a N30 billion (approx. USD100m). The objective of the intervention fund was partly to focus on exploration, formalization of artisanal miners, and the provision of access to funding for genuine miners.

ii. The Ministry also secured support from the World Bank for USD150 million for the Mineral Sector Support for Economic Diversification programme. The objective of this fund is to provide technical assistance for the restructuring and operationalization of the Mining Investment Fund, which would make finance available to operators through development finance, micro-finance, and leasing institutions. The fund will also help to make active previously abandoned proven mining projects like tin ore, iron ore, coal, gold, and lead-zinc.

iii. The Ministry is currently working with the Nigerian Sovereign Investment Authority and the Nigerian Stock Exchange to pull together a USD600 million investment fund for the sector.

iv. The Ministry also commenced capacity building on Mining Financing with banks and financial institutions, to build their knowledge assets in the sector, to better evaluate and finance bankable feasibility studies and business plans by enterprising miners.

v. The Nigerian Geological Survey Agency (NGSA) has signed an MoU and Technical Cooperation Agreements with the China Geological Surveys, Shandong Mineral Exploration Agency and the National Office Hydrocarbons and Mines 'ONHYM' of Morocco. The collaborations were intended to leverage the expertise and state-of-the-art technologies of these organizations in assisting Nigeria to generate investor-friendly geoscience data.

vi. The Ministry has also initiated discussions with SGS, a world-renowned material testing company, to activate the NGSA Laboratory Facilities in Kaduna towards achieving ISO 17025 accreditation. The objective is to significantly reduce the thousands of mineral samples being shipped abroad for analysis thereby reducing the huge revenue loss and correspondingly incentivize the mining sector.

vii. The Ministry implemented a provision in the Nigerian Minerals and Mining Act, 2007, which allows for the revocation of non-performing or defaulting mineral titles. This exercise led to the revocation of several titles, and the generation of revenue to the federation account from titleholders who met the deadline to regularize their statuses.

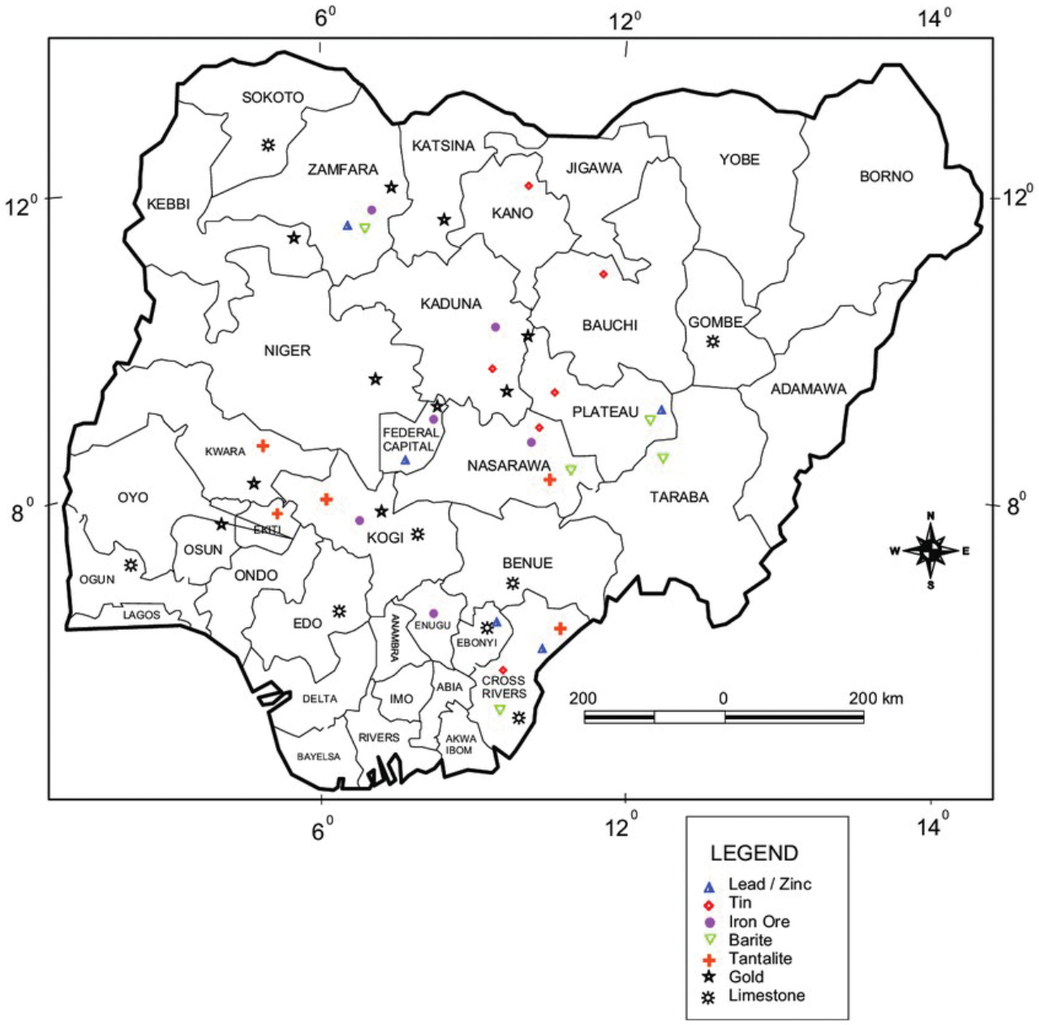
viii. As part of the efforts put in place to improve infrastructure and de-risk the sector, the Ministry has been in discussions with the Bank of Infrastructure, as part of a consortium, to attract private capital investments for the critical mining infrastructure, which will help to spur necessary investments in the industry. The Ministry is also working in collaboration with the Ministry of Transportation to develop the Central Rail Corridor and with the Ministry of Power, Works and Housing on the development of Coal to Power projects.

However, a key challenge militating against improved sector performance is the gross infrastructure deficit. For instance, the country has connected the Ajaokuta Steel Complex with the first stretch of standard gauge rail from the Itakpe Iron Ore mine (51 km) installed since 1992 but yet to be commissioned for use. The steel plant has been connected to its supplier of iron ore, and the line effectively links the heart of the iron ore site with the Delta Steel Company's Aladja port near Warri passing through Itakpe, Ajaokuta, Agbor, and Ore, with six stations along the route, was conceived to carry steel products and raw materials from the Delta Steel Company.

The rail project linking Aladja was abandoned after about 254 kilometres had been constructed due to a lack of funds. However, the Federal Ministry of Transportation has mobilized to site the contractors handling the Central Railway Line and the Itakpe/Ajaokuta Railway Line. The lines linking the Complex to inland steel plants in Katsina, Warri, Ajaokuta, Oshogbo, and Jos as planned and other industries in the hinterland have not been constructed. Also, the proposed East-West rail line running from Lagos to Enugu, the main site of coal production, has not been realized.

These industries cannot function without the railways with a new modern system, the standard gauge, to replace all the 3,800 km of obsolete lines.

Figure 3.24: Mineral Location and Distribution of Infrastructure



Source: Natural Earth, African Development Bank.

Nigeria's mineral resources can be categorized according to their usage, or the geological terrains in which they are found. In terms of use, mineral resources of Nigeria are generally classified into five broad groups:

- Industrial minerals (e.g. barite, kaolin, gypsum, feldspar, limestone)
- Energy minerals (e.g. coal, bitumen, lignite, uranium)
- Metallic ore minerals (e.g. gold, cassiterite, columbite, iron ore, lead-zinc, copper)
- Construction minerals (e.g. granite, gravel, laterite, sand)
- Precious stones (e.g. sapphire, tourmaline, emerald, topaz, amethyst, garnet, etc)

These minerals are found in the different geological (age/lithological) groups in Nigeria which form three main categories:

- Pan-African basement rocks (e.g. gold, coltan, iron ore)
- Mesozoic Younger Granite (tin, columbite)
- Cretaceous-Tertiary sedimentary basins (lead-zinc, barite, limestone, coal, bitumen)

3.4.3.2 Aspirations and Targets for the Mining Sector

- Significantly increase the sector's contribution to national GDP;
- Generate revenue, grow the economy and develop infrastructure through mining and mineral resources;
- Inauguration of the Ajaokuta Presidential Project Implementation Team;
- Working towards ensuring that commercial activity return to Dana Rolling Mill in Katsina State;
- Close collaboration between the Federal, State and Local Governments to achieve full harnessing of mineral resources for economic development;
- MMSD collaborating with the Ministry of Foreign Affairs to convince countries, particularly, the UAE (where most of the smuggled golds from Nigeria are taken to) to ensure that any gold that is coming from Nigeria is certified;
- Profiling and registration of all miners in the country, local and foreign; networking with neighbouring countries on ways to curb illegal mining as well as educating Customs and Immigration Services to see illegal export of Nigeria's minerals as economic sabotage;
- Encourage the value addition of minerals;
- Ensure mining and mineral extraction are done sustainably, including social, environmental and safety considerations;
- Organize artisanal and small-scale miners for optimal participation to reduce rural-urban migration;
- Ensure robust geological data for investors and national planning;
- Promote rapid development of the mining and minerals sector for diversification of the Nigerian economy;
- Collaborate regionally within Africa on geological surveying and mineral resources/raw material development;
- Collaborate within Africa on infrastructure design and development, especially as it relates to mining;
- Strengthen collaboration with the Nigerian Customs Service to curb the menace of smuggling scrap metals across the borders to help grow the local steel industry; and
- Sustain research collaboration with Nigeria Tertiary Institutions to further research on the country's minerals resources and value addition.

With reagrds to targets, government intends to substantially grow the sector in terms of GDP and employment creation. Annual government revenue from mining taxes is targeted to increase fivefold, from the current USD 130 million to USD 640 million. Annual royalties collected are targeted to surge from the current USD 12 million to USD 130 million by 2023, USD 260 million by 2033, and USD 640 million by 2043. Particular emphasis will be placed on increasing the connectivity of mining sites with adjacent parts of the value chain, including transportation (roads, rail) and also energy and ICT.

Other targets for the mining sector include:

- To implement identified measures to attract private sector participation in the sector; to establish mining sector in the six geopolitical zones for gold as a prelude to same for the six other prioritized minerals; refocus the SMDE (Solid Minerals Development Fund) to de-risk value chains in the mining sector and diversify national income streams by 2021;
- To monitor and evaluate results outlined against set measures for the steel sector as well as produce geological maps of the entire country to attract FDI to the mining sector and review the growth in mining value chain de-

risked by the SMDE between 2022-2023; and

- To make two major steel complexes functional at the minimum; and also grow solid mineral GDP averaging 8.7 per cent yearly as well as the SMDE to contribute N8.0 Billion to solid minerals GDP annually, and create 2 million direct and indirect jobs by 2023.

The table 3.25 below further summarizes these aspirations, targets as well as the achievements so far.

Table 3.25: Aspirations and Targets as well as Achievements of the Mining and Quarrying Sector:

S/N	Aspirations and Targets	Achievements to date
1.	Significantly increase the sector's contribution to 3.0 per cent of GDP by 2025 and above 3.0 per cent by 2043	• The mining and quarrying grew to 4.26 per cent in 2019 from 1.17 per cent in 2018. The sector contributed 8.91 per cent to 2019 annual GDP compared with its contribution of 8.74 per cent in the corresponding period in 2018.
2.	Encourage the value addition of minerals.	• Bank of Industry has established a N5 Billion Fund for Artisanal Miners, as part of the Federal Ministry of Mines and Solid Minerals Development's Programme to boost Mining activities in Nigeria • Resuscitation Deal for the Ajaokuta Steel Rolling Mill, agreed by Presidents Buhari and Putin, during the Russia Africa Summit in 2019. The Russian Government has agreed to support the completion and full operationalization of the plant
3.	Ensure mining and mineral extraction are done sustainably, including social, environmental and safety considerations	• With foreign and domestic investments and the participation of Small-Scale Miners, Government is harnessing the supply value chain in gold production
4.	Organize artisanal and small-scale miners for optimal participation to reduce rural-urban migration.	• Flag-off of the Presidential Artisanal Gold Mining Development Initiative (PAGMI) Biometric Exercise
5.	Ensure robust geological data for investors and national planning.	• Exploration activities on the key priority minerals (i.e gold, coal, lead/zinc, limestone, bitumen) is near completion to improve the bankability and to attract the investment into the sector
6.	Promote rapid development of the mining and minerals sector for diversification of the Nigerian economy.	• Inauguration of the Ministerial Technical Committee on the formulation of a framework for sustainable development and growth of the Metals Industry in Nigeria as part of ongoing effort to diversify the economy from dependence on oil and gas.
7.	Collaborate regionally within Africa on geological surveying and mineral resources/raw material development.	• Launching a fully digitized mineral rights management platform for quick processing of mineral rights application digitization of records and plugging revenue leakages.
8.	Collaborate within Africa on infrastructure design and development, especially as it relates to mining.	• Government has put incentives in place such as zero per cent import duty charge to optimize revenue generation from the mining of solid mineral
9.	Strengthen collaboration with the Nigerian Customs Service to curb the menace of smuggling scrap metals across the borders	• Constitution of a Joint Ministerial Committee to work out modalities of implementation

S/N	Aspirations and Targets	Achievements to date
	to help grow the local steel industry	
10.	Sustain research collaboration with Nigeria Tertiary Institutions to further research on the country's minerals resources and value addition.	• The Ministry disbursed over N124 million in grant to about eleven Universities/polytechnics to conduct research on areas relevant to the mandate of the Ministry.

Source: MMSD Website and Presidential Speech of June 12, 2020.

3.4.3.3 Private Sector Expectations and Priorities

- Continuous reforms and focus on the sustainability of initiatives
- Punitive measures being put in place that will see illegal mining operators go to jail for two years without an option of fine
- Government to invest in the acquisition and integration of geo-scientific data
- License exploitation of Nigeria's strategic solid minerals – coal, bitumen, iron ore, limestone, barites, gold, and lead/zinc
- Provide basic mine site infrastructure like 'pit to port' road and rail networks
- Develop a clear framework for private sector-led mining activities in Nigeria
- Establish a mineral exploration and development authority
- Ensure reliable and increased power supply
- The government will pursue strategies to enhance the delivery, functionality, and resilience of the mining infrastructure to be provided
- The government will strengthen the infrastructure network by updating and integrating mining, transportation and power requirement in the national implementation plan

3.4.3.4 Key Enablers for Minining Sector Development

- A stronger regulatory framework for the sector and greater regulatory transparency
- Access to geoscientific data for investors
- Addressing the activities of illegal miners and smugglers
- Fiscal incentives for investors
- Improved transportation infrastructure, roads, and rail for haulage
- Adequate budgetary appropriation
- Information and Communication Technology (ICT)
- Available enduring policy, legal and regulatory framework
- Infrastructure survey of the mining sector
- Adequate and affordable supply of power
- Strengthening institutional frameworks
- Stakeholder engagement and collaboration with states
- Perception of index improvement
- Improved access to funding and incentives
- Improved transportation and bulk handling facilities
- Improved capacity development and skilled development
- Availability of accredited analytical laboratory
- Need for Geological Data in a usable format

The major relevant legislation for this sector is The Nigerian Minerals and Mining Act, which was established to repeal the Minerals and Mining Act of 1999 and re-enact the Nigerian Minerals and Mining Act 2007 to regulate all aspects of the exploration and exploitation of solid minerals in Nigeria and all other related purposes. These have been assessed to be in line with international standards.

3.4.4 Investment Requirements for Agriculture, Water and Mining

The Annual Required Investment for Agriculture, Water, and Mining Sub-Sectors is N468 billion or about USD$1.22 billion. This amounts to about USD$28.06 billion over the next twenty-three-year period. In the next five years (2020-2024) the average annual investment requirement for the sub-sectors is estimated at USD$2.57 billion of which 62 per cent is expected from the private sector while the balance (38 per cent) is expected public investment across these sectors. The national focus should be to set the stage and ensure favourable framework conditions (legal, political, supporting infrastructure such as transportation) to attract such large-scale private investments. It should be noted that agriculture has substantial overlap with other areas such as transportation and water.

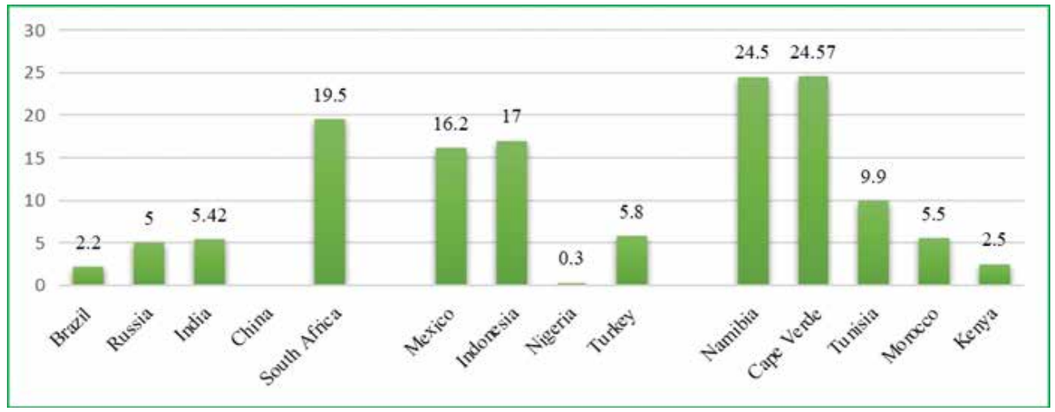
3.5 Housing

The stock of housing in Nigeria was estimated to be over 11 million houses with a growing by 2012. Based on the 2006 national population census estimate of 140,431,790 and an expected growth rate of 2.58 per cent, it is projected that the country's current population is over 206 million and will exceed 320 million by 2043. Following these patterns, it is also expected that Nigeria's housing deficit in the year 2020, exceeds 23 million units, and will be over 40 million units in 2043, aside the fact that these the stock of housing is mostly characterized by chaotic informal settlements with inadequate housing types lacking in basic services like potable water, sanitation, public power supply, and access roads. This challenge in housing supply is particularly highlighted in urban areas, where the population has grown at an astronomical rate of over 5.8 per cent annually, over the past three decades. Whereas the existing urban population constitute over 50.0 per cent of the country's total population, and is expected to rise to 60.0 per cent by 2025, as of 2018, about 80.0 per cent of these urban population had no access to decent housing.

Generally, the shortfall in housing supply is exacerbated by issues that hinder access to land and mortgage financing. Although several niggling legislative setbacks like the Land Use Act of 1978 have not received adequate attention, several efforts have been made at providing legislative and policy enablers to surmount these issues. Some of these attempts were conveyed across blueprints like the National Housing Policy (2002), National Building Code (2010), NV 20: 2020 and the Economic Recovery and Growth Plan 2017-2020, amongst other recent examples. In all, considerable attention has been tailored towards improving the situation, with special focus on the evolution of a housing sector that will make housing finance available to the vast majority of Nigerians, create a land management system that will stimulate rapid and broad-scale housing construction strategies that is domestic technology based.

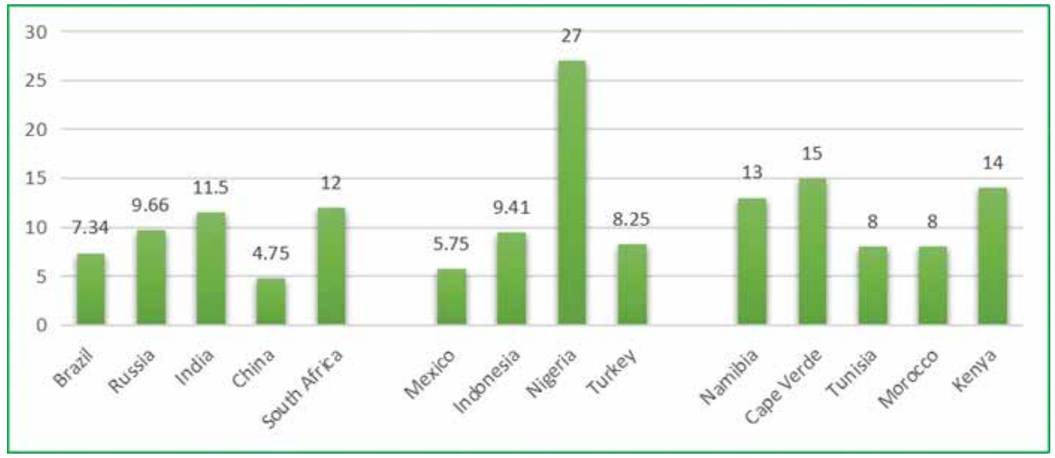
In terms of homeownership, only 6-7.19 per cent of Nigeria's population can access mortgages or make outright cash purchases for housing units. This situation is exacerbated by the fact that only about 14.0 per cent of households earn between 133 USD and 267 USD, monthly. These households would likely only afford adequate housing through public-funded initiatives that offer subsidized housing for low-income earners or social housing. The current mortgage to GDP ratio is estimated at 0.6 per cent, while prime mortgage rates among commercial deposit banks range from 11 per cent to 27.0 per cent, and as much as 31.0 per cent. Leading commercial banks offering mortgages demand an average down payment of over 25 per cent of property value and offer a repayment term that ranges from 10–20 years.

Figure 3.25: Mortgage to GDP Ration of BRICS, MINT & Selected African Nations



Figures 3.25 and 3.26, compare Nigeria's mortgage market with that of nations in the BRICS and MINT economic blocks as well as selected African nations. The indices, which are very crucial to closing the huge gap in housing supply, show that Nigeria has the highest mortgage rates – though very low when considered as a percentage of GDP - in comparison with the BRICS, MINT and most of Africa. Therefore, it is essential for housing solutions to bridge the country's huge housing deficit to leverage home-grown technology base.

Figure 3.26: Average Mortgage Rates of BRICS, MINT & Selected African Nations



The Vision is to provide affordable housing through collaboration among federal, states and local governments as well as the private sector to produce and implement a unified and integrated housing development programme. This would enable new funding opportunities, open new layouts and provide sites and services for the private sector to develop good quality affordable and decent mass housing to meet the nation's housing demands by 2043.

3.5.1 Current State of Housing

Notable progress made in the public sector towards making access to housing easier and more affordable, included the development of 4,878 housing units through the Federal Ministry of Works and Housing (FMWH) coordinated

by the National Housing Programme (NHP) from 2016 to date. A total of 2,287 units of these houses have been completed. (See Table below). Also, 398 housing units are being developed under the Prototype Housing Scheme out of which 185 have been delivered.

Table 3.26: Public Buildings and Housing Development Status Report National Housing Programme (Phases I & II)

GEO-POLITICAL ZONE	STATE	HOUSING UNITS PHASE I	HOUSING UNITS PHASE II		NO. OF HOUSING UNITS COMPLETED PHASE I & II
		TOTAL NO. OF HOUSING UNIT	NO. COMPLETED	TOTAL NO.	NO. COMPLETED
NORTH WEST	KADUNA	80	68	66	42
	KANO	76	68	60	16
	KATSINA	76	76	76	30
	KEBBI	76	72	68	20
	JIGAWA	76	76	64	28
	SOKOTO	80	80	80	24
	ZAMFARA	80	80	80	4
TOTAL		**544**	**520**	**494**	**164**
NORTH EAST	ADAMAWA	76	76	92	20
	BAUCHI	80	80	92	20
	BORNO	80	44	60	8
	GOMBE	76	76	76	12
	TARABA	76	76	60	24
	YOBE	80	76	48	32
TOTAL		**468**	**428**	**428**	**116**
NORTH CENTRAL	BENUE	76	44	70	44
	FCT	216	0	120	0
	KOGI	76	76	64	8
	KWARA	76	48	80	12
	NASARAWA	76	68	56	28
	NIGER	80	72	68	24
	PLATEAU	80	60	80	0
TOTAL		**680**	**368**	**538**	**116**
SOUTH WEST	EKITI	70	60	76	0
	OGUN	68	32	52	6
	ONDO	70	40	54	0
	OSUN	60	60	64	0
	OYO	72	44	48	0
TOTAL		**340**	**237**	**294**	**6**
SOUTH EAST	ABIA	72	0	92	0
	ANAMBRA	72	0	16	12
	EBONYI	70	22	50	0
	ENUGU	70	38	8	0
	IMO	68	60	56	4
TOTAL		**352**	**120**	**222**	**16**
SOUTH SOUTH	AKWA IBOM	68	60	72	0
	BAYELSA	72	0	40	0
	CROSS RIVER	68	48	0	0
	DELTA	68	28	60	0
	EDO	68	60	2	0
TOTAL		**344**	**196**	**174**	**0**
GRAND TOTAL		**2,728**	**1,869**	**2,150**	**418**

Also, 1,970 housing units have been delivered through PPPs between 2015 and 2019, and the Federal Government Staff Housing Loans Board (FGSHLB) provided 1,659 housing loans to fund 601 house purchases in the period.

Between 2019 and present, the FMBN has delivered 3,400 housing units while creating 1,762 mortgages despite disruption caused by the Covid 19 pandemic.

To deepen housing mortgage financing, the Federal Government initiated Nigeria Housing Fund Programme (NHFP) as part of its Social Investment Fund (SIF) initiative with an initial capital of N100 billion. The NHFP is coordinated by the Central Bank of Nigeria (CBN) and supported by contributions from the World Bank and African Development Bank (AfDB). Overall, The NHFP aims at accelerating the development of the domestic mortgage industry such that it becomes entirely private sector-driven in the medium to long term. It is also expected to create jobs and a robust primary local content participation, by supporting the extensive development of value-chains across the local construction industry. Its principal strategies are to provide long-term refinancing of mortgages and standardized mortgage procedures through the Nigerian Mortgage Refinance Company (NMRC). It is also to incentivize lenders to accept loans with lower down payments to increase affordability and ensure a robust primary mortgage market. This would increase access for intending buyers and provide borrowers with an initial down payment, with a mortgage for homeownership, through the Mortgage Guarantee/Insurance Scheme (MGS). Also, it would stimulate increased lending to low-income earners in the formal and informal sectors through Housing Micro Finance Scheme (HMFS).

From the NHFP, the Family Homes Fund Limited (FHFL) was created, has an innovative public-private sector-driven financing solution, structured as a Real Estate Investment Trust (REIT) to pool funds from the private sector, pension trust, insurance funds, multilateral agencies and investors for housing development. For over four years, the Fund has committed to raising N1.3 trillion to facilitate and supply 500 000 homes and 1.5 million jobs for low-income earners. The FHFL also aims at enabling developers deliver affordable ready-to-occupy homes with basic amenities like water and power. This is expected to be done by providing long tenor mortgages at single-digit interest rates to qualifying first time home buyers within targeted household income thresholds. Generally, the FHFL is also expected to channel funds from savers to borrowers so that builders have the required capital to construct and prospective buyers can access credit to purchase homes. Through collaborations, the FHFL has delivered 582 affordable houses, among other ongoing developments, and created over 26,599 jobs in its first two years of operation.

Furtherance to the efforts highlighted earlier, the Real Estate Developers Association of Nigeria (REDAN) alongside the CBN, FMWH and eleven other institutions operate a National Real Estate Data Collation and Management Programme (NRE-DCMP) in 2019, to ensure the comprehensive collation and management of data to support planning, pre-construction, construction and post-construction phases in housing delivery.

Overall, the FSS2020 still pegs homeownership at about 10.0 per cent. To accelerate the delivery of decent and affordable housing for over 315 million population by 2043, it is expected that over 1million housing units would be delivered annually, and as a priority. The Federal Government intends to deliver at least 200,000 houses annually through direct development among other private-sector-driven housing delivery. Existing appraisals by the FMWH shows that current housing delivery capacities at the federal level is 48,000 housing units per annum. These include 2,000 units by the Federal Ministry of Works and Housing, 30, 0000 by the FHA, 7,000 from the FMBN, and 9,000 from the FHFL.

3.5.2 Policy objectives and Targets

- Overcome critical constraints in the provision of new housing.
- Deepen housing financing to drive an increase in house ownership by 50.0 per cent.
- Improve land administration and make serviced land with secured tenure easily available, accessible, transferable and affordable for housing development.

- Build a domestic technology base for housing production and strengthen value-chains in housing delivery.
- Increase private sector participation in the provision of critical Pro-Poor and People-First driven affordable housing.

The aspirations and targets of towards achieving adequate affordable housing in Nigeria are shown in Table 3.27 below

Table 3.27: Aspirations and Targets for achieving adequate affordable Housing

Aspirations	Target 2025	2030	2043
Review enabling legislations	50 per cent	75 per cent	100 per cent
Provide secure land titles for development of affordable housing units annually	1 million	1.5 million	2 million
Increase FMBN capital base	200 Billion Naira	350 Billion Naira	500 Billion Naira
Reduce mortgage rate	30 per cent	55 per cent	70 per cent
Train and certify artisans in trades within housing delivery value-chain	300,000	1 Million	5 Million
Develop modular housing construction facilities across 36 States and FCT.	12	24	37
Increase volume of local low-cost building materials and technologies in housing delivery.	25 per cent	50 per cent	70 per cent
Capture housing units in a comprehensive database	50 per cent	75 per cent	100 per cent
Federal Government deliver affordable housing units through the Federal Ministry of Works and Housing (FMWH) coordinated by the National Housing Programme (NHP)	200,000	500,000 Million	1.5million
Respective State Governments build 5,000 new housing units annually	900,000	1.8 Million	4.1 million
Ensure that new housing development plans attain statutory approvals.	40 per cent	80 per cent	100 per cent
Build 800,000 units of new affordable housing through private sector led initiatives.	4 million	8 million	18.4 million
Inventory and Creation of Assets Registry	50 percent	100 percent	Review and update
Promote direct labour works to enable the Country's skilled artisans to perfect their skills	30 percent	60 percent	100 percent
Development of Maintenance as an economy for job generation, wealth creation and sustainable maintenance of Public Assets	25 percent	50 percent	100 percent

Source: Revised NIIMP Team

3.5.3 Strategies for Housing Development

The key to achieving adequate quantities of social and affordable housing in Nigeria is to develop a very clear long-term housing development philosophy that seeks to provide an adequate enabling environment to stimulate

modular housing production, through a home-grown technological base.This involves clearing legislative bottlenecks that hinder improved property and security rights, access to mortgage lending and long-term funding for housing development, and the better utilization of land resources. Specific activities to strengthen the enabling environment for affordable housing delivery include the following:

- Improve legal and regulatory framework, incentives, project preparation, technical resource capacity gap, and government openness to private sector drive PPPs in the delivery of affordable housing and its ancillary facilities. Thus, ICRC should develop a flexible and result oriented PPP for the housing sector.
- Strengthen regulation on housing development and improve the participation of the built-environment industry's professionals, like the Nigerian Institute of Architects (NIA), Nigerian Society of Engineers (NSE), Nigerian Institute of Town Planners (NITP), Nigerian Institution of Estate Surveyors and Valuers, Nigerian Institute of Builders (NIB) and the Nigerian Institute of Quantity Surveyors (NIQS), in the planning, financing, and production of housing.
- Reposition the FMBN and the FHA through improved financial base and re-engineer operations to deepen mortgage financing.
- Improve access to finance for the construction industry, through the introduction of safe and profitable mortgage products that target actual end-users.
- Accelerate the development of appropriate capacities to achieve 100.0 per cent sufficiency in manpower and the production of basic building materials and components of acceptable quality from local resources, to stimulate effective housing development and economic growth.
- Promote indigenous technology base and develop modular construction capability for affordable housing in the 6 geopolitical zones.
- Develop low-cost building materials and technologies.
- Establish a reliable and comprehensive database for the collation and warehousing of relevant data on housing development in Nigeria.
- Increase public financed housing production capacity, at the Federal level, from 48,000 – FMWH (2000), FHA (30,000), FMBN (7,000), and FHFL (9,000) - units per annum to 100,000, in the short-term and 200,000 units in the long-term.
- Ensure that respective State Governments build 5,000 housing units, annually.
- Ensure that the private sector delivers 800,000 housing units at the lowest best price, annually.

3.5.4 Maintenance and Facility Management of Federal Government Public Buildings

The National Public Buildings Maintenance Policy which was approved at the Federal Executive Council meeting of 9th January, 2019 is a document that is to guide the effective and sustainable management and maintenance of all Federal Government Buildings across the Country. The goals of the Policy Implementation Plan include among others:

i. The creation of opportunities for micro, small and medium enterprises (MSMEs);
ii. The creation of employment at the community level to build a sustainable maintenance economy.

The Policy Implementation Strategy is in line with International best practices, standards and guidelines on Facility Assets Management. On the side of the Federal Government, the economic impact is to:

i. Improve the Asset value and preservation of the Federal Secretariats;
ii. There are better returns on investment and also optimizes the asset utilization and
iii. Promotes efficiency of operations especially among the staff.

Table: 3.28: PROPOSED REHABILITATION OF FEDERAL SECRETARIATS IN THE NEXT FIVE YEARS

S/N	2021	2022	2023	2024	2025
1.	Asaba, Delta State	Maiduguri, Borno State	Kaduna, Kaduna State	Akure, Ondo State	Enugu, Enugu State
2.	Yola, Adamawa State	Damaturu, Yobe State	Abeokuta, Ogun State	Ibadan, Oyo State	Benin, Edo State
3.	Kano, Kano State	Kaduna, Kaduna State	Jos, Plateau State	Damaturu, Yobe State	Katsina, Katsina State
4.	Ilorin, Kwara State	Sokoto, Sokoto State	Bauchi, Bauchi State	Kano, Kano State	Maiduguri, Borno State
5.	Owerri, Imo State	Jos, Plateau State	Benin, Edo State	Ilorin, Kwara State	Makurdi, Benue State
6.	Akure, Ondo State	Minna, Niger State	Dutse, Jigawa State	Kaduna, Kaduna State	Asaba, Delta State
7.	Abeokuta, Ogun State	Asaba, Delta State	Enugu, Enugu State	Owerri, Imo State	Abeokuta, Ogun State
8.	Dutse, Jigawa State	Uyo, Akwa Ibom State	Owerri, Imo State	Cross River State	Dutse, Jigawa State
9.	Cross River State	Enugu, Enugu State	Katsina, Katsina State	Minna, Niger State	Ibadan, Oyo State
10.	Damaturu, Yobe State	Makurdi, Benue State	Akure, Ondo State	Uyo, Akwa Ibom State	Kaduna, Kaduna State
11.	Makurdi, Benue State	Yola, Adamawa State	Maiduguri, Borno State	Port Hartcour, Rivers State	Bauchi, Bauchi State
12.	Jos, Plateau State	Ibadan, Oyo State	Ilorin, Kwara State	Lifts At Jos & Port Harcourt	Yola, Adamawa State

Table 3.29: Facility Management (Janitorial, Security and Horticulture) of Federal Secretariat Complex

S/N	Project Title	Location Title	Status 2020-2024
1.	Facility Management of Federal Secretariat Complex, Kano	Kano	On-Going
2.	Facility Management of Federal Secretariat Complex, Katsina	Katsina	On-Going
3.	Facility Management of Federal Secretariat Complex, Illorin	Kwara	On-Going
4.	Facility Management of Federal Secretariat Complex, Sokoto	Sokoto	On-Going
5.	Facility Management of Federal Secretariat Complex, Yola	Adamawa	On-Going
6.	Facility Management of Federal Secretariat Complex, Bauchi	Bauchi	On-Going
7.	Facility Management of Federal Secretariat Complex, Dutse	Jigawa	On-Going
8.	Facility Management of Federal Secretariat Complex, Abeokuta	Ogun	On-Going
9.	Facility Management of Federal Secretariat Complex, Akure	Ondo	On-Going
10.	Facility Management of Federal Secretariat Complex, Damaturu	Yobe	On-Going
11.	Facility Management of Federal Secretariat Complex, Markudi	Benue	On-Going
12.	Facility Management of Federal Secretariat Complex, Jos	Plateau	On-Going
13.	Facility Management of Federal Secretariat Complex, Port Harcourt	Rivers	On-Going
14.	Facility Management of Federal Secretariat Complex, Minna	Niger	On-Going
15.	Facility Management of Federal Secretariat Complex, Ibadan	Oyo	On-Going
16.	Facility Management of Federal Secretariat Complex, Kaduna	Kaduna	On-Going
17	Facility Management of Federal Secretariat Complex, Benin	Edo	On-Going
18	Facility Management of Federal Secretariat Complex, Maiduguri	Borno	On-Going
19	Facility Management of Federal Secretariat Complex, Owerri	Imo	On-Going
20	Facility Management of Federal Secretariat Complex, Akwa-Ibom	Uyo	On-Going
21	Facility Management of Federal Secretariat Complex, Enugu	Enugu	On-Going
22	Facility Management of Federal Secretariat Complex, Gombe	Gombe	On-Going
23	Facility Management of Federal Secretariat Complex, Asaba	Delta	On-Going
24	Facility Management of Federal Secretariat Complex, Calabar	Cross-River	On-Going

Source: Federal Ministry of Works and Housing

Table 3.30: Aspirations and Targets towards achieving a well-maintained public building in Nigeria

Aspirations		Targets	
	2025	2030	2043
Inventory and Creation of Assets Registry	50 percent	100 percent	Review and update
Promote direct labour works to enable the Counrty's skilled artisians to perfect their skills	30 percent	60 percent	100 percent
Development of Maintenance as an economy for job generation, wealth creation and sustainable maintenance of Public Assets	25 percent	50 percent	100 percent

Source: Federal Ministry of Works and Housing

Table 3.31: Legislations that Affect Housing Development in Nigeria.

Enablers	Status	Intervention Required	Responsibility
National Housing Policy	Approved in 2012	Reflect current implementation realities and update housing statistics.	FMWH NASS
National Urban Development Policy	Approved in 2012	Reflect current development and trends in urban development.	FMWH NASS
National Land Policy	Process is ongoing	Accelerate policy development process and approval.	FMWH NASS
National Public Buildings Maintenance Policy	Approved in 2019. Federal Public Asset Maintenance Department created in the FMWH	Strengthen Implementation. Domesticate Legislation in States.	FMWH
National Building Code	Approved in 2006 and Reviewed 2017, and currently undergoing further review.	Accelerate ongoing review, approve and domesticate.	Nigeria National Building Code Advisory (NNBCAC), FMWH, and NASS
Land Use Act	Enacted in 1978	Review Land use Act to foster fast and easy processing of land titles documents, building permits and ensure longer leaseholds.	FMWH NASS
Federal Housing Authority Act	Enacted in1973 Partially commercialized in 1988	Increase autonomy.	FMWH NASS
National Housing Fund Act	Enacted in 1992	Increase the minimum income threshold for compulsory contribution to the NHF scheme and include coverage for self-employed persons. Encourage banks to comply with given obligations.	FMWH, FMBN, NASS
Energy Efficiency in Building	Enacted in 1991	Emphasis should be on strengthening indigenous R&D and incentives for uptakers.	FMWH NASS
Mortgage Institutions Act	Approved in 2012	Reflect current implementation realities and update housing statistics.	FMWH NASS
National Construction Policy	Approved in 2012	Reflect current development and trends in urban development.	FMWH NASS

Source: Revised NIIMP Team.

A. FEDERAL HOUSING AUTHORITY

In aligning with the Reviewed Integrated Infrastructure Master Plan 2020-2043, the Federal Housing Authority is developing its capacity to improve all outputs with regards to producing Housing Units in all categories. The Authority has developed an action plan of increasing the earlier submitted 30,000 Housing Units Annually to 100,000 Housing Units Annually reaching its peak by the year 2030.

Federal Housing Authority has developed strategies for Housing Development and commenced interface with critical stakeholders especially from the Private sector establishing frameworks towards achieving the target of 100,000 Housing Units Annually by the year 2030.

B. THE PLAN

In line with policy objectives and targets of the Reviewed National Integrated Infrastructure Master Plan as it related to Housing Development, the Federal Housing Authority has developed a Long-Term action Plan as enumerated in table 3.24 below:

Table 3.32: Long Term Action Plan

S/NO	ACTION PLAN	TARGET YEAR		
		2025	2030	2043
1.	In conjecture with FMWH cause for the Review FHA Act to repositioned the Authority, improve its financial base and re-engineer its operations	50% (FHA Act. reviewed and passed into law)	100% (FHA Repositioned and all its operations re-engineered with a strong financial base for better performance.	Sustained Housing Development with high delivery performance
2.	Secure Land Holdings to establish Land Banks worth 100,000Ha across the nation within the Master Plan's engagement Period	50% (Partnering with Federal and States' Governments to secure titled land allocations)	75% (Sustained Partnerships with other Land Holders from the Corporate and Traditional Environments)	100% (Continuation of
3.	Develop Capacities to achieve the provision of 100,000 Housing Units per annum	25% (Development of strategies that brings the use of adaptable technologies that endure the use of local materials	100%	
4.	Partnering with FMWH to internally drive the Full Commercialization of the Authority	100%		
5.	Develop strong PPP Framework towards ensuring full private sector participation in Housing Development	100%		

Table 3.33: The Status Report of the FHA On-Going and Planned Projects Nationwide.

S/N	PROJECT NAME AND LOCATION	PROJECT DETAILS	TOTAL PROJECT COST(N)	FINANCIAL EXPENDI-TURE (N)	REMARKS
1.	Pilot Mass Housing Programme, Zuba, Abuja, FCT.	Construction of 764 Units of 1Bdr, 2bdr and 3Bdr Houses with associated infrastructure	N9.30 Billion	N6.7 Billion	Project on-going and at 85% completion
2.	Completion of Commercial Housing Project, Apo- ABUJA	Reactivation and recommencement of Construction activity towards the completion of 90 Luxury Duplexes	N4.05 Billion	N1.85 Billion	Project on-going and at 85% completion
3.	FHA-ENL Partnership APO-ABUJA	Completion of 822 Luxury Housing Units with associated infrastructure.	N41.78 Billion	N18.8 Billion	Partnership project and at 60% completion
4.	Completion of Nationwide Housing Project, MAKURDI – BENUE STATE	Construction of 80 Units of 2 & 3Bedroom Bungalows with Associated Infrastructure	N768 Million	N712 Million	Project completed and currently been marketed for sale
5.	Completion of Nationwide Housing Project, YENAGOA – BAYELSA STATE	Construction of 80 Units of Various House Types with Associated Infrastructure	N2.28 Billion	N342 Million	Project on-going and at 40% completion
6.	Completion of Nationwide Housing Project, ODUKPANI C/ RIVERS STAT	Construction of 86 Units of 2 & 3Bedroom Bungalow House Types with Associated Infrastructure	N830.12 Million	N570.35 Million	Project on-going and at 60% completion
7.	Mass Housing Project with Associated Infrastructure at South-West Geo-political Zone at Ajoda – Ibadan Oyo State	Construction of 886 Housing Units	N12.00 Billion		Construction has commenced with Partners operating a PPP arrangement
8.	Medium/High Income Housing Development with Associated Infrastructure at Lugbe, Abuja -FCT	Construction of 1000 Housing Units	N18.00 Billion		Pre-project activities been carried out
9.	Proposed Mass Housing Project with Associated Infrastructure at North-East Geo-political Zone at Damaturu, Yobe State	Construction of 1750 Housing Units	N14.00 Billion		Planning & Procurement Stage

Table 3.33: The Status Report of the FHA On-Going and Planned Projects Nationwide.

S/N	PROJECT NAME AND LOCATION	PROJECT DETAILS	TOTAL PROJECT COST(N)	FINANCIAL EXPENDI-TURE (N)	REMARKS
10.	Proposed Mass Housing Project with Associated Infrastructure at Nort-West Geo-political Zone at Katsina, Katsina State	Construction of 700 Housing Units	N7.00 Billion		Planning & Procurement Stage
11.	Mixed Housing Development and Associated Infrastructure for the Abuja New City Development at Kabusu, Abuja - FCT	Construction of 10000 Housing Units	N50.00 Billion		Pre-project activities been carried out
12.	Mixed Housing Development and Associated Infrastructure in Lagos	Construction of 5000 Housing Units	17.00 Billion		Planning Stage

Source: Federal Ministry of Works and Housing

3.5.5 Required Infrastructure Investments

Overall, given that the conservative estimate of Nigeria's housing stock is about 12 million, around 28 million additional housing units will be required to meet the demands of over 400 million projected population by 2043. To close these gaps, 1.22 million additional housing units will be delivered annually for the next 23 years. This implies a substantial need for investment to boost the production of new housing units. Therefore, USD 10,000 is estimated to be the unit cost of constructing one affordable housing, based on the prevailing cost of construction. It is estimated that at least USD 300 billion is required over the next 23 years, to close the gap (i.e. an average of USD 13.5 billion per annum).

3.6 Social Infrastructure

Social infrastructure development cuts across almost all sectors of the economy, as it has to do with the wellbeing of all strata of the society. Facilities and services for promoting societal wellbeing are related to health, education, sport, labour productivity, environment, culture and tourism, and developmental facilities for youth and women.

The sector covers 11 sub-sectors (health, education, youth and sports, women affairs, social development, labour, productivity, information, environment, and tourism). This document groups these sub-sectors into the following four broader categories:

- Health, Women affairs and social development;
- Education, youths and sports;
- Environment, tourism, information; and
- Labour and productivity.

3.6.1 Health, Women Affairs and Social Development

3.6.1.1 Overview of Healthcare Sector

The 2019 Corona Virus pandemic, more than ever, painfully demonstrates how intertwined healthcare and the economy have become. The unprecedented effect of the pandemic poses a major threat to global public health, especially in the area of disruptions to the management of other diseases as well as the entire healthcare service delivery infrastructure that has seen most of the gains achieved in medical care over the past decades, under the threat of being wiped out within a short period of time. Short to medium-term measures have been employed to deescalate the severity of the pandemic, but globally, the frailties that have been exposed in healthcare systems call for a fit for purpose architecture that would be resilient to unpredictable, large-scale health challenges that would require the urgent mobilization of resources and or affect large populations. This is especially important in situations like current scenarios that are particularly impelled by lifestyle changes and aging populations.

In Nigeria, the health burden caused by the pandemic has the potential to disrupt and further weaken an already fragile healthcare delivery system. Considering the extended effects of the Covid-19 pandemic and a further over-stretched infrastructure base, healthcare delivery service must be considered more in terms of preparedness and response plans to address any of such outbreaks or intensive lifestyle changes related to ailments. This measure is necessary to avoid losing previous gains in the management of other diseases, which might be eroded, especially in a period of increase in the prevalence of Anti-Microbial Resistance (AMR), which is a rapidly growing public health concern. The focus of healthcare delivery is therefore shifted solely from the prevention of communicable diseases and management of non-communicable diseases to driving efficiency, shifting care from hospital to outpatient services, incentivizing innovations that address marginal but fundamental healthcare needs, especially for vulnerable populations, and strengthening of specialty in healthcare services. This measure focalizes a new strategic direction in healthcare delivery that would address new realities whilst remaining sustainable.

3.6.1.2 Current State of Healthcare

Years of under-investment in healthcare delivery in Nigeria has resulted in poor and inadequate infrastructure, including hard infrastructure like buildings and modern equipment and technology, and soft infrastructure such as major underlying systems to support data management, business continuity, and even the adequacy, mix and distribution of healthcare workers. This has particularly resulted in the poor development of key specialties and loss of confidence in the general quality of healthcare delivery, especially in the management of non-communicable diseases. To further, make the case worse, vaccine-preventable, and infectious diseases remain the leading causes of morbidity and mortality in Nigeria.

The Nigerian healthcare system is organized as a hub of the radial referral system of primary, secondary, and tertiary healthcare delivery. Primary healthcare services are domiciled within the purview of Local Governments. State Governments are solely involved in the delivery of secondary healthcare service, while the Federal Government is responsible for the development of healthcare policies, the overall coordination of the healthcare system, and the

delivery of tertiary healthcare services. Currently, Nigeria has 23,385 public Primary Healthcare Clinics (PHCs) or an average of 30 clinics per Local Government Area, 963 Secondary Care Centres or about 27 facilities per State, 42 Tertiary healthcare institutions, and 13 specialist hospitals across the country. Also, there are 8,355 private PHCs and 3,030 private secondary facilities.

The country's National Health Policy (2016) highlights the weakness and underperformance in all the building blocks of the healthcare delivery system. This situation is exacerbated by a near-total absence of social or financial protection mechanisms with very low insurance coverage that fuels high out-of-pocket expenditure on healthcare services. In a demonstration of the commitment to address these structural issues, the National Health Policy 2016 is aimed to promote multi-sectoral and public-private partnerships for the development and delivery of healthcare infrastructure and maintenance Key healthcare indicators for Nigeria are summarised as follows:

- Major causes of child mortality and morbidity are diarrhoea, acute respiratory infections, malaria, measles and other vaccine-preventable diseases, and the exacerbating effect of children's malnutrition.
- 132 deaths per 1,000 live births in 2018, a level far above the target of 64 deaths per 1,000 live births agreed for the UN-SDGs.
- 512 women died per 200,000 live births due to pregnancy-related.
- Access to primary healthcare is currently about 61 per cent with only 15 beds available per 1,000 population and only 30 primary healthcare centres per 100,000 people.
- 54 years life expectancy in 2018 compared to Sub-Saharan African average of 61 years, and 69 years for Lower Middle-Income countries.

3.6.1.3 Policy objectives for the Healthcare Sector

In the face of all these challenges, Nigeria's commitment to revitalizing its healthcare system is underscored by a robust health sector reform. In October 2014, the National Health Act was enacted into law and the Federal Government approved the revised National Health Policy (NHP) in 2016 to provide direction necessary to support and significantly strengthen healthcare delivery. The goal for healthcare infrastructure development in the NHP 2016 is to achieve adequacy in quality and network of healthcare services. Thus, the specific objectives of healthcare delivery include, to:

- improve availability and accessibility of high quality and functional healthcare facilities across the country to support affordable healthcare delivery;
- expand healthcare coverage in order to provide equitable access to healthcare services, especially in under-served areas;
- ensure that all healthcare infrastructure, including biomedical equipments, comply with very high quality standards and requirements;
- increase access to ambulatory (outpatient) healthcare services;
- ensure effective maintenance of healthcare equipment and infrastructure at all levels; and
- Improve the prevention, preparedness, and response to public health threats by ensuring adequate health security infrastructure at National and Sub-national levels. These include infectious disease treatment centres, public health laboratories, Public Health Emergency Operations Centres (PHEOCs), and digital surveillance systems (Surveillance Outbreak Response Management and Analysis System – SORMAS).

3.6.1.4 Strategies

Considering the commitment of the NHP to promote multi-sectoral and public-private partnerships for health infrastructure development and maintenance, government is to provide policy support and incentives for private sector investment and foreign direct investment in healthcare service delivery. Further to the decision for Nigeria's

Sovereign Wealth Investment to prioritize investment in healthcare development, priority would be given to the development of physical infrastructure and strengthening of underlying systems that support the equitable delivery of high-quality healthcare service, especially in areas of Research and Development. To further make healthcare services more available, considering that primary healthcare is the bedrock of national health development in addition to the provision of financial risk protection to citizens, especially the poor and vulnerable population, the following infrastructural priorities also relate to improving healthcare delivery services in Nigeria:

- Functional PHCs would be affiliated to a contiguous General Hospital;
- All States should ensure that there is a functional and equipped General Hospital in every LGA manned by qualified personnel, with a strong referral system to contiguous tertiary hospitals;
- Existing tertiary and specialist hospitals would be revamped to meet the needs of the local population;
- Diagnostic and quaternary mono-specialist centres should be distributed in a manner that ensures equitable access to all sections of the country;
- A robust integrated health management information system would be established to generate timely data for evidence-based healthcare delivery decision-making and service improvement;
- Institutions that conduct development research to address priority health needs of the country would be strengthened; and
- Reduce the impact of public health emergencies by strengthening the health security infrastructure at National and Sub-national levels.

In line with the NHP, the benchmarks for financing healthcare development are as follows:

- Governments at all levels to spend at least 15.0 per cent of their annual budgets on health care development;
- Federal Government is to set aside at least 1.0 per cent of the Consolidated Revenue Fund for the establishment of the Basic Healthcare Provision Fund (BHCF), as provided for in the National Health Act 2014; and
- The allocation of 15.0 per cent from the BHCF for the maintenance of health infrastructure, equipment and transport for eligible primary healthcare facilities, in line with the National Health Act 2014.

Table 3.34: Specific Achievement of the Health Sub-Sector

S/N	Type of Infrastructure Developed 2014 -2020	Purpose of the Infrastructure	Achievements Attained on the Developed Infrastructure	Beneficiaries of the Infrastructure
1.	Medical (Storage) Warehouse (Federal Central Medical Warehouse Lagos, and the Premier Medical Warehouse Abuja)	To strengthen the national warehousing system for effective storage and distribution of essential medicines to enhance Public Health	Provision of approximately 7000m2 of pharma grade warehousing space for various health commodities in the country Preservation of lifesaving medicines and other essential health commodities, especially during the COVID 19 crisis. Provision of quality life-saving health commodities for Nigerians through a central facility Increased federal warehouse capacity for central storage	• International and local donors • Donor recipients such as the vulnerable • Federal Ministry of Health

S/N	Type of Infrastructure Developed 2014 -2020	Purpose of the Infrastructure	Achievements Attained on the Developed Infrastructure	Beneficiaries of the Infrastructure
			Effective storage of donated public health commodities to fight public health diseases such as AIDS, Tuberculosis and Malaria. Utilisation of the expertise of the private sector through best practices of operation and maintenance which has led to better inventory management, human resources and quality assurance. Creation of jobs in the health supply chain industry	
2.	Construction of Infectious Disease Treatment Centres	To improve management of infectious diseases	Construction of 16 treatment centres	• Tertiary health facilities and States
3.	Establishment of 28 Public Health Emergency Operations Centres (PHEOCs)	To improve the coordination of preparedness and response activities	28 PHEOCs established, with staff trained on Incident Management System	• 27 States and the FCT
4.	Activation of 97 Public Health Laboratories (79 public and 18 private laboratories) nationwide	To improve timely detection of COVID-19 as well as other diseases of public health importance	The availability of at least one functional public health laboratory in all the States of the federation	• Tertiary hospitals • 36 States and the FCT

DEPT. of SPECIAL PROJECTS & PUBLIC PRIVATE PARTNERSHIP/DIASPORA

S/N	Project Title	Zone	Project Location	Project Value	Completion Date	Status of Implementation (%)	Remarks
1.	Nsia-Umuahia Dignostic Centre	SE	Abia State	$5.5 Million	2020	100%	The Federal Ministry of Health through Its PPP Unit Facilitated the Signing of a Memorandum of Understanding between the Federal Ministry of Health, Nigeria Sovereign investment Authority (NSIA) And Federal Tertiary Health institutions With A view of investing in The Development of Healthcare Facilities And Provision of Health Care Services including Diagnostic Centres, Teaching Hospitals, General Hospitals, Private Hospitals and other Similar Healthcare
	Construction, Equipping and Operation of Full-Range Advanced Diagnostic Centre in Federal Medical Centre, Umuahia			N3,025,000,000 (N550 Conversion Rate)			

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S/N	Project Title	Zone	Project Location	Project Value	Completion Date	Status of Implementation (%)	Remarks
2.	Nsia-Kano Diagnostic Centre	NW	Kano State	$5.5 Million	2020	100%	institutions. The Federal Ministry of Health through Its PPP Unit Facilitated the Signing of A Memorandum of understanding between the Federal Ministry of Health, Nigeria Sovereign Investment Authority (NSIA) and Federal Tertiary Health institutions with A view of investing in the Development of Healthcare Facilities and Provision of Health Care Services including Diagnostic Centres, Teaching Hospitals, General Hospitals, Private Hospitals and other Similar Healthcare institutions.
3.	Nsia-Luth Cancer Treatment Centre	SW	Lagos State	$11 Million	2019	100%	The Federal Ministry of Health through its Ppp Unit Facilitated. The Signing of A Memorandum of Understanding between the Federal Ministry of Health, Nigeria Sovereign investment Authority (NSIA) and Federal Tertiary Health institutions with a view of investing in the Development of Healthcare Facilities and Provision of Health Care Services including Diagnostic Centres, Teaching Hospitals, General Hospitals, Private Hospitals and other Similar Healthcare institutions.
	Rehabilitation, Equipping and Operation of an existing Cancer Centre in Lagos University Teaching Hospital			N6,050,000,000 (N550 Conversion Rate)			
4.	Lagos Medical Warehouse (Warehouse in A Box)	SW	Lagos State	$5.2 Million N2,860,000,000 (N550 Conversion Rate)	2018	100%	USAID And Global Fund Sponsored the Construction of The Facility on a Land Asset Provided by the Federal Ministry of Health. The Facility is Being Managed by A Private Operator through a PPP arrangement.
5.	Abuja Premier Medical Warehouse	NC	Abuja	$5.1 Million N2,805,000,000 (N550 Conversion Rate)	2017	100%	Usaid and Global Fund Sponsored the Construction of the Facility on a Land Asset Provided by the Federal Ministry of Health. The Facility is being Managed by a Private Operator

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S/N	Project Title	Zone	Project Location	Project Value	Completion Date	Status of Implementation (%)	Remarks
							through a Ppp arrangement.
	NATIONAL PRIMARY HEALTH CARE DEVELOPMENT AGENCY						
6.	Construction of Primary Health Care Centre Level 2 in Agatu in Benue South Senatorial District, Benue State.	NC	Benue	88,020,591.50	2020	On-Going	
7.	Construction of Primary Health Care Centre Level 2 in Okpokwu in Benue South Senatorial District, Benue State.	NC	Benue	88,119,985.50	2020	On-Going	
8.	Construction of Phc Centre With Supply of Hospital Equipment And Solar Powered Boreholes in Gboko/ Tarka Federal Constituency, Benue State	NC	Benue		2020	On-Going	
9.	Construction of Primary Health Centre and Supply of Medical Equipments in Ipole (Ijigban Ward) of ado Lga, Benue State.	NC	Benue	53,508,516.73	2020	On-Going	
10.	Renovation & Equipping of Nyangl Phc Facility in Gwalgwada Ward Toto Lga Nassarawa State	NC	FCT	16,683,587.00	2020	Completed	
11.	Renovation & Equipping of Owowolo Phc in Ochadamu Ward ofu Lga Kogi State	NC	Kogi	16,683,587.00	2020	Completed	
12.	Renovation & Equipping of Ikpakpala Phc in Iyale Ward Dekina Lga Kogi State	NC	Kogi	16,683,587.00	2020	On-Going	
13.	Renovation & Equipping of Ogodu Health Clinic in Ogodu Ward Omala Lga Kogi State	NC	Kogi	13,768,097.00	2020	On-Going	
14.	Renovation of Primary Health Care Centre	NC	Kwara	19,159,820	2020	On-Going	
15.	Construction of Primary Health Care Centre Type 2	NC	Nasarawa	9,040,612	2020	Completed	
16.	Renovation & Equipping of Saura Phc Facility in Sabon-Gari Ward Keffi Lga Nassarawa State	NC	Nasarawa	16,683,587.00	2020	Completed	
17.	Renovation And Equiping of Primary Health Care Centre	NC	Nasarawa	16,379,416	2020	Completed	
18.	Construction of 1no. Primary Health Centre And Completion of 3 Nos Primary Health Care Centres at Akwanga/Nass-Eggon and Wamba, Fed. Constituency, Nasarawa State.	NC	Nasarawa	53,508,516.73	2020	On-Going	
19.	Construction of Primary Health Care Centre Type 1	NC	Nasarawa	13,911,547	2020	On-Going	
20.	Construction of Primary Health Care Centre Type 2	NC	Nasarawa	12,402,747	2020	On-Going	
21.	Renovation & Equipping of Tabanni Phc Facility in Kasanga Ward Mashegu Lga Niger State	NC	Niger	16,683,587.00	2020	Completed	
22.	Construction of Primary Health Care Centre Level 2 At Gawu in Gurara Local Government, Niger East Senatorial District, Niger State	NC	Niger	48,748,956.11	2020 2020 2020 2020	On-Going On-Going 	
23.	Contruction of Primary Health Care Centre Level 2 in Wushishi And Mariga Lga, Niger State.	NC	Niger	53,508,516.73	2020	On-Going	
24.	Renovation & Equipping of Egbatituaki H.P in Sidisaba Ward Katcha Lga Niger State	NC	Niger		2020	On-Going	
25.	Renovation of Primary Health Care Centre	NC	Niger	16,380,345	2020	On-Going	
26.	Completion of Primary Health Care Centre At Zaron Kapwis Ward, Barkin Ladi Lga, Plateau State	NC	Plateau	15,997,136.92	2020	On-Going	
27.	Renovation & Equipping of Kalerhealth Care in Langshi Ward Kanke Lga Plateau State	NC	Plateau	8,794,056.00	2020	On-Going	
28.	Renovation & Equipping of Takwok Phc Facility in Takwok Ward Barkin	NC	Plateau	16,683,587.00	2020	On-Going	

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S/N	Project Title	Zone	Project Location	Project Value	Completion Date	Status of Implementation (%)	Remarks
	Ladi Lga Plateau State						
29.	Construction And Equiping of 25 Bed Primary Health Care Centre Level 2 At Gombi, Adamawa State.	NE	Adamawa	87,242,817.71	2020	On-Going	
30.	Construction of Primary Health Centre in Ganye/Jada Federal Constituency, Adamawa State	NE	Adamawa	48,748,956.11	2020	On-Going	
31.	Contruction of Primary Health Care Centre Level 2 in Shellenge Lga, Adamawa State	NE	Adamawa	48,748,956.11	2020	On-Going	
32.	Renovation & Equipping of Bitiku Basic Health Centre in Hyambula Ward Madagali Lga Adamawa State	NE	Adamawa	16,381,150.00	2020	On-Going	
33.	Renovation & Equipping of Gulak Health Facility in Gulak Ward Madagali Lga Adamawa State	NE	Adamawa	16,381,149.00	2020	On-Going	
34.	Renovation And Supply of Hospital Equipment in Mayo-Balwa and Demsa Primary Healthcare Centre in Adamawa South Senatorial District	NE	Adamawa	16,997,123.00	2020	On-Going	
35.	Upgrading of Phc in Ngurore, Yola Lga, Adamawa State	NE	Adamawa	16,997,123.00	2020	On-Going	
36.	Contruction of Primary Health Care Centre Level 2 in Asurbun Zaki Lga, Bauchi State	NE	Bauchi	35,512,738.68	2020	On-Going	
37.	Renovation And Equpoping Phc Mainari Misau Lga Bauchi	NE	Bauchi	6,165,532.51	2020	On-Going	
38.	Renovation/Equipping of Phc Centre in Bauchi,Bauchi Lga,Bauchi State	NE	Bauchi	6,165,532.51	2020	On-Going	
39.	Construction of Primary Healthcare Centers at Kurghi Village in Hawul/ Askira/Uba Fed. Const. Borno State	NE	Borno	28,685,040.46	2020	On-Going	
40.	Upgrading of Phc in Shaffa, Hawul Lga Borno State	NE	Borno	6,165,532.51	2020	On-Going	
41.	Construction of a Health Centre at Garko in Akko Federal Constituency, Gombe State	NE	Gombe	34,586,170.38	2020	On-Going	
42.	Contruction of Primary Health Care Centre in Akko-Garki Ward, Gombe State	NE	Gombe	34,586,170.38	2020	On-Going	
43.	Renovation & Equipping of Lawushi Health Clinic in Boh Ward Shomgom Lga Gombe State	NE	Gombe	8,795,935.00	2020	On-Going	
44.	Construction of 6 Nos Primary Health Care Centre Level 2 in Jakusko Yobe State	NE	Yobe	88,997,121.13	2020	On-Going	
45.	Construction of 6 Nos Primary Health Care Centre Level 2 in Machina Yobe State	NE	Yobe	35,512,738.68	2020	On-Going	
46.	Construction of 6 Nos Primary Health Care Centre Level 2 in Yusufari Yobe State	NE	Yobe	88,796,153.63	2020	On-Going	
47.	Renovation & Equipping of Gurbana Hc in Buduwa Ward Jakusko Lga Yobe State	NE	Yobe		2020	On-Going	
48.	Upgrading of Primary Health Centre in Bulatura Town, Bulatura Yusufari Fed. Constituency, Yobe State	NE	Yobe	6,165,532.51	2020	On-Going	
49.	Renovation & Equipping of Saleri Dispensary in Saleri Ward Kirikasama Lga Jigawa State.	NW	Jigawa	8,731,604.00	2020	On-Going	
50.	Renovation & Equipping of Shehu Maimota Memorial Clinic Garu in Limawa Ward Dutse Lga Jigawa State	NW	Jigawa	8,752,654.00	2020	On-Going	
51.	Renovation of Madammawa Primary Healthcare Centre, Guri Lga, Jigawa State	NW	Jigawa	6,115,228.66	2020	On-Going	
52.	Upgrade and Rehabilitation of Sundimina Town Hospital Birnin Kudu Local Government, Jigawa South West Senetorial District	NW	Jigawa	64,707,768.50	2020	On-Going	
53.	Constructio of One Unit of Phc	NW	Kaduna	35,512,738.68	2020	On-Going	

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S/N	Project Title	Zone	Project Location	Project Value	Completion Date	Status of Implementation (%)	Remarks
	in Makarfi Lga of Kaduna North Senatorial District, Kaduna State.						
54.	Construction of Primary Health Care Centre Level 2 in Jaba Lga, Zango-Kataf ,Kaduna State.	NW	Kaduna	35,512,738.68	2020	On-Going	
55.	Construction of Primary Health Care Centre Level 2 in Tudun-Wada, Kaduna South Fed. Constituency, Kaduna State.	NW	Kaduna	35,512,738.68	2020	On-Going	
56.	Construction of One Unit of Phc Centre in Sabon Lga of Kaduna North Senatorial District, Kaduna State.	NW	Kaduna	35,512,738.68	2020	On-Going	
57.	Construction/Renocation of Primary Health Care Centers in Kaduna Central Senatorial District, Kaduna State.	NW	Kaduna	35,512,738.68	2020	On-Going	
58.	Primary Health Care (Phc) Clinic At Gidan Fulani Palladan in Sabon Gari Lga	NW	Kaduna	19,332,810.92	2020	On-Going	
59.	Renovation of two (2) Primary Health Care Centres	NW	Kaduna	15,297,464	2020	On-Going	
60.	Completion of Medical Centre At Kofar Ruwa Dala Fed. Const.	NW	Kano	17,991,920.79	2020	On-Going	
61.	Completion of Ongoing Utai Phc Centre in Wudi Lga, Kano State	NW	Kano	6,115,228.66	2020	On-Going	
62.	Construction And Furnishing of Maternityhospital in Kano Municipal Federal Constituency, Kano State	NW	Kano	48,748,956.11	2020	On-Going	
63.	Construction of Primary Health Care Centre Level 2 (2no) @ N32m Kumbotso Lga Fed. Constituency, Kano State.	NW	Kano	53,508,516.73	2020	On-Going	
64.	Construction of Primary Health Care Centre Level 2 (4 Units) At Nasarawa Fed. Constituency, Kano State.	NW	Kano	88,924,276.54	2020	On-Going	
65.	Construction of Primary Health Care Centre Level 2 At Fagge B-Fabbe Lga Fed. Constituency, Kano State.	NW	Kano	35,512,738.68	2020	On-Going	
66.	Construction of Primary Health Care Centre Level 2 in Bachirawa & Kunya	NW	Kano	88,950,000.00	2020	On-Going	
67.	Renovation of Phc Centre in Rijiya Lemo Modern Health Centre At Fagge Federal Constituency Kano State	NW	Kano	6,115,228.66	2020	On-Going	
68.	Completion of Kamry Type Ii Phc Centre Bindawa Lga, Katsina State	NW	Katsina	6,115,228.66	2020	On-Going	
69.	Construction of Maternity Centre in Katsina North Senatorial District, Katsina State.	NW	Katsina	88,514,524.98	2020	On-Going	
70.	Construction of Ultra-Modern Primary Health Centres With Equipments in Mashi, Baure, Maiaduwa of Katsina North Senatorial District, Katsina State	NW	Katsina	113,371,402.75	2020	On-Going	
71.	Contruction of Primary Health Care Centre Level 2 in Batagarawa / Crc/Rimi	NW	Katsina	88,569,588.63	2020	On-Going	
72.	Rehabilitation of Kasanki Comprehensive Phc Centre in Mashi Lga Katsina State	NW	Katsina	6,115,228.66	2020	On-Going	
73.	Renovation of Primary Health Care Centre At Sabin Gida, Yerraddau, Musawa Lga Katsina State.	NW	Katsina	45,604,993.75	2020	On-Going	
74.	Renovation & Equipping of Gawasa Phc Facility in Bandan Ward Suru Lga Kebbi State	NW	Kebbi	16,683,587.00	2020	Completed	
75.	Renovation & Equipping of Maikwari Phc Facility in Zaria Kala-Kala in Zaria Aminu Ward, Koko-Besse Lga Kebbi State	NW	Kebbi	16,683,587.00	2020	Completed	

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S/N	Project Title	Zone	Project Location	Project Value	Completion Date	Status of Implementation (%)	Remarks
76.	Construction of Primary Health Care Centre Level 2 in Kebbi Central Senatorial District, Kebbi State.	NW	Kebbi	48,748,956.11	2020	On-Going	
77.	Fencing And Construction of Staff Quarters At Phc Centres in Dugu in Shange Lga Kebbi State	NW	Kebbi	14,248,098.84	2020	On-Going	
78.	Rehabilitation of Argungu General Hospital in Kebbi North Senatorial District -	NW	Kebbi	59,898,046.48	2020	On-Going	
79.	Rehabilitation of Bagudo General Hospital in Kebbi North Senatorial District –	NW	Kebbi	49,467,301.05	2020	On-Going	
80.	Rehabilitation of Kaóje General Hospital in Kebbi North Senatorial District –	NW	Kebbi	49,469,027.50	2020	On-Going	
81.	Rehabilitation of Primary Health Care Centre Augie in Kebbi North Senatorial District –	NW	Kebbi	44,997,778.39	2020	On-Going	
82.	Renovation & Equipping of Bazama Hp in Sakaba Ward Sakaba Lga Kebbi State	NW	Kebbi	4,596,362.00	2020	On-Going	
83.	Renovation /Fencing of Cipamini Phc Centre in Ngaski Lga Kebbi State	NW	Kebbi	12,926,332.66	2020	On-Going	
84.	Renovation And Supply of Hospital Equipment To Phc Center in Gungun Hoge Ngaski in Kebbi State	NW	Kebbi	12,926,332.66	2020	On-Going	
85.	Renovation of Phc Centre At Makawa Town in Ngaski Lga Kebbi State	NW	Kebbi	12,926,332.66	2020	On-Going	
86.	Renovation of Phc Centres At Zuru Near Dan-Mangoro, Zuru Lga Kebbi State	NW	Kebbi	14,248,098.84	2020	On-Going	
87.	Renovation And Equiping of Kaura, Tambuwal Lga, Sokoto State	NW	Sokoto	9,460,955.50	2020	On-Going	
88.	Renovation And Supply of Drugs To Primary Healthcare Centre in Bancho, Tambuwal Lga Sokoto State	NW	Sokoto	9,460,955.50	2020	On-Going	
89.	Renovation of Phc Centre in Danchadi, Bodinga Lga, Sokoto State	NW	Sokoto	9,460,955.50	2020	On-Going	
90.	Contruction And Equipping of Primary Health Care Centre Level 2 At Falale, Gumi Lga And Yashi Bukkuyum Lga	NW	Zamfara	48,748,956.11	2020	On-Going	
91.	Renovation of Kaura Namoda General Hospital in Zamfara North Senatorial District	NW	Zamfara	27,702,588.75	2020	On-Going	
92.	Refurbising Dilapidated Phc in Umuahia North Lga of Abia Central Senatorial District, Abia State	SE	Abia	12,533,333.39	2020	Completed	
93.	Renovation of Obuoiha Ibere Health Centre, Ikwuano Lga Abia State	SE	Abia	12,533,333.39	2020	Completed	
94.	Renovation of Phc in isiala Ngwa South Lga of Abia Central Senatorial District Abia State	SE	Abia	12,533,333.39	2020	Completed	
95.	Construction of Primary Health Care Centre Level 2 At Ikwuano, Abia State	SE	Abia	88,742,204.06	Ongoing	On-Going	
96.	Construction of Primary Health Care Centre Level 2 in Ukame, Umuahia Nontu, Abia Central Senatorial District, Abia State.	SE	Abia	88,527,970.50	Ongoing	On-Going	
97.	Completion And Furnishing of Phc Center At Amawbia Town, Awka South Lga in Anambra State; Lot 1 Nphcda 201188/1/57 Seegnal Nig Ltd.	SE	Anambra	14,666,666.67	2020	Completed	
98.	Completion of Phc Centres At St Barnaba Anglican Church And Umuezema Village in Ojoto Obiofia including inter -Locking And Provision Solar Boleholes	SE	Anambra	14,666,666.67	2020	Completed	

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S/N	Project Title	Zone	Project Location	Project Value	Completion Date	Status of Implementation (%)	Remarks
	in Idemili South Lga, Anambra State, Lot Nphcda/2018/2/3(Lot :Nphcda/2018/2/3:Aso Renovation &Building Technology Ltd And Nathados Ventures Ltd						
99.	Construction of Doctors Quarters/ Supply of Basic Drugs And Furnishing of Phc Center At Maryland Estate Mmakwum Village Obosi Idemili South Anambra State: Lot 1:Nphcda /2018/1/10	SE	Anambra	14,666,666.67	2020	Completed	
100.	Construction of Primary Health Care Centre Level 2 in Ekwulobia, Aguata Lga, Anambra South Senatorial District, Anambra State	SE	Anambra	113,523,322.50	2020	On-Going	
101.	Completion of Primary Health Care Centre At St Barnabas, Idemili South of Anambra State	SE	Anambra	7,000,000.00	2020	On-Going	
102.	Completion of Primary Health Care Centre At Umuezema, Idemili South of Anambra State	SE	Anambra		2020	On-Going	
103.	Upgrading of Amagu Phc Centre in Edukwuedo Amagu, Ikwo Lga, Ebonyi State	SE	Ebonyi	24,000,000.00	2020	On-Going	
104.	Construction of Perimeter Fence At Jcss Ogba-Nkpologu Hospital in Uzo Uwani Lga of Enugu State	SE	Enugu	24,000,000.00	2020	On-Going	
105.	Construction of two (2) Staff Quarters At Jcss Ogba Nkpologu Hospital Uzo Uwani Lga Enugu North Senatorial District	SE	Enugu	24,000,000.00	2020	On-Going	
106.	Construction of two 92) Staff Quarters	SE	Enugu	44,800,000.00	2020	On-Going	
107.	Contruction of Primary Health Care Centre Level 2 in Amogwu-Aku Igbo-Etiti Lga, Enugu State	SE	Enugu	48,748,956.11	2020	On-Going	
108.	Drilling And Reticulation of Water Boreholes Powered By Solar Energy in Amangbana Community Enugu North Senatorial District	SE	Enugu	14,000,000.33	2020	On-Going	
109.	Drilling And Reticulation of Water Boreholes Powered By Solar Energy in Adaba Community Enugu North Senatorial District	SE	Enugu	14,000,000.33	2020	On-Going	
110.	Drilling And Reticulation of Water Boreholes Powered By Solar Energy in Amogbo - Aku Community Enugu North Senatorial District	SE	Enugu	14,000,000.00	2020	On-Going	
111.	Drilling And Reticulation of Water Boreholes Powered By Solar Energy in Lejja Community in Enugu North Senatorial District	SE	Enugu	14,000,000.33	2020	On-Going	
112.	Drilling And Reticulation of Water Boreholes Powered By Solar Energy in Oda - Ukpabi Community Enugu North Senatorial District	SE	Enugu	14,000,000.00	2020	On-Going	
113.	Drilling And Reticulation of Water Boreholes Powered By Solar Energy in Unasi Community Enugu North Senatorial District	SE	Enugu	14,000,000.00	2020	On-Going	
114.	Renovation of Akokwa Primary Health Care Centre in Ideato North/ Ideato South Federal Constituency	SE	Imo	6,000,000.00	2020	Completed	
115.	Renovation of Akpulu Primary Health Care Centre in Ideato North/ Ideato South Federal Constituency	SE	Imo	9,333,333.33	2020	Completed	
116.	Renovation of Aronduzogu Primary Health Care Centre in Ideato North/ Ideato South Federal Constituency	SE	Imo	9,333,333.33	2020	Completed	
117.	Renovation of Dikenafia Primary Health Care Centre in Ideato North/ Ideato South Federal Constituency	SE	Imo	6,000,000.00	2020	Completed	
118.	Renovation of Obiohia Primary Health Care Centre in Ideato North/	SE	Imo	16,000,000.00	2020	Completed	

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S/N	**Project Title**	**Zone**	**Project Location**	**Project Value**	**Completion Date**	**Status of Implementation (%)**	**Remarks**
	Ideato South Federal Constituency						
119.	Renovation of Osina Primary Health Care Centre in Ideato North/Ideato South Federal Constituency	SE	Imo	9,333,333.33	2020	Completed	
120.	Renovation of Umumaisiaku Primary Health Care Centre in Ideato North/Ideato South Federal Constituency	SE	Imo	12,000,000.00	2020	Completed	
121.	Renovation of Umuobom Primary Health Care Centre in Ideato North/ Ideato South Federal Constituency	SE	Imo	16,000,000.00	2020	Completed	
122.	Renovation of Urualla Primary Health Care Centre in Ideato North/ Ideato South Federal Constituency	SE	Imo	12,000,000.00	2020	Completed	
123.	Renovation of Ntueke Primary Health Care Centre in Ideato North/ Ideato South Federal Constituency	SE	Imo	6,000,000.00	2020	On-Going	
124.	Renovation of Ogboko Primary Health Care Centre in Ideato North/ Ideato South Federal Constituency	SE	Imo	6,000,000.00	2020	On-Going	
125.	Renovation of Primary Health Care Centre	SS	Akwa Ibom	7,999,534.00	2020	On-Going	
126.	Construction, Equipping And Furnishing of A Health Centre At Irhodo Ii in Jesse Clan, Ethiope West Lga, Delta State	SS	Delta	48,748,956.11	2020	On-Going	
127.	Construction And Equipping of Primary Health Centre At Eko-Kakulu in Irrua, Esan Central Local Government Area of Edo State.	SS	Edo	88,061,484.50	2020	On-Going	
128.	Contruction of Primary Health Care Centre Level 2 in Ado-Ekiti/ Irepodun-Ifelodun	SW	Ekiti	48,748,956.11	2020	On-Going	
129.	Rehabilitation & Renovation of Sango -Agege Phc Centers Fed. Constituency Type 1 Lagos State	SW	Lagos	8,092,616.71	2020	Completed	
130.	Rehabilitation And Renovation of Phc Center At Power -Line in Agege Fed. Constituency, Lagos State	SW	Lagos	8,092,616.71	2020	Completed	
131.	Renovation of Phc Centre in Surulere 1 Fed Constituency Lagos State	SW	Lagos	8,092,616.71	2020	Completed	
132.	Construction of Primary Health Care Centre Level 2 At Oshodi/isolo Fed. Constituency	SW	Lagos	88,667,236.25	2020	On-Going	
133.	Rehabilitation And Upgrading of Type Ii Phc Centre in isheri Township, Ifo Lga, Ogun State	SW	Ondo	6,400,000.01	2020	Completed	
134.	Upgrading of Comprehensive Healthcare Centre in Okitipupa, Ondo State	SW	Ondo	6,400,000.01	2020	Completed	
135.	Fencing And Furnishing of Type 11 Phc Centre At Iyeku Odo Otin Lga, Osun State	SW	Osun	6,400,000.01	2020	Completed	
136.	Upgrading And Equiping Odeomu Phc Center And Maternity Ile -Idi, Asa, Ode-Omu, Ayedaade Lga, Irewole Fed Const. Osun State.	SW	Osun	6,400,000.01	2020	Completed	
137.	Construction of Primary Health Care Centre Level 2	SW	Osun	28,685,041.46	2020	On-Going	
138.	Renovation of two Phc Centres	SW	Oyo	17,600,000.00	2020	Completed	
NATIONAL AGENCY FOR FOOD AND DRUGS ADMINISTRATION AND CONTROL (NAFDAC)							
139.	Connection of Nafdac office Complex @ No.1 isolo ind. Est - Apapa To 11kva Dedicated Undeground Feeder Pillar Direct From Phcn.	SW	isolo, Lagos	44,108,367.45	2014	100% Completed	
140.	Supply & installation of 18kva Soundproof Fg Wilson Generator @ Nafdac Zamfara State office.	NW	Zamfara	4,238,325.00	2014	100% Completed	
141.	Supply And installation of Dedicated 1000kva,11/0.415 Transformer			4,841,392.50	2014	100% Completed	

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S/N	**Project Title**	**Zone**	**Project Location**	**Project Value**	**Completion Date**	**Status of Implementation (%)**	**Remarks**
142.	Provision of An Underground Dedicated 11kva Pillar			73,105,452.00	2014	100% Completed	
143.	Provision of An Underground Dedicated 11kva Pillar			29,356,653.90	2014	100% Completed	
144.	Supply of Sql Server 2008 Enterprise Edition Complete-25 Client User License			2,352,000.00	2014	100% Completed	
145.	Drilling of Motorised Borehole At Nafdac office, Ogoja Cross River	SS	Ogoja, Cross River	4,938,150.00	2014	100% Completed	
146.	Construction of A Generator House At Nafdac Laboratory, Narayi - Kaduna	NW	Kaduna	4,900,087.00	2014	100% Completed	
147.	Supply And installation of 20kva Generator At Nafdac State office, Lafia	NC	Lafia, Nasarawa	4,173,750.00	2014	100% Completed	
148.	installation of Fire Fighting System At Nafdac office, Apapa	SW	Apapa, Lagos	36,950,000.00	2014	100% Completed	
149.	installation of Entry Security Barrier System At The New Nafdac office Complex	SW	isolo, Lagos	20,299,482.00	2014	100% Completed	
150.	installation of Additional Facilities, incinerator At The New Nafdac office Complex	SW	isolo, Lagos	59,962,206.15	2014	100% Completed	
151.	Supply And installation of 20kva Perkings Generator At Nafdac State office, Lokoja	NC	Lokoja Kogi	4,238,325.00	2014	100% Completed	
152.	Supply & installation of 200kva Perkings Generator @ Nafdac Ekiti State	SW	Ekiti State	4,238,325.00	2014	100% Completed	
153.	Provision And installation of 1no 500kva Transformer & Drilling of 1 No industrial Water Borehole, Water Tank	NC	Antyu Mbakaa, Benue State	65,887,500.00	2015	100% Completed	
154.	Supply & installation of 200kva Perkings Generator @ Nafdac State office, Damaturu	NE	Damaturu	4,238,325.00	2015	100% Completed	
155.	Supply & installation of 20kva F.G Wilson Perkins Generator At Nafdac State office, Jalingo	NE	Jalingo	4,238,325.00	2015	100% Completed	
156.	Supply & installation of 20kva F.G Wilson Perkins Generator At Nafdac State office, Dutse	NW	Dutse	4,238,325.00	2015	100% Completed	
157.	Supply & installation of 20kva F.G Wilson Perkins Generator At Nafdac State office, Katsina	NW	Katsina	4,238,325.00	2015	100% Completed	
158.	Provision And installation of Fire Hydrants And Carcass Tiles At Nafdac Burnt Seized-Drug Warehose, Oshodi –Lagos	SW	Lagos	43,900,353.00	2015	100% Completed	
159.	Construction of Generator House At Nafdac State office, Ado-Ekiti, Ekiti State.	SW	Ekiti	4,900,066.50	2015	100% Completed	
160.	Construction of Water Treatment Plant House At Nafdac Lab Project Site, Waff Road - Kaduna	NW	Kaduna	4,888,222.50	2015	100% Completed	
161.	Construction of Mini Security Pos, Extension of intercom Services And installation of Security Entrance Barrier At Nafdac Lab, Project Site, Waff Road - Kaduna	NW	Kaduna	4,963,455.00	2015	100% Completed	
162.	Construction of Staff Canteen At Nafdac Lab, Waff Road - Kaduna	NW	Kaduna	42,880,246.50	2015	100% Completed	
163.	Automatic Cover & Upgrading of Control Panel At Nafdac Central Lab, Oshodi - Lagos	SW	Oshodi, Lagos	13,935,521.25	2015	100% Completed	
164.	Supply of 80 Nos Digital Camera Chain For Nafdac Coverages			14,490,000.00	2015	100% Completed	
165.	Supply And installationg of Ups & Stabilizers At Nafdac office, isolo – Lagos	SW	isolo, Lagos	38,535,000.00	2015	100% Completed	
166.	Construction of Stepping-Stone Service Walkway To The Transformer Substation And Maintenance of 300kva Transformer At Maduguri	NE	Maiduguri	4,806,112.50	2015	100% Completed	

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S/N	Project Title	Zone	Project Location	Project Value	Completion Date	Status of Implementation (%)	Remarks
	Area Laboratory						
167.	Supply of 1 Nos, Nissan Urvan 16 Seater High Roof 2.51mt For The New Nafdac Complex, isolo	SW	isolo, Lagos	7,770,000.00		100% Completed	
168.	Drilling of industrial Borehole And Associate Works At Nafdac Operations office, isolo, Lagos	SS	Asaba	25,740,006.00		100% Completed	
169.	Construction of office Block, Warehouse, Perimeter Fence And Gate House At Nafdac Property Illela Boarder, Illela Lga, Sokoto State	NW	Sokoto	31,332,332.80		100% Completed	
170.	Construction of office Block, Warehouse, Perimeter Fence And Gate House At Nafdac Property Kamba Boarder, Dandi Lga, Kebbi State	NW	Kebbi	30,863,421.12	2015	100% Completed	
171.	Drilling of Motorized Borehole Works At Nafdac Border Post, Illela - Sokoto	NW	Sokoto	4,899,510.00	2016	100% Completed	
172.	Drilling of industrial Borehole And Associate Works At Nafdac Operations office, isolo, Lagos	SW	Lagos	4,788,525.00	2016	100% Completed	
173.	Construction And Conversion of Store Unit To office Accomodation For The Pharmacovigilince Post Market Survey			3,693,375.00	2016	100% Completed	
174.	Construction And installation of Mode Pallets in The Store Room At Nafdac Headquarters Abuja.	NC	Abuja	4,903,500.00	2016	100% Completed	
175.	Construction of office Wall Cladding And Wall Partitioning At Der office, Nafdac Hq	NC	Abuja	4,809,013.13	2016	100% Completed	
176.	Construction of office Wall Cladding And Wall Partitioning At Admin office (Discipline & Promotions Unit)	NC	Abuja	4,773,995.63	2016	100% Completed	
177.	Construction of Gatehouse At Nafdac office, Nahco - Lagos.	SW	Lagos	2,480,593.92	2016	100% Completed	
178.	Construction of office Wall Cladding And Wall Partitioning At Salary & Wages And Fixed Assets Units Respectively At Nafdac Hq	NC	Abuja	4,977,236.25	2016	100% Completed	
179.	Construction of office Wall Cladding And Wall Partitioning (Final Accts Unit)	NC	Abuja	4,809,013.13	2016	100% Completed	
180.	Drilling of Motorized Borehole Works At Nafdac Land At Birnin Kebbi, Kebbi State	NW	Birnin-Kebbi, Kebbi State	4,893,000.00	2016	100% Completed	
181.	Drilling of Motorized Borehole Works At Nafdac Land At Abakaliki, Ebonyi State	SE	Abakaliki, Ebonyi	4,851,000.00	2016	100% Completed	
182.	Construction of office Cladding & Wall Partitioning At Expenditure Unit, Nafdac Hq, Abuja	NC	Abuja	4,823,647.50	2016	100% Completed	
183.	Construction of office Cladding & Wall Partitioning At Ddf's office & Votebook Unit, Nafdac Hq, Abuja	NC	Abuja	4,635,618.75	2016	100% Completed	
184.	Renovation of Nafdac Zonal & State office, Enugu - Enugu State	SE	Enugu State	4,948,072.50	2017	100% Completed	
185.	Drilling of Motorized Borehole And Associated Works At The Proposed New Nafdac Hqtrs &Lab Building Site At Kyami District Cadastral Zone E24, Abuja	NC	Kyami, Abuja	4,894,470.00	2017	100% Completed	
186.	Supply & installation of Agilent Hplc Machine/Training of Nafdac Staff			31,500,000.00	2017	100% Completed	
187.	Supply & installation of 15kva Perkins Generator Set For Nafdac office, Sokoto State	NW	Sokoto State	4,903,500.00	2018	100% Completed	
188.	Supply of office Equipment (1.5hp Split A/C, Semi-Executive Table Standing Fan Rechargeable Executive office Chairs Swivel Delivery/installation			2,456,055.00	2018	100% Completed	

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S/N	Project Title	Zone	Project Location	Project Value	Completion Date	Status of Implementation (%)	Remarks
189.	Supply of office Equipment (Laptop Computers, Microspft office 2013 & Pro Anti-Virus Activation License	SW	Lagos	2,231,250.00	2018	100% Completed	
190.	Supply & Purchase of 1 Unit Toyota Prado Tx 7-S At Ls	SW	Lagos	47,222,222.22	2018	100% Completed	
191.	Supply & installation of Video Conferencing Systems For Dgs office (Lagos & Abuja	SW/NC	Lagos/Abuja	4,596,800.00	2018	100% Completed	
192.	Construction & installation of Phase 2 of Epoxy Floor Finishes At Micro-Biology Lab. Nafdac Oshodi, Lagos			4,580,000.00	2018	100% Completed	
193.	Procurement of It Working Tools For Dg office - Sa - Dg & Pa - Dg, Abuja	NC	Abuja	1,031,100.00	2019	100% Completed	
194.	Roofing of Portacabins Flooring & Associated Works			4,162,111.99	2019	100% Completed	
195.	Supply & installation of Agilent Uhplc 1290	NW	Kaduna	39,924,742.20	2019	100% Completed	
196.	Supply & installation of Agilent Uhplc 1290	SW	Yaba, Lagos	39,924,742.20	2019	100% Completed	
197.	Supply & installation of Gl - Ms instrument To Central Lab Oshodi	SW	Oshodi, Lagos	49,618,732.30	2019	100% Completed	
198.	Supply of Video Conference Equipment For The Dgo, Chq - Abuja	NC	Abuja	1,573,635.00	2019	100% Completed	
199.	Supply & Delivery of 2 Nos Toyota Hiace Bus	NC/SW	Abuja/Lagos	42,222,222.00	2019	100% Completed	
200.	12 Units Scientific Refridgerator 247 Sliv		Nafdac Labs	7,649,999.70	2019	100% Completed	
201.	8 Units Scientific Refridgerator 247 Sliv		Nafdac Labs	5,092,500.00	2019	100% Completed	
202.	Agilent infinity Ii 1290 Uhplc	NW	Kaduna	45,412,500.00	2019	100% Completed	
203.	Turbo Vap & Stirring Module	SW	Oshodi, Lagos	5,250,000.00	2019	100% Completed	
204.	Agilent infinity Ii 1290 Uhplc	SW	Yaba, Lagos	45,412,500.00	2019	100% Completed	
205.	Agilent infinity Ii 1290 Uhplc	SW	Oshodi, Lagos	45,412,500.00	2019	100% Completed	
206.	Agilent 7890b Portharcourt	SS	Portharcourt	22,050,000.00	2019	100% Completed	
207.	Aa 280fs Als & Sp	SS	Portharcourt	31,920,000.00	2019	100% Completed	
208.	Aa 280fs Als & Sp	SE	Agulu	31,920,000.00	2019	100% Completed	
209.	Aa 280fs Als & Sp	SW	Oshodi, Lagos	31,920,000.00	2019	100% Completed	
210.	Zymark Turbo Vap Sample Works			3,150,000.00	2019	100% Completed	
211.	Agilent 7890b	SE	Agulu	22,050,000.00	2019	100% Completed	
212.	Agilent 7890b	SW	Yaba, Lagos	22,050,000.00	2019	100% Completed	
213.	Supply & Delivery of 1 Unit 650kva Fg Wilson Soundproof Generator To Nafdac isolo, Lagos	SW	isolo, Lagos	34,590,289.20	2019	100% Completed	
214.	Supply & Delivery of 1 Unit 275kva Fg Wilson Soundproof Generator To Nafdac I&E Apapa, Lagos	SW	Apapa, Lagos	14,294,945.37	2019	100% Completed	
215.	Renovation of Pv/Pms Newly Allocated office Space	NC	Abuja	12,997,057.50	2019	100% Completed	
216.	Agilent infinity Ii 1290 Uhplc	SW	Yaba, Lagos	45,412,500.00	2019	100% Completed	
217.	Agilent infinity Ii 1290 Uhplc	SW	Yaba, Lagos	45,412,500.00	2019	100% Completed	
218.	Supply of Dissolution Tester System	SW	Oshodi, Lagos	11,494,935.24	2019	100% Completed	
219.	Supply of 20nos of Digital Thermometer/Clock/Humanity Monitor	SW	Oshodi, Lagos	1,192,766.40	2019	100% Completed	
220.	Supply & installation of 915 Kf-Ti Touch	SW	Yaba, Lagos	7,876,585.08	2019	100% Completed	
221.	Supply & installation of Erweka Disintegration Tester To Nafdac	SW	Yaba, Lagos	11,494,935.24	2019	100% Completed	

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S/N	Project Title	Zone	Project Location	Project Value	Completion Date	Status of Implementation (%)	Remarks
	Lab, Yaba						
222.	Maintenance of two (2) Hitachi Hplc in Central Lab, Oshodi	SW	Oshodi, Lagos	1,470,837.48	2019	100% Completed	
223.	Supply & installation of Erweka Disintegration Tester Zt 322 To Nafdac Lab, Agulu	SE	Agulu	9,256,797.48	2019	100% Completed	
224.	Supply & installation of Bench Ph Meter 2 Points Calibration To Nafdac Central Drug Control Laboratory, Yaba	SW	Yaba, Lagos	1,426,292.28	2019	100% Completed	
225.	Supply & installation of Conductivity Bench Meter To Nafdac Drug Quality Control Laboratory, Yaba	SW	Yaba, Lagos	2,887,914.96	2019	100% Completed	
226.	Supply & installation of Erweka Disintegration Tester To Nafdac Lab, Yaba	SW	Yaba, Lagos	9,256,797.48	2019	100% Completed	
227.	7units of Genesys 180 Double Beam Uv Visible Spectrophoter With Accessories		Nafdac Labs	33,174,225.00	2019	100% Completed	
228.	Aczet Professional Analytical Balance Cy224c - D=0.1mg		Nafdac Labs	6,693,750.00	2019	100% Completed	
229.	Thermo Scientific Nicolet is Ft			32,000,000.00	2019	100% Completed	
230.	Aczet Professional Analytical Balance Cy224c - D=0.1mg		Nafdac Labs	2,008,125.00	2019	100% Completed	
231.	Anton Paar Dma 4500m Automatic Density Meter, Printer & Drying Catridge			24,224,330.31	2019	100% Completed	
232.	Aczet Mb54 Moisture Analyzer			3,391,500.00	2019	100% Completed	
233.	Aczet Professional Analytical Balance			4,016,250.00	2019	100% Completed	
234.	Thermo Scientific Nicolet			16,000,000.00	2019	100% Completed	
235.	Procurement & Deployment of Video Conferencing Equipment At Nafdac Operational office Complex, isolo	SW	isolo, Lagos	4,622,100.00	2019	100% Completed	
236.	Supply of 2 Units Toyota Hilux 4wd 2.7ltr High Grade	NC	Chq, Abuja	44,844,000.00	2019	100% Completed	
237.	Construction And installation of Stainless Steel Cabinet Tables, Hangers And Racks At Microbiology Laboratory Complex. Oshodi - Lagos.	NC	Oshodi, Lagos	8,861,999.98	2020	100% Completed	
238.	Construction of Perimeter Fence, Gate & Gate House At Nafdac Property, Gamo - Kwara State	NC	Ganmo, Kwara State	12,341,407.05	2020	100% Completed	
239.	Construction of Perimeter Fence, Gate & Gate House At Nafdac Property, Damaturu - Yobe State	NE	Damaturu, Yobe State	20,433,624.75	2020	100% Completed	
240.	Water Borehole Drilling & Development At Nafdac Property Abeokuta, - Ogun State	SW	Abeokuta, Ogun State	2,878,050.00	2019	100% Completed	
241.	Water Borehole Drilling & Development At Nafdac Property Oshogbo - Osun State	SW	Osogbo, Osun State	2,845,500.00	2019	100% Completed	
242.	Water Borehole Drilling & Development At Nafdac Property Ilorin - Kwara State	NC	Ilorin,Kwara State	2,955,750.00	2019	100% Completed	
243.	Civil Works And Supply of Tools At Nafdac Kaduna State & Nwz office, Kaduna.	NW	Kaduna	16,457,126.40	2020	100% Completed	
244.	Construction of Perimeter Fence, Gate & Gate House At Nafdac Property, Birnin Kebbi - Kebbi State	NW	Birnin-Kebbi, Kebbi State	10,055,619.00	2020	100% Completed	
245.	Construction of Perimeter Fence, Gate & Gate House At Nafdac Property, Abeokuta - Ogun State	SW	Abeokuta, Ogun State	11,647,839.00	2019	100% Completed	
246.	Construction And installation of Ebm Heavy Duty Aluminim Partitioning Covered With Alucobond At The Microbiology Lab	SW	Yaba, Lagos	8,368,500.00	2019	100% Completed	

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S/N	Project Title	Zone	Project Location	Project Value	Completion Date	Status of Implementation (%)	Remarks
247.	Supply And installation of One (1) Unit 500kva Generator To Central Laboratory, Oshodi - Lagos	SW	Oshodi, Lagos	25,067,024.81	2019	100% Completed	
248.	Provisions & Deployment Configuration & Migration of Microsoft office 365 Enterprise E3 & E1 Plan.			45,099,600.00	2019	100% Completed	
249.	Supply of two (2) Units Toyota Hilux 4wd Dc Ac P Ss (New Model) High Grade Operational Vehicle.	NC	Abuja	37,800,000.00	2020	100% Completed	
250.	Supply of 15 Units of Toyota Hilux (4wd Dc Gc Hg 2.7l Petrol) Operational Vehicle For Nafdac	NC	Abuja	307,562,330.00	2020	100% Completed	
251.	Supply of Laboratory Equipment For Nafdac Lab, Kaduna	NW	Kaduna	135,575,977.52	2020	100% Completed	
252.	Supply of Equipment And Consumables For Nafdac Laboratory	SW	Lagos	598,924,502.75	2020	100% Completed	
253.	Civil & infrastructure Works At Nafdac Lab, Kaduna	NW	Kaduna	4,766,625.25	2021	100% Completed	
254.	Lobby Redevelopment & Security Architecture, Enhancement of Nafdac Head office Building, Abuja	NC	Abuja	12,805,804.75	2021	100% Completed	
255.	Expansion/Upgrade/Maintenance of Local Area Network (Lan) At 1&E And Pid Apapa - Lagos	SW	Apapa, Lagos	4,455,224.00	2020	100% Completed	
256.	Rehabilitation of Nafdac Lab. Calabar Cross River State	SS	Calabar, Cross River	57,992,994.15	2021	45%	
257.	Construction of Bungalow Height office, Warehouse And Generator House (Test & Validation Centre)	NW	Sokoto State	167,586,118.20	2021	60%	
258.	Construction of Bungalow Height office, Warehouse And Generator House (Test & Validation Centre)	SW	Abeokuta, Ogun Stste	161,696,609.71	2021	45%	
259.	Construction of Bungalow Height office, Warehouse And Generator House (Test & Validation Centre)	SE	Abakaliki, Ebonyi State	171,603,264.50	2021	90%	
260.	Construction of Bungalow Height office, Warehouse And Generator House (Test & Validation Centre)	SW	Osogbo, Osun State	154,481,335.07	2021	85%	
261.	Construction of Bungalow Height office, Warehouse And Generator House (Test & Validation Centre)	NC	Ilorin, Kwara State	147,772,252.00	2021	55%	
262.	Construction of Drainage & Associated Works At Nafdac office, Yaba - Lagos	NE	Yobe State	161,094,464.59	2021	80%	
263.	Construction of Drainage & Associated Works At Nafdac office, Yaba - Lagos	SW	Yaba, Lagos	29,482,724.25	2021	80%	
264.	Renovation, Remedial Works At Nafdac Area Lab, Kaduna	NW	Kaduna	17,166,761.00	2020	100% Completed	
265.	Supply And installation of Thirty-Five Units of Air Conditioner	SW	Oshodi, Lagos	10,488,721.25	2020	100% Completed	
	NATIONAL HEALTH INSURANCE SCHEME (NHIS)						
266.	Electronic-National Health insurance Scheme	NATION-WIDE	Nation-Wide	6,850,500,000	2021-2023	On-Going	
267.	Construction of State offices Nation-Wide For The Nhis	NATION-WIDE	Nation-Wide	31,587,200,000	2021-2023	On-Going	
268.	Construction of NHIs Corporate Headqurters Building	NC	Abuja	9,925,000,000	2021-2023	On-Going	
	DEPARTMENT of HOSPITAL SERVICES (DHS)						
269.	Strategic Joint Venture investments in Tertiary institutions With Nigeria Sovereign investment Authority	SE, SS, SW, NW, NE,	Unth Enugu, Ubth Benin City, Uch Ibadan, Abuth Zaria, Umth Maiduguri, Uith Ilorin, Oauth Ile-Ife, National Hospital, Abuja, Luth Lagos.	9,000,302,402	2017	90%	
270.	Construction of 50 Bed Capacity General Hospital And Furnishing in Warawa	NW	Warawa Lga, Kano	400,000,000	2017	98%	
271.	Procurement of 1no Vehicle	NW	Warawa General	201,000,000	2017	100%	

DEPT. of SPECIAL PROJECTS & PUBLIC PRIVATE PARTNERSHIP/DIASPORA							
S/N	**Project Title**	**Zone**	**Project Location**	**Project Value**	**Completion Date**	**Status of Implementation (%)**	**Remarks**
	(Ambulance) And 2nos 150kva And Generators For Warawa Hospital		Hospital, Kano				
272.	Construction And Equiping of Cottage Hospitals Balewa, Bogoro And Dass in Bauchi State	NE	Tafawa Balewa/Dass/ Bogoro	200,000,000	2017	100%	
273.	Procurement of Critical Medical Equipment	SS	Port Harcourt	200,000,000	2017	100%	
274.	Rehabilitation And Expansion of Genneral Hospital, Yunusari Lga, Yobe State	NE	Yunusari General Hospital, Yunusari Lga, Yobe State	300,000,000	2020	100%	
275.	Reactivation of Stem Cell Transplant Centre & Purchase of Equipment in University of Benin Teaching Hospital	SS	Ubth Edo State	290,000,000	2020	45%	
276.	Procurement of Medical Equipment And Medical Consumables For Accident & Emergency Unit, Theartre, Wards And Merternity At General Hospital Yunusari Lga, Yobe State	NE	Yunusari General Hospital, Yunusar Lga, Yobe State	39,685,000	2020	100%	
277.	Equiping of Jen & Bambur Hospitals in Ardo-Kola/Karim Lamido/Lau Federal Constituency, Taraba State	NE	Lau & K/Lamido Lgas	20,000,000	2020	50%	
278.	Construction of Maternity Healthcare Centre in Jauro-Nyavo Village, Garin Dogo, Lau Lga	NE	Lau Lga, Taraba State	10,000,000	2020 2020	50%	
NIGERIAN INSTITUTE FOR MEDICAL RESEARCH (NIMR)							
279.	Nimr Biotech Dna Preparation Kit	SW	Yaba, Lagos	N2,000,000.00	2019	100%	Developed By Nimr Scientist, Dr.. Muinah Foworah
280.	Nimcure Mobile Application	SW	Yaba, Lagos	N7,000,000.00	2019	100%	Developed By Nimr Scientist, Mr. Femi Amoo
281.	Nimr Electrophoretic Machines	SW	Yaba, Lagos	N2,500,000.00	2020	100%	Developed By Nimr Scientist, Dr. Bassey Orok And Mr. John Omohwovo
282.	Nimr Biotech Total Rna Purification Kit	SW	Yaba, Lagos	N5,000,000.00	2020	100%	Developed By Nimr Scientist, Dr. Muinah Foworah
283.	Design And Development of Point of Care isothermal Assay Detecting Sars-Cov-2 For Surceillance in Remote Settings	SW	Yaba, Lagos	N20,000,000.00	2020	100%	Developed By Nimr Scientist, Dr. Chika Onwuamah
284.	Nimr Sars-Cov-2 Detectionn Assay (Scoda)	SW	Yaba, Lagos	N5,000,000.00	2020	100%	Developed By Nimr Scientist, Mr. Joseph Shaibu
285.	Bgi Dnbseq-G50 Next Generation Sequencing Platform With Robotic Mgisp- 100 Library Preparation System	SW	Yaba, Lagos	N197,861,590.00	2019	100%	Covid -19 intervention Fund For Reseaarch And Short Term Response To Contain The Pandemic
286.	Researchers's Suite Building	SW	Yaba, Lagos	N230,501,124.00	2020	100%	in Functional Use
287.	Upgrading of Existing Laboratories	SW	Yaba, Lagos	N139,042,918.75	2020	100%	in Functional Use
288.	Procurement of 13 Vehicles	SW	Yaba, Lagos	N235,275,000.00	2019-2020	100%	in Functional Use
289.	Renovation Furnishing of offices/ Laboratories	SW	Yaba, Lagos	N99,994,522.00	2019-2020	100%	in Functional Use
290.	Internal Roads/ Drainage Network	SW	Yaba, Lagos	N104,039,433.25	2019-2020	100%	In Functional Use
291.	Rehabilitation of Biomedical incinerator Facilities	SW	Yaba, Lagos	N7,450,000.00	2019-2020	100%	in Functional Use
292.	Renovation/Rehabilitation of Asaba, Kainji And Maiduguri Outstations	SS, NC, NE	Asaba, Kainji, And Maiduguri Outstations	N230,893,318.13	2019-2020	40%	On-Going
293.	Conversion of Gaba Phc Surulere		Yaba, Lagos	N250,000.000.00		40%	On-Going

Source: Federal Ministry of Health

3.6.1.5 Women Affairs and Social Development

Infrastructure pertaining to women development in Nigeria includes skill acquisition centres and schools for social

workers. Various studies and surveys have shown that women are in the lowest income level in most Nigerian organisations and contribute to the highest percentage of the poor and vulnerable. They also participate predominantly in the informal sector of the economy. The Federal Ministry of Women Affairs has the mandate of promoting women development and protecting the rights of women and other vulnerable groups.

In line with the foregoing, the Ministry of Women Affairs have recorded some progress in some areas, including the following:

i. In the area of Child Development, the Ministry Launched the "One Million Girls March to School" Project towards promoting free and compulsory quality secondary education for all girls. This is one strategy aimed at achieving Goal 4 of the SDGs "Quality in Education," as well as addressing Goal 5 "Gender Equality" and Goal 10 "Reducing Inequality". The project is in collaboration with the Federal Ministry of Education and other partners.

ii. In the area of promoting Gender Equality and Women Empowerment, the Ministry created two departments to fast track policy planning across the various sectors and programmes. The departments are Gender Equality Department and Women Empowerment Department. Significant efforts have gone into the roll-out of joint programmes in Education, Agriculture, Health and Sports. To this end, the Gender in Agriculture Policy has been launched. The Policy is to ensure that the Federal Government Agricultural Revitalization and Economic diversification drive responds to Women's Agricultural needs. The Federal Executive Council has also approved the Federal Ministry of Environment "National Action Plan on Gender and Climate Change for Nigeria. The Ministry has also commenced the process of reviving all the existing structures including the Women Zonal Political Training Centres, the G-100 Women Lobby Group, the Nigeria Women Trust Fund amongst others.

iii. In the area of Economic Empowerment of Women, the Ministry is retooling many of the existing economic empowerment projects to make them more accessible to the beneficiaries.

iv. For the World Bank supported projects, 'Nigeria for Women Project (NFWP)' is project is making impact in 6 pilot States of Ogun (South West), Niger (North Central), Abia (South East), Taraba (North East), Kebbi (North West) and Edo (South South). The ministry intends to upscale to other States so that more women can benefit.

v. The National Centre for Women Development - the only parastatal of the Ministry of Women Affairs - continues to compliment the efforts of the Ministry in the empowerment of women and girls in Nigeria.

3.6.2 Education, Youth and Sports

3.6.2.1 Education

Education is administered by the federal, state and local governments. The Federal Ministry of Education is responsible for formulating national policies and guildlines for standardization of education across all levels in Nigeria. overall policy formulation and ensuring quality control and is primarily involved with tertiary education.

According to Nigeria's National Policy on Education (2004), basic education covers nine years of formal (compulsory) schooling consisting of six years of elementary and three years of junior secondary education. The revised National Policy on Education (2013) stipulates that a one-year pre-primary education should be an essential component of the 10-year formal basic education programme to be implemented. Post-basic education includes three years of senior secondary education. At the tertiary level, the system consists of a university sector and a non-university sector. The latter is composed of polytechnics, colleges of education and monotechnics. The tertiary sector offers opportunities for undergraduate, graduate, vocational and technical education.

In order to actualize the development goals, the Federal Ministry of Education (FME) developed a blueprint for the Education Sector tagged "Education for change: A Ministerial Strategic Plan (MSP) (2016-2022) (2018-2022)", The plan is built on ten pillars and around three result areas, :access, quality, and systems strengthening.

For each pillar, there are clear and well-defined objectives, together with strategies to be employed in achieving them. The ten pillars are:

i. Out-Of-School Children;
ii. Youth & Adult Literacy;
iii. Science, Technology, Engineering and Mathematics (STEM) & Technical, Vocational and Training (TVET);
iv. Basic education;
v. Teacher education, Capacity Building and Professional Development;
vi. Curriculum and Policy Matters;
vii. Tertiary education;
viii. Education data and Planning;
ix. Information and Communication Technology (ICT) in Education; and
x. Library Service in Education.

The Federal Ministry of Education (FME) in 2015 initiated Annual Education Conference in collaboration with Development partners with two broad aims to provide an opportunity for communicating research evidence that will guide basic education policy and practice of the Federal and State Government; and to bring together Stakeholders in the Education and Policy Sector. In the first year, it focused on making evidence work for basic education and policy practice (sector). In the second year, it focused on the critical role of teachers; third year, its theme was Achieving Inclusive Education through innovation strategies while the theme for 2018 was Education for self –Reliance: A system's Approach to Education for the Achievement of Education 2030 Agenda which is Agenda for Sustainable Development aims to wipe out poverty by 2030 and the theme for 2020 was a true reflection of an unusual global challenge faced by education in recent days.

The emergence of Coronavirus pandemic (COVID-19) has no doubt adversely affected the education sector and the economy at national and global levels. To cushion the effects of the pandemic, UNESCO has recommended the use of distance learning programmes, open educational applications and platforms by schools and teachers to reach learners remotely, including integrated digital learning platforms, video lessons, Massive Open Online Courses (MOOGs), and broadcast through radio and television.

- **Early Childhood Education Early Child Care and Development Education (ECCD)**
  Nigeria had 81,562 public and private Early Childhood Care and Development (ECCDE) schools as at 2018. Gross enrolment into ECCDE was 7,159,262 out of an estimated 17.3 million of children aged 3-5 years. Over 79,000 (79.9 per cent) of these schools were privately-owned. The Ministry fast-tracked the implementation of Pre-Primary Education and the establishment of Community Based Early Childcare Centre (CBECC) in 16 states to enhance their transition to the Basic Education. In addition, the Home- Grown School Feeding programme is also aimed at encouraging enrolment, in early childhood education across the countries, but particularly in educational disadvantage states.

- **Basic Education**
  Nigeria's population growth has put pressure on the country's resources and primary education infrastructure has not been spared. With an estimated population of 89.6 million children under 15 years of age accounting for 44.6 per cent of the 200.9 million population, the burden on education has become overwhelming.

  According to UNESCO Institute of Statistics (UIS) Data, about 263 million children and youth are out of school worldwide. This number includes 61 million children of primary school age (about 12 to 14 years) and 142 million youth of secondary school age (about 15 to 17 years) the school year ending in 2014. With 12.7million out-of-school children, Nigeria has the highest number of out-of-school children (OOSC) in the world. These include the almajiri, girls of school age (who constitute 60%), children of nomadic pastoralists and migrant fishermen and the one million children displaced by the Boko Haram insurgency.
  The last few decades have seen a steady growth of both governmental and donor-driven educational interventions for these marginalized groups from separate provisions, which seek to locate problems of exclusion in the organization, structure and curriculum or mainstream schooling (e.g nomadic and almajiri education), to the increasing number of targeted funding and other conditional cash transfer initiatives. These interventions aim to enhance attendance (such as the school feeding programmes) and create role models (such as Female Teachers Trainee Scholarship Scheme).

  However, while these have to some extent, led to marginal increase in enrolment, reduced longstanding patterns of discrimination in access to education and attempted to produce a more equitable distribution of schools and teachers in some cases (e.g girl-child, nomadic child, and almajiri-child), they have hardly affected the reality of low attendance and low attainment as well as completion rates among these disadvantaged groups. Sixty percent (60%) of the 12.7 million out-of-school children in Nigeria are girls (UNICEF, 2015); only a fraction (17%) of the 4.1million nomadic children of school-age have access to basic education despite decades of intervention. Similarly, an increasing number of displaced children (1million according to UNICEF's 2015 estimate) are being forced out of school in the insurgency stricken States. These figures suggest that the educational process has given these groups of disadvantages children very little access to education. However, the Ministry has given attention to expansion of access to education by ensuring that children within the school age are brought back to school. The number of OoSC was reduced from 12,700,00 to 10,193 which is 19% reduction.

  According to UNICEF (2015), one in every five out-of-school children in the world was a Nigerian. Over 10.7million children aged 6-11 years were out of school. Also, only 61.0 per cent of the total population of 6-11-year-olds (31.8 million) regularly attend primary school and only 35.6 per cent of children aged 3-5 years receive early childhood education in 2015. As at 2018, Nigeria had 113,450 primary schools with 72,505 in rural areas and 40,945 in urban areas. Gross enrolment in primary school among 40.8 million children aged 6-11 years was 27.8 million or 68.29 per cent while net enrolment was 24.3 million. In 2019, the total number of public primary schools were 66,550 while private primary schools was at 52, 98, giving a total of 119,532. In junior secondary school, the number of public was 13,581 and private was 18,986, bringing the total to 32,567; and the senior secondary school public was 9,824 and private was 14,245, bringing it to a total of 24,069.

  At the lower secondary level, only 41.0 per cent of the total population of 12-14 (13.7 million) regularly attend schools while 75.0 per cent of this number complete junior secondary classes. There were 31,017 schools at this level of basic education with 16,281 (52.0 per cent of the total) in rural areas and 14,736 (48.0 per cent) in urban areas. As at 2018, gross and net enrolment rate among 14.8 million 12-14 year-olds was 6.8 million (46.12 per cent) and 4.8 million (32.99 per cent) respectively.

  Most primary schools, especially in rural areas, lack water, electricity and toilet facilities. Despite political commitment to trying to reverse years of neglect in the education sector and a significant increase of the Federal funding, investment in basic education is still low compared to other Sub-Saharan African countries. The situation of education infrastructure is worsened in Nigeria because of the Boko Haram insurgency that started in 2009. By 2017 UNICEF estimated that 498 classrooms were destroyed while another 1,392 were damaged in the north-eastern region of the country, which has the worst education statistics. As a result, about 3 million children needed emergency education support in the region.

  The Nigerian government aims at offering free basic education for all children. Yet, despite recent improvements in total enrolment in elementary schools, the basic education system remains underfunded; facilities are often

poor, teachers inadequately trained, and participation rates are low by international standards. Recent efforts to reverse this trend include the following:

i. FME has carried out advocacy and sensitization of stakeholders at various levels to see how Islamiyya and "Tsangaya" education can be made effective in curtailing the out-of-school syndrome through conversion and comprehensive integration into formal western education system.

ii. In the aspect of Youth and Adult Literacy, the sector, through 'Literacy-by-Radio Programmes', 'Train-the-Trainers/Facilitators' manual and other learning materials, reviewed adult literacy pursuit in line with global best practices.

iii. Operational manuals on the Girls for Girl (G4G) to support girls and encourage them to remain and complete Basic Education were developed and pilot-tested.

iv. Monitoring and Data Collection, a strategy for Non-Formal Education (NFE) was developed, with pilot programmes on Rural Facilitators Scheme in 444 locations nation-wide established for the adult literacy.

v. In December 2020, there was direct identification and enrolment of Out-of School children. The Ministry did this in collaboration with three states: Zamfara, Benune and Nasarawa where uniforms, bags books were provided for students and their mothers were giving money to trade to encourage them keep the girl child in school.

vi. In 2020, there was training of boys as male champions to help in advocacy for girl child education.

- **Senior Secondary Education**

Senior secondary education offers Post-Basic; which is below tertiary level. It is duration of three years and prepares students for tertiary education and the labour market. Education lasts three years and covers grades 10 through 12. In 2010, Nigeria had a total 7,104 secondary schools and 2017/2018 was 21,039 with 4,532,131 population. There were 4.4 million students in senior secondary schools out of an estimated 14 -17year olds of population of 12.8 million in the 2015/16 academic year. Gross senior secondary school enrolment was 34.9 per cent. Close to 80 per cent of these students (3.5 million) at this level of education were enrolled in public senior secondary schools. There were also 88,065 students in Technical Colleges across the country. As at 2019, the total number of public secondary school in Nigeria was 9,824 while private was 14,245 giving a total of 24,064. Efforts at improving success at this level of secondary education include:

i. The Procuring and disbursement of instructional materials in 36 states and FCT
ii. Introduction of open school system in six states: Kaduna, Kano, Kebbi, Niger, kebbi, Niger.
iii. In January, 2020 the National Commission for Colleges of Education approved additional six Federal Colleges of Education opened in the following states Bauchi, Benue, Edo, Ebonyi, Osun and Sokoto who had no Federal colleges of Education before;
iv. Additional six Federal Colleges of Science and Technology were added in 2019 bringing up the Federal Unity schools to 110.

- **Tertiary Education**

Nigeria had 129 universities (40 federal universities, 29 state universities and 40 private universities) registered by the National Universities Commission in 2013, a significant increase from 16 universities in 1980. For the first few decades of growth, higher education capacity building was primarily in the public sector, driven by the federal and

state governments. More dramatic growth occurred beginning in the late 1990s, when the Nigerian government liberalized tertiary education by encouraging the establishment of private universities. As at March 2019 number of universities increased to 170 with federal, state, and private universities increasing to 43, 48 and 79 respectively. In addition to universities, there are many polytechnics and colleges of education (COEs) under the purview of the National Board for Technical Education (NBTE) and National Commission for Colleges of Education (NCCE), the bodies tasked with overseeing technical/vocational education and training of professional teachers respectively. In 2017, the NBTE recognized 107 polytechnics, 27 monotechnics, and 220 colleges in various specific disciplines. By 2018, the number of polytechnics increase to 116, with 20, 48 and 48 polytechnics owned by the Federal Government, state governments and private entities respectively. These institutions were established to train students for technical and mid-level employment. As at 2017, the number of approved Innovative Enterprise Institution (IEIs) were 140 while approved Vocational Enterprise Institutions (VEIs) were 77 in number.

The access to quality higher education and carrying capacities of the higher institutions had increased with the establishment of additional tertiary institutions across the country. From 2018 to date, 4 new federal university were established, the most recent was the Federal University of Health Science, Benue state. One new state university and 5 private universities were also approved by the FGN to create access to universities education. Before 2018 the total universities stood at 160 now 170. The numerical strength of the universities leapt by over 6 percent from 2018, with the lunch of the 2019 -2023 revitalization plan, the Nigerian University System will experience faster growth rate. The FGN has established Federal Polytechnic of Oil & Gas, Bonny, Rivers state and increased numbers of Innovation Enterprise Institutions (IEIS) in Nigeria from 153 to 167 across the country. There were additional 6 Colleges of Education, to the existing 183 National Colleges of Education (NCE) awarding institutions, established in the following state: Edo, Sokoto, Benue, Jigawa, Bauchi, Ebonyi, to create more access to teacher education in Nigeria.

It is common knowledge that the solution to the National unemployment problem and the bid to industrialise depend on technical education and this is in line with the United Nations proclamation of 2016- 2025 as the industrial decade for Africa, and in line with African Union's Continental Strategy for Technical and Vocational Education and Training. As part of its effort to attain the Education 2030 Agenda, FME has successfully drawn up and commenced the implementation of a Sectoral Framework for Skills development under the Nigerian Skills Qualification Framework, (NSOF) which provides a system for the promotion, standardisation and the recognition of working skill irrespective of where or how the skill are acquired. Technical and vocational education and training (TVET), teachers' Assessment Guide / Instructional materials to aid the teaching of the new curriculum in technical and vocational education (TVE) for the attainment of sustainable Development Goals (SDGs) were developed. This aspect of education is mostly in the hands of the private sector. Thus;

i. The sector has commenced the development of a policy on product innovation exhibition and commercialization that will create a window for advancing the outcomes of the National Annual student's skills competition, towards practical utilization and economic benefits;

ii. The sector, through NBTE has intervene in Adult and Non-formal Education by Formal Education Delivery in Nigeria, championed by all tiers of government and other stakeholders.

According to NCCE, there were 145 COEs in Nigeria in 2018, comprising 21, 50 and 74 COEs owned by the Federal Government, state governments and private entities.

The number of undergraduate students in Nigerian universities was 1,274,261 during the 2012-13 academic session. This number comprised of 761,363 in federal universities, 438,641 in state universities and 74,257 in private universities. Although, 31.0 per cent of universities were privately-owned, only 5.8 per cent of the total number of undergraduates were in these universities. By 2019, 1,990,067 applied for admissions into 883 tertiary institutions

through the Joint Admission and Matriculation Board (JAMB) examinations in 2019. Of this number, only 612,557 had provisional admissions, comprising 444,947 that gained admission for degree programmes, 69,810 for National Certificate of Education (NCE) and 97,800 for diplomas. The total number of candidates admitted provisionally into universities was 444,947, comprising 235,333 (53 per cent) into federal universities, 181,401 (40.7 per cent) into state universities and 28,213 (6.3 per cent) into private universities. The Federal Ministry of Education with the 'battle plan' encoded in the Ministerial Strategic Plan 2018-2022 has moved the education sector forward. The access to quality higher education has been increased by minimum of five percent. The carrying capacities of the universities have increased by over eight percent through the twin approach of expanding the human and facilities resourcing of existing universities and licensing new private universities as well as recognising new state universities, 8 state universities and 3 federal universities. The numerical strength of the universities leapt by over 15 percent since the inception of this administration. It is good to note that on all measures of quality, the Nigerian university system has gain 12 percent points since 2016. With the lunch of 2019-2023 Revitalisation plan, the Nigerian University System will experience faster growth rate. The Joint Admission and Matriculation Board has continued to record phenomenal growth in the conduct of the Unified Tertiary Matriculation Examination. The Board, through sensitization, encouraged both the private and public sectors to take up the establishment of modern computer-based test centre in the conduct of UTME. In 2017, out of a total of 642 CBT centres, 398 were privately-owned, while 244 were public. The Central Admission Processing System (CAP), which is an online platform, has been introduced for the processing of admission into Nigeria Tertiary Institutions. This system ensures transparency, accountability and proper monitoring of the admission process.

a) Access and Quality

Education is key to the growth and socio-economic development of the nation. The overarching challenges to the attainment of educational goals have been the issues of access to and quality of education. Infrastructure is key determinant of access to and quality of education at all levels. There is empirical evidence that shows a strong link between education infrastructure and quality of education, including better instruction, learning outcomes and reduction in dropout rates. It is critical to the achievement of SDG 4 that focuses on access to quality education. Target 4.2 of SGD 4 specifically focused on addressing physical infrastructure needs to ensure safe and inclusive learning environment.

At the secondary school level, the performance of senior secondary students in the examination conducted by the regional examination body, the West African Examination Council (WAEC), provides a proxy indicator for quality of education. In 2016, the number of candidates that scored 5 credits and above including Mathematics and English language was 807,780 out of 1,543,974. This represented 52.3 per cent of the total number of candidates. The number and proportion of successful candidates reduced in 2018 to 756,726 out of 1,571,536 and 48.15 per cent respectively. The performance was almost similar in terms of entrance examination for tertiary institutions. In 2019, only 612,557 of the 1,157,977 that sat for the JAMB Unified Tertiary Matriculation Examination (UTME) scored above 140 marks and had Ordinary (secondary) Level credit passes in Mathematics and English Language. This represented 52.89 per cent of the total number of UTME candidates. Further analysis of the JAMB 2019 results shows that 52.9 per cent of applicants qualified for admission by virtue of having Ordinary level examination credits and scoring the JAMB cut off mark. However, only 27.4 per cent of the total number of qualified applicants were suitable for admission, i.e. they had UTME subject combinations and specific course deferential.

At the tertiary level, global university ranking showed that Nigeria is relatively low in performance. Only three universities made it to the list of best 1,400 universities in the Times Higher Education World University Rankings in 2019, as against one university in 2018. Covenant University, University of Ibadan and University of Nsukka were ranked numbers 401–500, 601-800 and 1000+. This was low compared to China's 72 (best ranking of 22), South Africa's 9 universities (best ranking of 156), Brazil's 36 (best ranking of 251-300), and India's 49 (best ranking of 251-300).

Overall, access was even worse at the tertiary level. Nigeria's tertiary institutions generally have low-carrying capacity and most of the institutions are yet to meet the conditions for producing world class graduates required for 21st century economies. The ERGP prioritized education investments as part of the 'Investing in Our People' pillar. In line with this, government has implemented some strategic initiatives that aim to improve access to quality education vis-à-vis infrastructure development. These initiatives include:

- **Central Bank of Nigeria's Centre of Excellence project:**

  The CBN initiated the establishment of Centres of Excellence in Nigerian public universities. The project, which was estimated to cost over N63 billion (USD$206 million) involves the construction and equipping of nine centres to increase access to post-graduate studies in Economics, Accounting, Banking and Finance, Business Administration and Statistics. Three Centres were completed at the end of 2019 in University of Ibadan, University of Nigeria, Nsukka and Ahmadu Bello University, Zaria. The remaining centres are expected to be established in the University of Lagos, University of Port Harcourt, University of Jos, Bayero University, Kano and University of Maiduguri.

- **Tertiary Education Fund (TETFund) High Impact Project:**

  TETFund had been one of the major sources of extra-budgetary financing for infrastructure development in Nigerian tertiary institutions, i.e. public universities, polytechnics and Colleges of Education (COEs). The Fund finances wide range of projects in 85 universities, 66 polytechnics and related institutions, and 67 COEs as at 2019. Between 2009 and 2013, TETFund earmarked N1,469 billion ($4.8 billion), out of which N878 billion (42.8) was earmarked for infrastructure related projects. In 2016, N83.4 billion ($273.5 million) was earmarked specifically for physical infrastructure, of which N42.8 billion ($140.5 million) was disbursed to public universities, polytechnics and COEs. In addition, as at 2019 a total of N190.6 billion ($624.9 million) was earmarked for the High Impact project, of which N136.3 billion ($446.8 million) was released. 25,000,000.00 was released in 2019 by TETFUND to all the Tertiary institutions in the country. The High Impact project aims to correct imbalances or deficiencies in critical areas in 99 public tertiary institutions.

- **Universal Basic Education Commission (UBEC) interventions:**

  Universal Basic Education Matching Grants - The responsibility of providing quality education is shared among the three tiers of government: (Federal, states and local). The Federal Government introduced the Universal Basic Education Programme in 1999 and later established the Universal Basic Education Commission (UBEC) following the enactment of the Free Universal Basic Education Act 2004. The intervention system has been formatted in the states and the machinery to release fund to the state and monitor same has been strengthened for greater accountability. This administration has disbursed N32.5Bn in matching grants to 22 states and FCT, utilized N8.7Bn in the construction and rehabilitation of public schools and procured N15.07Bn worth of instructional materials in the core subjects for basic education and science equipment for JSS. AT present, there has been significant improvement in the performance of UBEC on it mandate. So far, N2,797Bn has been utilized as Teacher Professional Development Fund for training of teachers and education manager in the 36 state and FCT. The funding of the sector took a slightly upward swing from 2019-2020 and in the direction anticipated by the Ministerial Strategic Plan. In 2019 over N634billion was appropriated.

- **The Almajiri Project:**

  Nigeria was estimated to have over 9.5 million almajiris (itinerant Qur'anic school pupils) in 2010 mostly in the northern part of the country. The Federal Government introduced the National Framework for the Development and Integration of Almajiri Education into the Universal Basic Education Scheme. This framework provided guidelines for regulating almajiri schools to address challenges associated with the system, including itinerancy and begging. It also targeted the establishment of 400 almajiri model schools by 2015 and provision of support community owned Tsangaya/Islamiyyah and Tahfeez schools. By 2014, 152 almajiri model schools were completed.

- **UBEC Matching Grants:**

  To discharge its core responsibility of coordinating basic education development, UBEC provides matching grants to state and local governments for the purpose of basic education development. Between 2005 and September 2018, over N428.7 billion (USD$1.4 billion) was disbursed to the 36 States and the FCT. In 2019, UBEC disbursed N208 billion (USD$681.9 million) to sub-national governments. The sum of N36.3 billion (USD$119.1 million) was released in 2018, down from N47.5 billion (USD$156 million) in 2017. 56,235,710,917.00 was released as matching grants for 2019 and 39,517,046,050.43 was unassessed. At the basic education level, UBEC; the intervention system has been formatted in the states and the machinery to release fund to the states and monoitor same has been strengthened for greater accountability. This administration has disbursed N32.5Bn in matching grants to 22 states and the FCT, utilized N8.7Bn in the construction and rehabilitation of public schools and procured N15.071Bn which of instructional materials in the core subjects for basic education and science equipment for JSS. Today, there has been significant improvement in the performance of UBEC on its mandate over the status in 2016, the chief of which are at least 10 percent improvement in facilities for the delivery of basic education by way of new and refurbished classrooms, schools, and school supplies. So far, N2,797Bn has been utilized as Teachers and education managers in the 36 states and FCT.

- **UBEC School-based Management Committee School Improvement Programme:**

  In 2019, Under this programme, UBEC targeted the construction and renovation of 5,010 classrooms across Nigeria. Over N2.76 billion ($9.1 million) grant was given to 2,505 primary schools in the first phase of the programme.

3.6.2.2 Youth and Sports Development

The Federal Ministry of Youth and Sports Development evolved from the merger of the defunct **Federal Ministry of Youth Development (FMYD) and the National Sports Commission (NSC)** by the proclamation of His Excellency, Mr. President on the restructuring of Ministries, Departments and Agencies (MDAs) of Government on 11th November, 2015.

Mandate of the Ministry

The Ministerial organ of the Federal Government directly responsible for "Formulation, implementation, monitoring and evaluation of policies and programmes on Youth and Sports development towards wealth creation, youth empowerment, physical fitness and wellbeing, achieving excellence in sports, national unity and sustainable Development."

3.6.2.2.1 The Youth Sector

The youth are the largest demographic group in Nigeria and have the potential to facilitate rapid development of the country. They account for nearly half of the labour force population of 80,291,894 in Q2, 2020 (NBS). The state of youth development in Nigeria is however challenging. Youth unemployment remains high, particularly among graduates. Higher population growth rate and Nigeria's fragile economic growth in the last quarter makes it difficult to keep pace with the increase in unemployment rates. As a result, unemployment rose from 13.62% in Q2,2017 to 22.7% in Q2, 2019 and 27.1% in Q2 2020. In particular, 13, 986,968 youth (34.9% of the population in this age group) were unemployed in Q2 2020.

The National Youth Service Corps (NYSC) provides Nigerian graduates a unique opportunity to have practical experiences that prepares them for the work place. Over 200,000 corps members are discharged annually with less than 10% gaining employment; thus increasing the unemployment burden.

3.6.2.2.2 Current State of Youth Development Infrastructure

Federal Ministry of Youth and Sports Development established many National Youth Development Centres spread across the nation to help youth to realize their full potentials through skills acquisition and other forms of empowerment. There are presently forty-three (43) numbers of National Youth Development Centres in all the six Geo-political zones of the Country.

The forty-three (43) NYDC spread across the country are mostly constituency projects at various infrastructural stages - completed, on-going or completed but not functional/active or in some cases completed but abandoned. There are presently ten (10) active Centres but only eight (8) out of them are active and equipped. It is important to equally note that, some of the Centres are occupied by Tertiary educational institution, Citizenship and Leadership Training Centre (C&LTC), State Government, Nigeria Army, and Civil Defence.

Each Youth centre is designed to offer employable skills in the prevailing trades to provide vocational and technical training, acquisition of other life skills and Agro – allied training programme available in Nigeria to both unschooled youths, out – of – school, graduates youth among others. A Youth centre is also intended to serve as rallying point for the Nigeria teeming youth, where they could meet from time to time to cross fertilize ideas that would lead to their empowerment and hopefully. A standard Youth Centre comprises the following facilities:

- Multipurpose Hall (1000 capacity)
- An Administrative Block,
- Blocks of Classrooms
- Male and Female Hostels (500 capacity each)
- Multipurpose Workshop
- IT/Computer Training Laboratory,
- Clinic,
- Standby Generators,
- Well equipped kitchen,
- Sporting / Recreational Facilities,

To achieve the overall objective of the National Youth Development Centre for optimal utilization, there is need to deliberately position the Centre to generate income for its long-term sustainability and self-reliance. In order to achieve this, every NYDC should establish state-of- the-art equipments and scale-up existing youth empowerment hub through providing locally relevant entrepreneurship and skills training to many young people across the vast

locations of NYDC; training of unschooled and out-of-school Youth as well as the disabled in fish farming, piggery, poultry and general agribusiness management; constructions of cottage industry, fish ponds, poultry, pen for livestock etc.; inspire and empower young people to form cooperatives at the local level for production, sale of products, and being part of the value chain; construction of viewing point and restaurant (Hospitality). The projects will target unemployed young men and women living in Nigeria.

3.6.2.2.3 Youth Programmes and Policies

The Federal Government, however, has intensified efforts towards job creation for youth by setting up various programmes and initiatives, such as the N-Power, the Social Investment Programme, the AGMEIS programme, the Presidential Youth Empowerment Scheme (P-Yes), N-YIF etc.

Similarly, the Federal Ministry of Youth and Sports Development launched a number of initiatives to respond to the challenges of youth development. Some of these are highlighted below:

i. **Launch of the revised National Youth Policy 2019:**

The National Youth Policy is Nigeria's declaration and commitment to the practical support it would give to the development of its youth and has five strategic thrusts that are fundamental to enabling youth to transit to self-fulfilled and productive adulthood with opportunities for full, effective and constructive participation. These Strategic Thrust are:

- *Productive Workforce and Sustainable Economic Engagement of Youth;*
- *Health and Health-Promoting Lifestyle;*
- *Participation, inclusiveness and equitable opportunities for all Youth;*
- *Promotive and Protective Environment for Youth Development;*
- *Partnership-building and effective collaboration*

ii. **Development and launch of the DEEL Initiative:**

Following initial interactions and rapid assessment studies, it was apparent that Nigeria's Youth bulge required urgent targeted investments, baseline skills for the new digital economy, attitudinal enhancements and economic linkages to employment and entrepreneurial opportunities. The Ministry therefore developed an umbrella vehicle called DEEL under which the micro deliverables will be driven and measured. DEEL is an acronym for: -

- **Digital Skills Acquisition:** (Flagship programme called DY.NG): a Basic/Intermediate/Advance training for 500,000 Youth in App Development, Cloud Computing, Artificial Intelligence, Web Development, Mobile Device Repairs, Software Development, Coding (App Development, Software Development, Data Processing), Data Processing, Robotics, Drone Technology, Cyber Security, etc.
- **Enterprenuership:** (Vocational/Entrepreneurship Training): Entrepreneurship Development Training, Provision of Business support services, Provision of Start-up funds for youth in Beauty and Makeup Artistry; Confectionary, Photography & Videography, Event Planning & Decoration, Leather Works and footware, Mobile Device Repair & Maintenance, Fashion Design and clothing, Green House Farming, etc
- **Employability:** To provide youth with skills in work place experience through our flagship Work Experience Programme (WEP) through placement opportunities in corporate organizations: 3 months internship.
- **Leadership Training:** To provide Youth with opportunities in leadership training.

iii. **Revitalization of some Ministry's National Youth Development Centres.**
Because of the critical role youth Centres will play in the delivery of the Ministry's programmes, the Ministry has embarked on an aggressive revitalization of these facilities.

The Digital Skills (DY.NG) training locations already identified to deliver Digital Skills Training are: -

- 12 FMYSD's Youth Development Centers in the six geopolitical zones
- 4 Niger Delta Youth Development Centres
- 64 Digital Hubs across 21 states of Nigeria in partnership with Junior Achievement Nigeria (JAN).

3.6.2.2.4 Specific Achievements of Youth Development

Table 3.35: Specific Achievements of Youth Development

S/N	Project Title	Location	Status
1	National Youth Development Centre	Sumaila, Kano State	Occupied by Al-Istiqama University
2	National Youth Development Centre	Takai, Kano State	FMY&SD
3	National Youth Development Centre	Kudan, Kaduna State	CLTC
4	National Youth Development Centre	Sabon Gari, Zaria, Federal Constituency, Kaduna State. Unoccupied	Completed
5	National Youth Development Centre	Sokoto Federal Constituency	Inside Town but not in use (Vandalized)
6	National Youth Development Centre	Batagarawa, Katsina State	Occupied by CLTC
7	National Youth Development Centre	Maradun LGA, Zamfara State	Completed
8	National Youth Development Centre	Anguwan Rimi, Tofa LGA, Kano State	Completed
9	National Youth Development Centre	Dawakin, Tofa LGA, Kano State	Completed
10	National Youth Development Centre	Gwaram, Jigawa State	Occupied by State Government & converted to School (Arabic)
11	National Youth Development Centre	Damaturu, Yobe State	Completed
12	National Youth Development Centre	Azare, Katagun, Bauchi State.	Completed
13	National Youth Development Centre	Gashua, Yobe State	Completed
14	National Youth Development Centre	Kwambai, Taraba State	Completed
15	National Youth Development Centre	Biu, Borno State	Ocuppied by Nigerian Army
16	National Youth Development Centre	Shere-Hills, Jos, Plateau State.	FMY&SD
17	National Youth Development Centre	Otada, Otukpo LGA, Benue State.	School of Health Sciences
18	National Youth Development Centre	Agatu LGA, Benue State.	Benue Government requested for its use by Nigerian Air Force
19	National Youth Development Centre	Obi LGA, Benue State	Completed
20	National Youth Development Centre	Ogbondoko, Ilorin West, Kwara State	Completed
21	National Youth Development Centre	Okpokwu, Benue State	Completed
22	National Youth Development Centre	Ngwo, Udi LGA, Enugu State	Completed
23	National Youth Development Centre	Aboh Mbaise, Imo State	Completed

S/N	Project Title	Location	Status
24	National Youth Development Centre	Iwollo, Ezeagu LGA, Enugu State	Taken over by Community
25	National Youth Development Centre	Mpu, Aninri LGA, Enugu	Upgraded to command Science and Technical School
26	National Youth Development Centre	Achi, Oji River LGA, Enugu State	Occupied Civil Defence
27	National Youth Development Centre	Awgu, Awgu LGA Enugu State	Occupied by National Open University
28	National Youth Development Centre	Mgbakwu, Awka, Anambra State	FMY&SD
29	National Youth Development Centre	Odi, Bayelsa State	Water logged
30	National Youth Development Centre	Port-Harcourt Fed. Consitutency, Rivers State	Multipurpose Hall (Managed by Local Government)
31	National Youth Development Centre	Ibiono, Akwa Ibom State	Completed
32	National Youth Development Centre	Obubra, Cross River State	FMY&SD
33	National Youth Development Centre	Agbokim, Cross-River State	Completed
34	National Youth Development Centre	Ikom, Cross-River State	National Open University
35	National Youth Development Centre	Imule-Illeh, Ekpoma, Edo State	Unoccupied
36	National Youth Development Centre	Onila, Oluyole LGA Ibadan	Unoccupied
37	National Youth Development Centre	Iresaapa, Oyo State	Unoccupied
38	National Youth Development Centre	Aiyetoro, Oyo State	Oyo State Government Requested for farming project
39	National Youth Development Centre	Ojongbodu, Oyo State	Unoccupied
40	National Youth Development Centre	Surulere 1, Lagos State	No Structures
41	National Youth Development Centre	Ode-Omu, Osun State	FMYSD
42	National Youth Development Centre	Owode-Egba, Ogun State	CLTC
43	National Youth Development Centre	Ibereke, Badagry LGA (Initially awarded and budgeted to be built in Alimosho LGA, but due to the non availablity of land, Badagry LGA was considered)	Unoccupied

3.6.2.3 The Sports Sector

An efficient Sports system will assist in nation building through youth empowerment, wealth creation, employment generation, health and social mobilization. The new strategic management activities for qualitative performance and mass participation are capacity building of Coaches and administrators, early talents detection and development, policy direction on partnership and collaboration, sports facilities maintenance, a central national sport programmes systems etc.

3.6.2.3.1 Sporting Facilities

The Sporting Facilities owned by the Federal Government are spread across the country. These facilities were constructed at different times and are in different states of disrepair/dilapidation. The Sporting Facilities are as follows:

- Stadia Facilities in Abuja, Lagos, Ibadan and Kaduna
- 6 Isolated Indoor Sports Halls in Bauchi, Minna (Niger), Enugu, Etete, (Edo), Gombe and Damaturu (Yobe)
- 4 Training Centres in Afuze (Edo), Gembu, Mabila (Taraba), Jos (Plateau) and Nsulu (Abia)

- 85 Mini Sports Centres in all the six Geo-political Zones
- 33 Mini Stadia also in all the six Geo-political Zones

3.6.2.3.2 Sports Programmes and Policies

In the Sports sector, the Federal Ministry of Youth and Sports is also implementing several aggressive policies and programmes for sports development as well as improve the sporting facilities in the Country. These Policies include the NSIP and Adopt Campaign.

A. The National Sport Industry Policy (NSIP)

With the reclassification of Sports from recreation to business, the Federal Ministry oy Youth and Sports is Developing the National Sports Industry Policy (NSIP) which seeks to design a model to attract investment to sports amongst others. Sport is an economic endeavour that can add value to the talents of our sportsmen and women, and has immense potential for job creation and revenue generation, and add to the Gross Domestic Product (GDP).

The main thrust of the National Sports Industry Policy is to ensure that sports is developed as a viable business sector capable of attracting investments and delivering returns to investors. To achieve this, the policy rests on the four important pillars of sports (3Is and 1P):

a. **Infrastructure - Facilities Development:** drive an aggressive programme to address the infrastructure

B. Investment and Economic Potentials of Facilities

The sector presents enormous potential for investments and economic development; which can only be realized if the right and necessary investments are made. For instance, the sports sector alone is capable of generating thousands of jobs across its value chain – athletes, coaches, physios, athlete agents, merchandising, etc.

Table 3.36: Specific Achievements of Sports Development

SPORTS DEVELOPMENT			
S/N	**Project Title**	**Location Title**	**Status**
1	Construction of Mini Stadium	Daura, Katsina	On-going
2	Completion of Association of National Olympic Committees of Africa (ANOCA) Head Quarters	Abuja, FCT	Completed
3	Rehabilitation of Indoor Sports Hall at Nnamdi Azikiwe Stadium	Enugu	Completed
4	Rahabilitation of Hostels, Rayfield, Jos.	Jos, Plateau	Completed
5	Construction of Mini Sports Centre	Burusari, Yobe	On-going
6	Mini Sports Centre	Bogoro, Bauchi	Completed
7	Mini Sports Centre	Bashar, Plateau	Completed
8	Construction of Mini Stadium	Langtang South, Plateau	Completed
9	Construction of Mini Stadium.	Dawaki, Kano	Completed
10	Rehabilitation of Stadium at Kumo and Deba.	Kumo and Deba, Gombe	Completed
11	Construction of Mini Sports Centre	Onisha North	On-going

SPORTS DEVELOPMENT			
S/N	**Project Title**	**Location Title**	**Status**
12	Rehabilitation & Re-equipping of Lagos Sports Medicine Centre	National Stadium, Lagos	Completed
13	Construction of Additional Spectators' Stand of Mini Stadium	Dawakin Kudu, Kano	Completed
14	Renovation of Goodluck Athletes' Hostel, Abuja, Package B	National Stadium, Abuja	Completed
15	Construction of Mini Sports Centre	Nkalagu, Ebonyi	On-going
16	Upgrade of Rasaq Balogun Playfield to Mini Stadium	Surulere, Lagos	Completed
17	Construction of Mini Sports Centre	Orogun, Delta	On-going
18	Construction and Equipping of Mini Sports Stadium	Kwaya Kusar, Borno	On-going
19	Construction of Mini Sports Centre	Anam, Anambra	On-going
20	Construction of Mini Sports Centre	Gaya, Kano State	On-going
21	Construction of Mini Sports Centre	Bukarti, Yunusari LGA, Yobe State	On-going
22	Construction of Mini Sport Centre	Okporo Usugbe, Anambra	On-going
23	Construction of Mini Sports Centre	Arochukwu, Abia State	On-going
24	Construction of 6 No Tracks	Dawaki	On-going
25	Construction and Equipping of Mini Sports Centre	Shani, Borno	On-going
26	Construction of Additional Spectators' Stand	Dawakin Kudu, Kano	Completed
27	Construction of Mini Sports Centre	Abeokuta North LGA, Odeda Fed. Constituency, Ogun	On-going
28	Construction and Equipping of Mini Sports Stadium	Shani, Borno	On-going
29	Construction of Mini Sports Centre	Abeokuta North LGA, Obafemi Owode Federal Constituency, Ogun	On-going

3.6.2.3.3 Challenges

i. ***Continued classification of Youth and Sports as Social Sector:*** Youth and Sports is not listed as a priority sector in the national budget but the Ministry is tasked with spending on priority social issues such as employment, curbing youth restiveness, poverty as well as enhancing unity and national image through sports participation at local and global level.

ii. Youth development issues are multi-sectoral and so cut across various MDAs. This limits the actual funds given to the Federal Ministry of Youth and Sports, Development, the main organ responsible for youth development issues.

iii. Inadequate sporting facilities in the Country.

iv. Non maintenance of the existing sporting facilities in the Country

3.6.3 Environment, Tourism and Information

3.6.3.1 Environment

As Nigeria embarks on a path of rapid economic growth, it also aims at being a nation with a healthy environment for sustainable socio-economic development.

The country is faced with a number of longstanding environmental challenges including land degradation and oil spillages, pollution, urban waste management, open defecation, desertification and erosion. Coupled with a poor response over the years to promptly address environmental degradation. These have led to negative indirect effects on other sectors of the economy and even direct threats to human existence and survival.

The Federal Government flagged off the remediation of contaminated sites in Ogoni Land in 2016. The government had through the Nigerian National Petroleum Corporation, and multi-national oil companies mobilised $180 million for the exercise. The reformation of the Hydrocarbon Pollution and Remediation Project (HYPREP) under the Ministry of Environment is a positive development aimed at the sustainable clean-up of Ogoni land. Several initiatives had been taken to ensure the clean-up of ogoni land by the Federal Government and UNEP, but with also these initiatives, there is the prolonged delay in the clean-up of the oil polluted region of Niger Delta. In Ogoni land, this is likely to trigger more deaths, as indicated by environmental experts. The clean-up exercise has not seen much progress since the process was initiated five years ago.

Some infrastructure developments have been planned over the years targeted at halting specific environmental hazards in Nigeria, such as:

i. Provisions made to promote quality and safety, and considerations relating to climate change, in the design and construction of hard infrastructure
ii. Measure put in place to avoid or minimize community exposure to project-related traffic and road safety risks, diseases and hazardous materials
iii. Measures put in place to address emergency events.
iv. Make adequate provisions for Occupational health and safety (OHS) requirements for project workers and ensure the safeguarding of personnel and property in order to avoid or minimize risks to project-affected communities
v. Obtaining assurance that design, construction and operation as it relates to project structural elements will not constitute hazards
vi. Making adequate provision for time, procedure and plan for project decommissioning
vii. Make adequate provisions for maintaining optimum standards for Water quality; Air quality; Noise quality and Lighting quality
viii. Proper siting of Infrastructure in a safe location (downstream or upstream) in relation to potential sources of hazard and/or pollution sources
ix. Preparation of a well-articulated and comprehensive waste management plan for effective collection, transportation, storage, treatment and disposal of solid, liquid and gaseous wastes
x. Documentation of emergency preparedness and response plans showing activities, resources, and responsibilities throughout project duration
xi. documenting and remedying past oil-impacted areas in the Niger Delta by the Nigeria Oil Spill Detection and Response Agency and the National Emergency Management Agency (NEMA).

Desertification and land degradation are major environmental challenges in Nigeria. To arrest the situation from deteriorating, Nigeria joined the Pan-African Great Green Wall (GGW) Initiative in 2013, which is being implemented in more than 20 countries across the world. The Initiative has the goal of restoring 100 million hectares of degraded

land; sequester 250 million tons of carbon and create 10 million green jobs by 2030. In Nigeria, the initiative aims at, among others:

- Establishing Greenwall or shelterbelt from Kebbi State in Northwest to Borno State in Northeast, a distance of 1,500km and 15km across
- Provision of water for irrigation and domestic uses
- Development of Grazing resources
- Promotion of alternative and sustainable sources of energy
- Promotion of alternative means of livelihoods

By 2019, the GGW project had recorded the following achievements:

- Production of Five Million Assorted Forest and fruit tree Seedlings
- Establishment of 415km shelterbelt
- Establishment of 135ha community woodlots
- Establishment of 235ha community orchards
- Establishment of 92 community tree nurseries

The United Nations Convention to Combat Desertification reported that Nigeria restores 5 million hectares of degraded land.

3.6.3.2 Tourism

This sub-sector is currently hindered by infrastructural inadequacies, inadequate funding, weak product packaging and marketing approaches, security and safety issues, as well as neglect and underdevelopment of tourism assets. Others include the existence of an underdeveloped hospitality industry and low-capacity building, poor data collection for planning purposes and poor inter-agency collaboration on tourism statistics. Also, COVID-19 has negatively impacted on the Tourism Industry

The World Travel and Tourism Council released an analytical report on Nigeria's tourism that travel and tourism generated 838,500 jobs directly in 2011 (1.4 per cent total employment), and was forecasted to grow by seven per cent in 2012 to 897, 500. This includes employment by hotels, travel agents, airlines, and other passenger services excluding commuter services). It also included, for example, the activities of the restaurants and leisure industries directly supported by tourists.

Despite the impressive potential of Nigeria's tourism as highlighted by the WTTC report, Nigeria has failed to evolve into a prominent tourism destination in Africa, let alone in the world. Yet, the country is enormously blessed with several resource-based tourist attractions, including some United Nations World Heritage Sites. Nigeria officially became a member of the United Nations World Tourism Organisation in 1975. Furthermore, Nigeria has in 2019 embarked on strengthening of National Tourism Statistical data and the development of Tourism Satellite Account (TSA) for Nigeria.

Cultural tourism, which is the most significant brand of Nigeria's tourism, is not strategically marketed to attract international tourists. Notwithstanding, there have been a few successful tourist events such as the Carnival Calabar, tagged "Africa's Biggest Street Party" which have gained international recognition and tourist patronage. The Federal Government is also poised during the plan period to invest in Cultural Tourism.

In line with the planning and development framework, the National Tourism Policy of Nigeria was formulated in 1999 and reviewed in 2005 in order to ensure that Nigeria's tourism development is primarily focused on areas of

comparative advantage, which is our culture. Hence the thrust of the policy is to develop sustainable tourism by capitalizing on heritage diversity as the basis for promoting domestic and international tourism. The development and packaging of our authentic cultural heritage should be a priority for all the States. However, some States such as Cross River and Lagos States have incorporated some element of foreign culture (i.e. the costumes) into their own Carnivals.

The United Nations World Tourism Organization (UNWTO) in 2016 and 2018 carried out two separate evaluation / assessment missions to Nigeria on the review / implementation of the Nigerian Tourism Development Master Plan. The missions were undertaken by two UNWTO experts on Tourism Statistics and Tourism Satellite. In 2018, the Federal Ministry of Information and Culture signed an agreement with the UNWTO for Technical Assistance for a project on 'Strengthening of the National Tourism Statistical Data and the Development of a Tourism Satellite Account (TSA) for Nigeria'. The project document from the two evaluation missions recommended two phases of implementation for the project with a five years' timeline; 2019-2023. But due to funds constraints, implementation could not commence until 2020, when the Federal Ministry of Information and Culture, in collaboration with the National Bureau of Statistics (NBS) and some of its Agencies, did a pilot survey of Lagos State as part of the implementation of the Short Term Action Plan on data collection and analysis.

Other challenges for Tourism in Nigeria include:

- A dearth of trained manpower to effectively and efficiently service the sector;
- Inadequate capital for infrastructural development and upgrading of existing facilities;
- Poor budgetary allocation for the Federal Ministry of Information and Culture and its Tourism-related Agencies;
- Lack of standardization and rating structure for the tourism and hospitality sectors (i.e. star rating by hotels);
- Neglect of most of the country's tourist sites, which result in the near collapse of the infrastructure;
- Lack of reliable statistical tourist and economic data and measurements (National Tourism statistical data and Tourism Satellite Account);
- Slow visa implementation protocols and passport issuance;
- Poor air connectivity within the region;
- Travel Advisories by the western world;
- Rising domestic insecurity nationwide (Actual and perceived negative propaganda);
- Multiplicity of taxes by all tiers of government for tourism and hospitality operators;
- High operating costs;
- High interest rate / lack of incentives for the sector;
- Insufficient bail-outs and fiscal palliatives by the federal and state governments for the tourism and hospitality sectors to cushion the impact of the COVID-19 pandemic;
- Insufficient awareness and sensitization by government on tourism attractions / potentials;
- Lack and/or inadequate information sharing constraint on the variety of investment opportunities available for the development of the sectors;
- Weak legislation on matters of Tourism.

3.6.3.3 Information

Effective information dissemination is fundamental to the transformation of Nigeria into a critical player in the global affairs of politics and economy. Information is a major driver of National development plans and programmes, as it remains the tool for mobilizing citizens, organisations and partners in the course of governance.

Consequently, the Federal Ministry of Information and Culture aims at managing the Image, Reputation and Promotion of the culture of the people and Government of Nigeria through a dynamic public information system that facilitates

access by citizens and the global community to credible and timely information.

The tenets of democratic governance as practiced in Nigeria requires the integration and participation of the people to provide a stable and cohesive environment for the successful governance process and effective implementation of government plans and programmes.

Over the years there has been a growing apathy and distrust between the Government and the Citizenry owing to the absence of deliberate plans to involve the citizens in the governance process. This has ultimately led to the failure of most government plans and programmes.

Furthermore, the country is faced with protracted insecurity challenges, which include: Boko Haram terrorism, kidnapping, banditry, herders/farmers clashes, separatist agitations and so on. As a result, these have not only led to negative and severe consequences on the economic growth and development of the country but also threatened the corporate existence and survival of the Nigerian State.

In order to address the foregoing and ensure wider participation of the citizens in the art of governance, Government has deemed it necessary to embark on the following:

- In line with the provisions of the Freedom of Information Act, create an information platform that will provide citizens and foreigners alike easy access to credible official information on National activities and programmes-through the national portal; www.nigeria.gov.ng and the Federal Ministry of Information and Culture's official website: www.fmic.gov.ng;

- Strengthen existing institutional frameworks that continue to ensure press freedom and safety of Journalists;

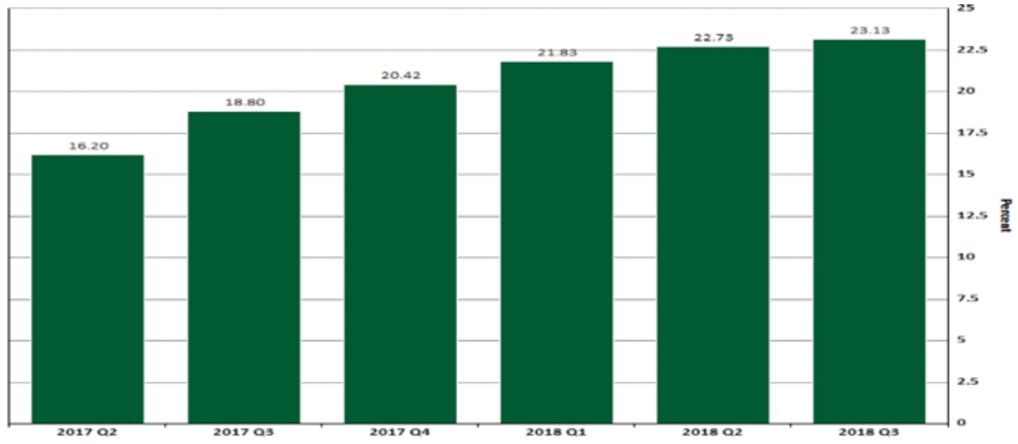
- Mainstream strategic communication plans in all infrastructure projects of Government that will save cost and lead to successful delivery of the projects;

- Strengthen the Infrastructural and Human Capacity of the Federal Resource Centres and the Federal Information Centres scattered across the six geo-political zones of the country, to effectively engage and communicate with the rural populace on public information issues.

3.6.4 Labour and Productivity

Labour remains a Nigerian national asset and a critical development factor. However, statistics show that unemployment is gravitating towards a crisis. According to the National Bureau of Statistics (NBS), Nigeria's unemployment rate maintained a persistent increase from 16.2 per cent in Q2 2017 to 23.1 per cent by Q3 2018 (Figure 3.27). In 2019, the Nigerian states of Sokoto and Taraba were reported to have the largest percentage of people living below the poverty line. The lowest poverty rates were recorded in the South and South-Western states. In Lagos, this figure equalled to 4.5 percent, the lowest rate in Nigeria. An individual is considered poor in Nigeria when has less than 137.4 thousand Nigerian Naira (roughly 361 U.S. dollars) per year. In total, 40.1 percent of population in Nigeria lived in poverty.

Figure 3.27: Nigeria's Unemployment Rate (Q2 2017 – Q3 2018)



Source: NBS (2017 – 2018).

Other available indicators of the Nigerian labour market include the following:

- The number of persons in the economically active or working age population (15 – 64 years of age) in Q2, 2020 was estimated at 116,871,186. This is 1.2% higher than the figure recorded in Q3, 2018, which was 115,492,969.
- The number of persons in the labour force (i.e. people within ages 15 -64, who are able and willing to work) was estimated to be 80,291,894. This was 11.3% less than the number of persons in Q3, 2018. Of this number, those within the age bracket of 25-34 were highest, with 23,328,460 or 29.1% of the labour force.
- The total number of people in employment (i.e. people with jobs) during the reference period was 58,527,276. Of this number, 35,585,274 were full-time employed (i.e. worked 40+ hours per week), while 22,942,003 were under-employed (i.e. working between 20-29 hours per week). This figure is 15.8% less than the people in employment in Q3, 2020.
- For the period under review, Q2, 2020, the unemployment rate among young people (15-34years) was 34.9%, up from 29.7%, while the rate of underemployment for the same age group rose to 28.2% from 25.7% in Q3, 2018. These rates were the highest when compared to other age groupings.

Several infrastructure-related measures are required to improve the current labour situation in Nigeria. These include:

- establishment of Labour Desk officers in all the MDAs to capture data on employment and vacancies;
- establishment of Nigerian Labour Exchange in all the states, for unemployed youths to access job vacancies/ opportunities on the internet;
- Provision of a social security fund for vulnerable groups and unemployed youths;
- establishment of more and better coordinated skill acquisition centres;
- revival of ailing industries to create more job opportunities through improved infrastructure (e.g., power, roads, markets); and
- Facilitation of access to finance for MSMEs.

3.6.4.1 Specific Achievement of Labour and Employment

i. Develop Labour-based strategy for infrastructure works;
ii. Establish National Labour Legislation;
iii. Establish labour-based contractor association;
iv. Training of emerging contractors; in subjects related to labour legislation and working conditions;
v. Develop roadmap for the implementation of a Labour Market information System Harmonization and Coordination Framework (LMIS-HCF);
vi. Strengthen regional structures and their ability to shape employment policies;
vii. Develop youth employment inventory;
viii. Develop and distribution of operational manuals for scalable employment interventions;
ix. Establish Global Union dialogue; facilitating and enabling the continuous dialogue with international trade union movement;
x. Setup a repository to capture labour activities, to help improve labour market assessment and bench-marking;
xi. Strengthen and assess the applicability of labour rules and regulations;
xii. Sensitizing and training of labour inspectors to protect workers and employers association right;
xiii. Strengthen the labour Arbitration panel and setup appropriate disciplinary system based on transparency and fair play;
xiv. Skills Acquisition inclusion in school's curriculum; and
xv. Support Small-Scale business and self-employed, broadening access to credit.

3.6.5 Aspirations and Targets for Social Infrastructure

Specific targets have been set for the Social Infrastructure sector by 2043. These objectives are divided between the four sub-groups as follows:

3.6.5.1 Health, Women Affairs and Social Development

Provide adequate infrastructure including laboratory and logistics support for ambulatory care services

- Develop a national/state strategic healthcare infrastructure plan;
- Develop and review of policies, laws and guidelines on health infrastructure, equipment maintenance and management;
- Advocate for dedicated funds for health infrastructure development and management in Nigeria;
- Establish a PPP platform on health infrastructure procurement, service provision and maintenance (e.g. build and maintain, outsource, contract, concession etc.);
- Revitalize, upgrade and expand centres of excellence in the State;
- Establish/strengthen logistics support including transportation and communication systems to aid referral;
- Provide sustainable influx of input for production of drugs, vaccines, equipment, among others;
- Focus on making rural and community healthcare services adequate and improving;
- Rural and community health;
- Increase use of ICT;
- Boost capacity of healthcare response to the COV¬ID-19 pandemic and other infectious diseases;
- Ensure access of every Nigerian to qualita¬tive health services based on the prioritization of primary health care (building 15, 000 PHCs);
- Boost local research and development efforts aimed at the production of medical and pharmaceutical resourc¬es;
- Create a single national pool of resources for the purchasing of a defined package of health services to foster broader risk sharing and reduce duplication of effort;
- Expand universal health insurance to cover the poorest and most vulnerable by linking the National Health Insurance Scheme to the National Social Register;
- Accelerate implementation of the Basic Health Care Provision Fund (BHCPF) to achieve at least a 65.0 per cent increase in the share of the population covered by primary healthcare by 2023;
- Ensure access to power for health clinics through stand-alone systems or micro-grids (where necessary);
- Establish a favourable tariff regime to support domestic pharmaceutical companies and allied Manufacturers;
- Support domestic pharmaceutical companies to meet WHO prequalification criteria, and overcome a major challenge to production for export;
- Mobilize private sector resources to contribute to various health funds and services such as the National Emergency Health Fund or Basic Healthcare Provision Fund (BHCPF), health infrastructure development and granting incentives like tax exemptions; and
- Support local research and development efforts aimed at production of medical and pharmaceutical resources including vaccines and consumables.

In the Health sub-sector, targets set will ensure a significant increase in access to primary healthcare from 33.0 per cent in 2013 to 61.0 per cent in 2043 by:

- Increasing the number of primary healthcare clinics per LGA from 28 currently to 40 by 2023, and subsequently to 55 by 2043;
- Increasing the total number of hospital beds per 100,000 people from three currently to 200 by 2023, and to 450 by 2043.

3.6.5.2 Education, Youth and Sports

- Provide equal access to education and sports development at all levels;
- Develop appropriate skills – mental, physical and social abilities and competencies in citizens;
- Promote vocational and technical education;
- Use education and sports as catalysts for national consciousness and unity Provide a globally competitive education system.

In Education Sector, development of infrastructure to support attainment of targets is the most prominent, with projects planned to:

- Neutralise the 250,000 Classroom deficit by 2023 and create an additional 250,000 ECCDE and standard classrooms by 2043;
- Scope of the targets also includes increasing the number of federal universities, polytechnics and colleges of education by up to 300.0 per cent in the next 23 years.

3.6.5.3 Environment, Tourism and Information

- Develop an effective pollution and waste management system in 36 states and the Federal Capital Territory with emphasis on "waste to wealth";
- Implement proper environmental control measures to check degradation;
- Improve governance infrastructure to facilitate performance evaluation for the reward of excellence and transparency;
- Develop world class tourism infrastructure to position Nigeria as a tourism destination;

- Establish effective private sector-driven tourism infrastructure by 2023;
- Ensure citizens' participation in governance, information dissemination and coverage;
- Establish one Engineered Sanitary Land Fill for management of Solid Wastes shall be constructed in each of the State capitals in the Federation;
- Provide one Solid wastes transfer station in each of the Senatorial Districts;
- Establish Waste composting plants in every Federal Constituency for production of bio-organic fertilizers;
- Empower local industries to commence manufacturing/production of Environment Health Service equipment for pest and vector control, air quality, water quality monitoring etc;
- Provide locally-fabricated machinery for recovery and recycling of Healthcare Wastes;
- Make available facilities for solid wastes colour-coding to avoid health hazards associated with improper solid waste handling;
- Eliminate open drain system in major cities of the federation by providing efficient Sewerage systems;
- Eliminate the use of Chlorofluorocarbons and other Ozone-depleting substances in Nigeria;
- Eliminate the use of Single-use plastics in packaging and promote the use of biodegradable substitute materials;
- Increase capacity and capability for Environmental Health Surveillance – Water quality, Air Quality, Sanitary standard etc;
- Improve Environmental quality necessary for the control of biotics especially SARS-Cov-2 (COVID-19);
- Set up one Environmental Health Laboratory in every State capital for the analysis of Environmental Media (Water, Land, Air & Food) for early identification of environmental contaminants; and
- Deploy Artificial Intelligence in rendering Environmental Health Services (Pest Control, Cleaning Services, Waste Collection).

3.6.5.4 Labour and Productivity

- Promote employment – intensive economic growth;
- Enhance employment generation by growing an entrepreneurial economy;
- Transform the informal economy to further boost productive employment Develop a national policy on social security and safety nets;
- Set productivity standards and a measurement system;
- Several initiatives are planned to achieve these ambitious targets within the various broad groups.

3.6.6 Private Sector Expectations and Priorities

3.6.6.1 Health

With a functional financial resource pooling mechanism in place to cover the healthcare of citizens, the private sector support will be brought to bear on the effort to transform public second¬ary and tertiary health institutions into self-administering and self-sustaining enterprises with the capacity to manufacture ba¬sic commodities and consumables like intravenous fluids, laun¬dry soap, surgical gloves, bed sheets and pillowcases, nurses and doctors' uniforms, etc. Steps are being taken to

- Expand the National Health Insur¬ance Scheme to cover all citizens;
- Ensure protection of health work¬ers on the front lines of addressing COVID-19 threats and other infec¬tious diseases;
- Establish a credible health insurance system by empowering the National Health Insurance Scheme as payment security for users, thus meeting buy-side demand.

- Ensure reduction of capital flight in the sub-sector through medical tourism by increasing investment in the sector, establishing world class hospitals and diagnostic centres;
- Develop strategies to stop the 'brain drain' of qualified healthcare personnel;
- Create regional centres of excellence related to common specialty fields; and
- Consider a private financing initiative as in the UK, where hospital infrastructure is built by the private sector under a concession and the concessionaire is paid a unitary charge for managing the hospital and other ancillary services (catering, laundry, etc.).

To this end, the Nigeria Social Insurance Trust Fund (NSITF) shall provide insurance coverage for health workers across all tiers of government as well as in the private sector.

3.6.6.2 Education

- Build targeted research institutes with linkages to industry
- Implement the 10-year Strategic Plan which calls for greater private sector and industry participation in curriculum design at all levels as well as commitment to PPPs
- Initiate a coherent policy focused on enhancing technical education and a conscious effort to develop technical and vocational education to support planned infrastructure expansion.
- To enable increased private sector participation in the sector, the following strategies were identified.
- Concession tertiary hospitals (not to include medical colleges, e.g., Lagos University Teaching Hospital) under a PPP and introduce management contracts where necessary
- Concession all failed/abandoned federal and state hospital projects deemed attractive by the private sector
- Provide basic educational facilities in line with United Nations Sustainable Development Goals (SDGs)
- Ensure adequate electricity supply in schools
- Improve broadband, including rural broadband access
- Create centres of excellence in one university, polytechnic, and college of education in each of the six regions
- Build targeted research institutes linked to industry.

3.6.7 Required Infrastructure Investments

In order to achieve the goals and objectives mentioned in the previous section, Nigeria needs to increase its infrastructure spend in this sector. Using estimates combined with infrastructure requirements associated with identified development targets, the Federal Government alone is expected to commit at least N180 billion (or about USD47.4 million) per annum to social sector development projects in order to achieve the specific sub-sector targets. The biggest spend will be in Education and Healthcare infrastructure financing.

In particular, Nigeria will need an average investment of USD1.28 billion on social infratsruture development over the next five years (2020-2024). In view of the challenging public resources, it is expected that the private sector will account for greater percentage of the investment needs (65 perc cent) to close the demand gap.

3.7 Vital Registration and Security

3.7.1 Current State of Infrastructure

3.7.1.1 Vital Registration

Civil Registration and Vital Statistics (CRVS) Systems are playing increasing roles in national and global data

infrastructure, facilitating the achievement of key developmental goals. The performance of CRVS systems in many developing countries including Nigeria is sub-optimal and information on their structure and operations scanty. Civil Registration and Vital Statistics is the continuous, permanent, compulsory, and universal recording by registration of the occurrence and characteristics of vital events pertaining to the population as provided through decrees or regulation following the legal requirements of each country. Vital events considered in the registration system include live birth, death, stillbirth, marriage, divorce, annulment of marriage, judicial separation of marriage, adoption, legitimization, and recognition. Birth, death, marriage, and divorce are priority vital events to be registered and statistics produced on a continuous and permanent basis by countries. An effective system of vital registration therefore must have fundamental characteristics such as continuity, permanence, and compulsion so as to detect and record all births, deaths, etc. regardless of the time or place, such an event takes place.

Within governments, input to the civil registration systems is made by few ministries or departments, including the National Population Commission, Ministry of Health, Ministry of Interior, National Identity Management Commission (NIIMC), and National Bureau of Statistics (NBS). Governments at various levels rely on vital registration information for calculation and production of timely and accurate population estimates, which contributes to policy-making and long-term national planning. In other words, the accuracy of estimates in the NIIMP largely depends on the accuracy of estimates of births, deaths, marriages, and population projections.

Record available on "RapidSMSNigeria", an online portal designed by UNICEF and implemented by National Population Commission (NPC) with support from UNICEF, showed improvement in current vital registration coverage.

Table 3.37: Vital registration Coverage

Coverage	Status
Birth Registration	43%
Death Registration	10%
Still Birth	1%
Marriages	Yet to commence
Divorces	Yet to commence
Internal Migration	Baseline survey conducted in 2010
International migration	Last published in 2004

Source: NIMC and UNICEF

The implementation of "RapidSMS" has the potential to expand coverage of vital registration towards the goal of universal coverage. The platform, implemented by NPC captures real-time birth and death registration addresses centre-by-centre birth registration disparities and facilitates prompt and appropriate action. This initiative covers 36 states plus FCT, across 774 LGAs. As at September 2020, about 1,246,279 under-1 births, 2,078,433 under-5 and 920,470 above-5 births have been registered with "rapid SMS". Deaths reported on the platform as at September 2020 showed 64.0 per cent were male and 36.0 per cent female.

However, the current coverage is still below the gold standard of universal coverage. Although ongoing automation and digitalization of the system make the goal achievable. The achievement of 100.0 per cent coverage of civil registration by 2043 should follow the following principles:

- Total coverage – a complete vital registration coverage should cover all vital events happening in every state, local government, and community, and taking place in every demographic group

- Continuous collection and compilation of vital statistics should reflect short term movements, periodic fluctuation, and longer-term movements. This is easily achieved if established routine of reporting is instituted thereby leading to the availability of data on a monthly, quarterly, and annual basis.
  Privacy of data should be maintained while data should be widely made available for legitimate uses.

Table 3.38: Priority Projects on Vital Registration

S/N	Acitivity	Duration
1.	Automation and digitalization of the Civil Registration and Vital Statistics processes	2020 - 2023
2.	- GIS final editing, cleaning and processing of all demarcated 546 LGAs EA Maps.	February 2021 – July 2021
3.	The completion of the on – going Enumeration Area Demarcation Exercise in the 774 LGAs of the Federation.	January 2021
4.	Production and compilation of thematic maps, charts and related datasets based on specific stakeholder needs on demand. Maintenance and continuous updating of the Geographic frame to reflect the realities on ground.	August 2022 – January 2023
5.	Conduct of National Demographic Surveys -Nigeria Education Data Survey (NEDS) -National Malaria Indictor Survey (NMIS) -Nigeria Demographic and Health Survey (NDHS)	2020 - 2023
6.	Development of Census database Stakeholders conference to present 2022 Census instrument Census Management training Training of staff on data collection and interviewing techniques at IPC, Washington Design of data collection Test of new methodology First pretest of Census instruments Second pretest of census instruments	2020 2020
7.	Field work for main Census Development of Census data base Development of Administrative and technical report for Census Post Enumeration Survey (PES)	2022
8.	Dissemination of Population Census data Archiving and Documentation of Census information.	2023

Source: NIMC

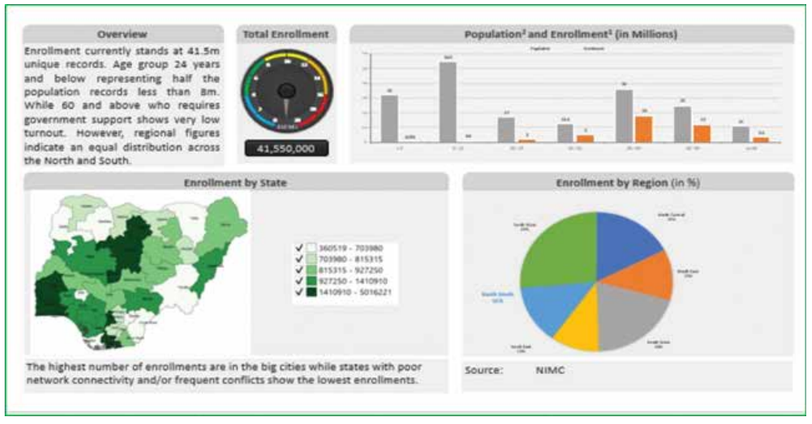
TABLE 3.39: VITAL REGISTRATION SECTOR TARGETS

	2020	2023	2043
Registration Offices (National Population Commission)	3,810	7,000	10,000
Complete coverage of birth registration	43%	70%	100%
Complete coverage of death registration	10%	60%	100%

Source: Vital Registration TWG.

The National Identity Management Commission (NIMC) in its efforts to meet up with the enrollment of the entire population in the country and linking the Identity registration with other relevant agencies introduced the Ecosystem. Figures 3.28 to 3.32 show efforts of NIMC on improving the registration coverage of citizens and non-citizens as well as connectivity of such identity with other relevant agencies:

Figure 3.28: Enrolment Dashboard as at June 2020



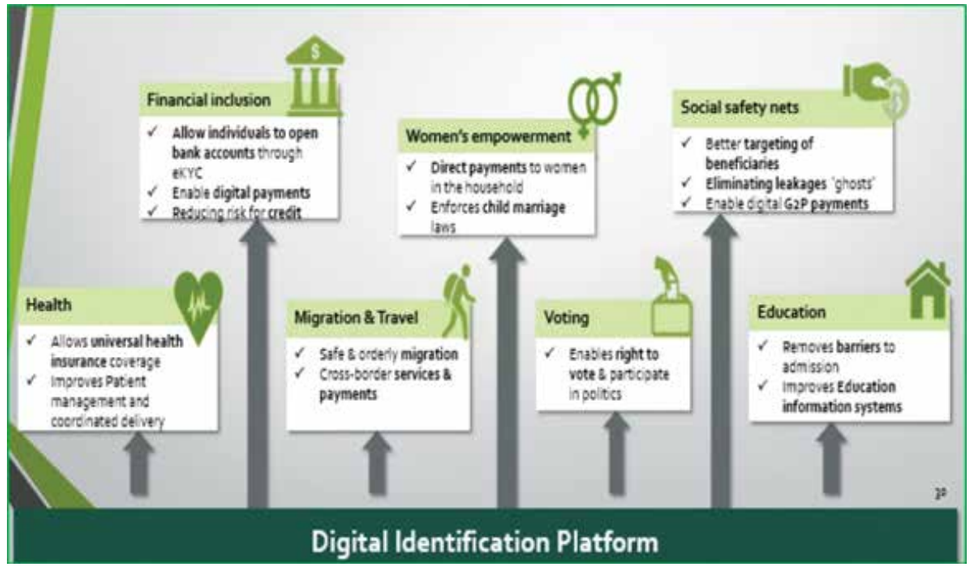
Source: NIMC.

Figure: 3.29 Digital National Identity Data Growth (2015-2019)

Source: NIMC.

The Federal Government is giving more emphasis to the use of the National Identification Number (NIN) as the foundational digital ID for the country. This has led to a significant upsurge in the NIN enrolments during the period under review from 42 million to 63.4 million.

Figure 3.30 Benefits of National Identity Card Programme

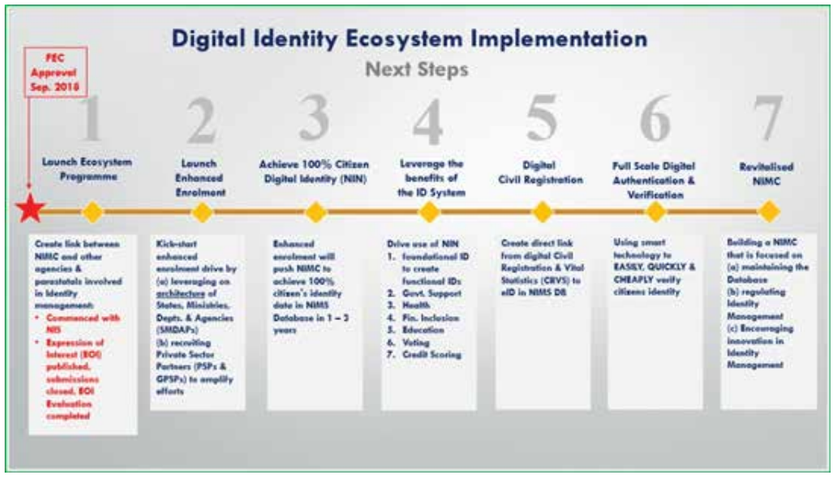


Source: NIMC.

Figure 3.31: Ecosystem Roadmap Program

Source: NIMC.

Figure 3.32: Steps to Ecosystem Roadmap Implementation



Source: NIMC.

3.7.1.2 Security

Twelve Agencies were considered to fall under the security sub-sector. These include the Nigerian Police Force (NPF), Nigerian Correctional Service (NCS), Federal Fire Service (FFS), Nigerian Army, Nigerian Navy, Nigerian Air force, Federal Road Safety Commission (FRSC), Defence Industry Corporation of Nigeria (DICON), Nigeria Immigration Service (NIS), Nigeria Security and Civil Defence Corps (NSCDC), Nigerian Communication Satellite (NigComSat) and Nigerian Space Research and Development Agency (NASRDA).

In this document and for simplification, the 12 agencies have been categorized into two - the Military and Civilian Defence. Military covers the operations of the Armed forces (Army, Airforce and Navy) while civilian defence includes operations of the police and other para-military agencies (Nigeria Security and Civil Defence, Nigeria Immigration Service, Federal Fire Service, and Nigeria Correctional Service, etc).

Nigeria is grappling with new and more complex security challenges. Most of the contemporary security threats are internal and are mainly unconventional in nature. These threats include:

- **Insurgency** characterized by terrorism and kidnapping. The activities of insurgents in the North East has had significant toll on the economy and society in the region and beyond. It caused loss of lives, serious destruction on infrastructure and disruption of livelihoods.

- **Organized** crime such as smuggling, oil theft, illegal bunkering, pipeline vandalism, drugs trafficking, arms trafficking, including heavy calibre weapons, human trafficking and internet – cyber related crimes

- **Cross border banditry and ethno-religious conflicts** which have significantly spread among various parts of the country with the North-Western parts heavily affected by banditry and the North-Central having higher cases of violent communal conflicts.

The Nigerian government has continued to priotize security by constantly upgrading its military and civil defence

infrastructure. Table 3.27 shows the capital budgetary alloactions to security for the past few years. The data indicates that on the aggregate, government allocation to security sectors has generally increased over the years under review (except in 2015 and 2019 which witnessed slight reductions). The nature of contemporary security challenges and the magnitude of its impact on the economy and society would necessitate more funding and the adoption of new ways of responding. Therefore, addressing the current and future security challenges require upgrading and expanding existing infrastructure that enables effective operations of various security formations and related organizations.

Table 3.40: Capital Budget allocation to Security Agencies ('Billion)

Sub-sector	2013	2014	2015	2016	2017	2018	2019
Nigerian Army	8.77	4.89	5.75	19.79	20.92	19.62	19.62
Nigerian Navy	15.03	8.99	8.65	25.65	26.45	27.45	27.15
Nigerian Arirforce	14.24	7.26	7.63	24.46	29.45	44.65	45.05
Police	10.25	3.44	17.8	16.12	16.12	25.19	22.06
NSA	22	28.52	11.3	15.23	25.31	46.66	33.87
Min. of Interior	9.46	6.95	2.89	45.61	47.15	49.9	31.61
DICON	1.7	0.8	0.82	3.83	3.58	3.73	3.23
Total	**81.45**	**60.85**	**54.84**	**150.69**	**168.98**	**217.2**	**182.59**

Source: Budget Office of the Federation.

Civilian Defence

i. Nigeria Correctional Service

The total population capacity for the Nigeria Correctional Service (NCS) is 50,153 but NCS has historically been overcrowded. In 2016, the Prison population in Nigeria was 63,142 and by 2018 the population increased to 71,522. This overcrowding in the correctional centres brought about the need for construction of more cell blocks and the releasing of inmates through judiciary processes to decongest the existing centres. New satellite correctional facilities were constructed in 2016, 2017 and 2018, making the total number of correctional facilities in the country to increase to 240 as at 2018. Also, there are ongoing 3,000 correctional model facilities in Kano, Karshi-Abuja and Bori.

Overall, some of the major challenges facing the Nigerian Correctional Service include:

- Congestion, especially among those awaiting trial in Urban Areas Inadequate manpower to effectively manage the Correctional Centres;
- Weak and inadequate structures;
- Poor logistic fleets to meet the courts' needs of ATPs;
- Inadequate and poorly equip correctional facilities for identification, treatment, and reintegration of convicted persons to become law-abiding citizens on discharge inmates upkeep;
- The slow judicial process in deciding cases of ATPs Insufficient budgetary allocation.

ii. Federal Fire Service

The Federal Fire Service is responsible for the rescue, fire prevention and migration, firefighting, paramedic and information services. The main goal of the Fire Service is to minimize fire and other emergency incidents resulting in loss of life and property. The infrastructural stock of the Agency consists of 328 Fire Stations and fire training schools. Out of which, 10 fire stations and two training schools are owned by the Federal Government while the remaining are owned by the various State Governments and the FCT. The average emergency response time for

buildings within 18 square kilometres of a fire station is 35 minutes. Nigeria has 8,000 firemen, of whom only 1,200 are trained according to standard requirements. The ratio of fire-fighters to the population in Nigeria is 1:20000, while the internationally recommended ratio is 1:1000. The Service is constructing Metropolitan fire station spread across the six geo-political zones of the country and the benefiting States are Benue, Bauchi, Abeokuta, Enugu, Akwa-Ibom and the FCT.

iii. Nigeria Immigration Service

The key mandate of this Agency is to establish a technology platform to address the operational challenges of modern migration, relevant to the world security order and responsive to global migration trends. An opportunity exists for improving the level of monitoring at the borders by installing CCTV cameras.

iv. Nigerian Security and Civil Defence Corps (NSCDC)

NSCDC is a para-military Agency of the Federal government commissioned to provide measures against threats, attacks and disasters against Nigeria and its citizenry. The NSCDC is responsible for:

- Protection of critical infrastructure and national assets;
- Licensing, supervision and monitoring the operations of private guard companies in the country; and
- Providing rescue and emergency aid during natural or man-made disaster.

The Agency's current infrastructure stock consists of three State Commands, ten (10) Divisional offices, 12 dormitories, three training colleges, 30 classrooms, three commandants' residences and two shooting ranges. The main challenges facing the NSCDC include:

- Shortage of manpower;
- Inadequate funding; and
- Weak synergies and collaboration with other security agencies.

v. Defence Industries Corporation of Nigeria (DICON)

The main mandate of the Agency is to produce arms, ammunition, weapons and machinery to meet Nigeria's defence needs. However, the Agency is faced with the challenge of unavailability of production plants and simulation centers. DICON's current infrastructural stock includes, nine factories and workshops, one arms production line and two laboratories.

vi. Nigeria Communication Satellite (NigComSat)

The key mandate of this Agency is to deploy communication satellite resources for maritime, aviation defence and other security needs of the nation. The opportunities for NigComSat include:

- Capacity to provide the military and other security agencies with a communications service and bandwidth requirements for all platforms;
- Deploying Beyond Line-of-Site (BLOS) connectivity for Unmanned Aerial Vehicles (UAVs) in Nigeria; and
- Becoming the cornerstone for universal access, bedrock for ICT development, backbone of social, political and economic re-engineering in Nigeria and Africa in general.

vii. Nigeria Police Force

The vision of the Police Force is to make Nigeria safer and more secure for economic growth and development and to create a safe and secure environment for everyone living in Nigeria. Substantial expenditure has been made on

infrastructure and training programmes for the Police Force since 2013 to date. A total of N6.5 billion was budgeted from 2014 to 2017 for the construction of new police stations. Within this period, 318 new police stations were constructed which brought the total number Police stations to 1,598 (Table 3.28). However, additional 145 police stations are required to meet the short-term target of 1,743 stations by the year 2018.

Table: 3.41: Current State of the Nigeria Police Force.

No. of Area Commands	No. of Divisions	No. of Police Stations	No. of Police Posts	No. of Village Posts
127	1,040	1,598	2,631	3,920

Source: Nigeria Police (NPF)

Despite increase in budgetary provision and infrastructure, the Police Force is still grappling with the following challenges:

- Lack of trust and support by the Public
- Weak Investigation Infrastructures
- Creation of multiple security institutions with same mandate
- Lack of effective ICT Infrastructure
- Old and dilapidated Police Stations, Buildings and Offices
- Lack of Modern Residential Accommodation
- Lack of Forensic laboratories/fingerprint database
- Inadequate training infrastructure
- Insufficient Police Buildings, Housing and Police Stations

viii. Federal Road Safety Commission (FRSC)

The FRSC is a Government Agency with statutory responsibility for road safety administration in Nigeria. The FRSC currently have, among others, 203 Unit commands, 29 outposts, 211 driver's license centres and 12 license plate production plants.

There exists a strong nexus between vital registration and security. Thus, thus national security must become imperative if proper fields of statistics are captured and unique to each person for the purpose of facilitating health care, access to education, procurement of international passport, driver's license and vehicle number plates for crime detection and prompt apprehension of criminals. Other opportunities that exist for the FRSC include:

- An electronic national driver's license, vehicle, and offenders register hosting over 10 million records managed by Federal Road Safety Corps officials which can be integrated into a national database. This should be accessible to all the security agencies.

- Twelve number plate production plants for the production of number plates as well as driver's license workstations infrastructure in each state of the federation for production of driver's license. It is important to build on this to reduce the waiting period of subscribers.
- An ultra-modern communication centre including a 3-digit emergency number, 122 that facilitates 15 minutes' response time to road traffic crash victims
- Emergency ambulances and road side clinics located at crash-prone areas for prompt response and first aid medical treatment to road traffic crash victims;
- Corporate strategic road map with the vision of eradicating road traffic crashes in Nigeria: aimed at transiting Federal Road Safety Corps from an enforcement Agency to a regulatory Agency and manager of federal highways;
- Production of National Road Safety Strategy envisioned to address consistent road crashes and zero death; Generally, the FRSC is faced with the following challenges:
- lack of electronic monitoring facilities on the highway
- insufficient collaboration among various highway security agencies
- Inadequate capacity by highway security agencies
- Unreliable identity check mechanism
- Lack of ICT security gadgets, and
- Inadequate equipment to cover the entire country

Military Defence

i. Nigerian Army

The Nigerian Armed Forces currently have 200,000 troops and over 300,000 para military personnel on active duty. The mandate of the Armed Forces are to:

- Defend the territorial integrity of Nigeria and provide aid to civil authority to attain a safe and secure environment for economic growth
- Achieve a full complement of the military defence system of Nigeria in air, sea and on the ground.

Table 3.42 shows the various formations of the Nigerian Army

Table 3.42: Nigerian Army Formations

Division	Coverage	Area of Responsibility	Main Operations
1 Division	Kaduna	North West	A mechanized infantry with affiliated combat service units
2 Division	Ibadan, Oyo State	South West	A mechanized infantry with affiliated combat service units
3 Division	Jos	North Eastern flank	Armoured division with affiliated combat support and combat service support units
6 Division	Port-Harcort	Niger Delta/Coastal region	Charged with the responsibility of securing the Niger Delta/coastal region with its critical national oil and gas assets and infrastructure.
81 Division	Lagos Garrison Command	Lagos and Ogun	Mechanized infantry affiliated with combat support and combat service units
82 Division	Enugu	South East and South-South flanks	Composite Division with affiliated combat support and combat service support units
7 Division	Maiduguri	North-eastern States	Counter insurgency
8 Task Force Division	Maiduguri	North-eastern States	Task Force Division responsible for Operation Dole
Guards	Abuja	FCT- Presidential Villa and Brigade Presidential wing of the Airport	Responsible for the protection of the President, the Presidency, and the Presidental Villa

Source: Nigerian Army

Some of the challenges of the Nigerian Army includes:

- Amorphous nature of the enemy: decentralized and loosely connected – capable of taking decisions and springing surprise attacks
- Urban warfare: Enemies operate in urban areas and urban operations are the most difficult and consume a lot of manpower
- Porous borders which facilitate arms proliferation and cross border infiltration by terrorist groups.

ii. Nigerian Air force

The Nigerian Air Force is adjudged to be one of the largest in West Africa with manpower of about 10,000 personnel stationed around ten bases. The Air Force is organised to meet current requirements of the service and the defence needs of the country. Its current structure consists of six (6) principal staff branches, four (4) Direct Reporting Units and four (4) Operational Commands. The main opportunity available for the Air Force is the use of communications satellites and unmanned aerial/ground/surface vehicle. This provides capabilities for effective surveillance, tactical mobility, border patrol, military operations, disaster and emergency management and monitoring of critical infrastructure such as pipeline monitoring.

The Air Force has opportunities to use communication satellites and Unmanned Aerial/Ground/Surface Vehicle across the globe (e.g. in Israel, China, Iraq, Afghanistan, Sri Lankan, Iran, Europe, Russia, USA, South-Africa,

France, South-Korea, India/Pakistan and Singapore etc). This will greatly improve the effectiveness of the military in providing capabilities for effective surveillance, tactical mobility, border patrol, military operations, disaster and emergency management and monitoring of critical infrastructures such as pipeline monitoring, medical evacuation, protection of Maritime Resources (Maritime Air Patrol, Maritime Air Defence, Anti-Shipping) as well as protection of energy resources.

The challenges facing the Air Force include:

- Dilapidated Runways and Taxiways at (Kaduna, Kainji, Makurdi and Port Harcourt). Navigational Aids/ Radars.
- Inadequate Operational Support Facilities.
- Ineffective Hangar Facilities and Workshops. Staff/Crew Utility Vehicles
- Unserviceable Bulk Fuel Installations
- Inadequate Electronic Communications/Radars, navigational aids, control tower/base ops equipment, and meteorological equipment)
- Insufficient Information Communication Technology
- Unserviceability of aircrafts
- Insufficient Funding
- Inadequate ammunition storage facilities
- Shortage of manpower
- Inadequate infrastructure and training aids
- Dearth of ground-based air defence systems.

iii. Nigerian Navy (NN)

The Nigerian Navy is responsible for the naval defence of Nigeria; assisting to enforce customs laws; carrying out hydrographical surveys and safeguarding the country's maritime economy especially in the oil and gas sectors. The Navy currently has 39 vessels and more than 10 helicopters split between the Western Naval Command and the Eastern Naval Command. The main infrastructure-related mandate of the Navy is to develop infrastructure support for sustaining its operational, administrative and welfare responsibilities for the next two decades. The following represent challenges facing the Nigerian Navy:

Poor maritime and air domain Intelligence Surveillance and Reconnaissance (ISR) awareness of Nigeria's maritime environment vis-à-vis the Gulf of Guinea;

- Lack of target identification and maritime picture compilation within Nigeria's maritime environment and the Gulf of Guinea;
- Coastal observation posts;
- Quick response to emergencies at sea with essential facilities such as jetties, armouries, fuel dumps or Petroleum, Oil and Lubricant (POL) reservoirs, helicopter landing pads, offices, and accommodation quarters;
- Platforms available to the NN are unsuitable and inadequate when compared with the essential requirements for effective maritime policing that would enhance the nation's maritime security;
- Maritime Patrol Aircraft for the surveillance of vast expanse of sea;

- Helicopters for patrolling coastal areas from operational bases, preferably FOBs, for refuelling and basic maintenance; and
- The present equipment holding of the NN cannot adequately meet the emerging threats for the effective maritime defence of Nigeria as envisaged in the National Defence Policy and the transformation objectives of the Armed Forces.

Table 3.43: Specific Achievements of the Security Sector

a) External Security (Nigerian Army, Nigerian Navy, Air Force etc)

S/N	ASPIRATIONS AND TARGET	ACHIEVEMENTS/YEARS						
		2014	2015	2016	2017	2018	2019	2020
1	End insurgency in the North-East, banditry in the North-West and other forms of insecurity in Nigeria	**ARMY** i. Conducted Ops CRACK DOWN, GAMA AIKI and RESCUE FINAL to capture the hitherto notorious towns of Damasak, Kangarwa, Gashigar Allargarno, Sambisa Forest amongst others in Northern Borno ii. Supplied 1,230x 105mm Hen shells and accessories, NA were procured iii. Provided Sewing Qty. 42,617 Pairs of Desert Camouflage Uniforms to the NA. Provision of Uniforms and Other Kitting Items iv. Constructed Counter Terrorist/ Counter Insurgency (Ct/Coin) Buildings by NA Engineers v. Procurement of Ammunition by NA	**ARMY** i. Constructed across the nation Soldiers Accommoda -tion by Nigerian Army ii. Fencing of Biu Barracks. NA iii. Constructed Offices and Residential Accommodation in Maiduguri Nigerian Army. iv. Procurement of Ammunition by NA **NAVY** i. Established NOP LAKE CHAD. The deployment of personnel and boats by NN **JSD** i. Rehabilitated Military Cemetery, Maiduguri, Borno State by JSD	**ARMY** i. Procurement of Ammunition by NA ii. Construct the BDE at Mubi Adamawa State iii. Rehabilitated 19 Units of 5 Family CBQ, 7 Units of 2 Bedroom SNCO (Twin) at Nigerian Army Barracks, Gombe State **AIRFORCE** i. Procured Super Mushshak Aircraft NAF ii. Procured 2 X Mi-35m Helicopters iii. Purchased Various Arms and Ammo e.g. 30mm Canon, 68mm Sneb Live Rocket, F3 & F4 Practice Bomb etc. – NAF iv. Infrastructural Development at Newly Established Forward Operational Bases (Fobs) a NAF Units across the nation. v. 10 x Super Mushshak aircraft procured	**ARMY** i. Op DEEP PUNCH and deployed strike teams by NA for the complete defeat of the Boko Haram Territories in Nigeria ii. Relocation of 1 Brigade from Sokoto to Gusau iii. Operation HARBIN KUNAMA II (Zamfara, Katsina and Sokoto States by NA iv. Procurement of Ammunition by NA **AIRFORCE** i. 3000 Pcs of Jericho Pistols and Various Arms and Ammo by NAF ii. Provided Facilities for K-9 Unit by NAF	**ARMY** i. Development Project of Damboa Army Barracks: ii. Developed Project of Damboa Army Barracks: iii. Established NA Special Forces School in BuniYadi Yobe State iv. Procurement of Ammunition by NA **AIRFORCE** i. Procured Quantity 3 x JF-17 Thunder Aircraft Spares and Support Equipment ii. Procured 2 X Agusta Aw109 Power Helicopters iii. Periodic Depot Maintenance of C-130h Aircraft (NAF 918) iv. Procurement of Various Arms and Ammo, Including Aircraft Ammo v. Upgraded and Rehabilitated Existing Barracks infrastructure by NAF	**ARMY** i. Constructed Barracks in Dutse, Jigawa- NA ii. Renovated NA Barracks Azare Bauchi State: iii. NA completed the Phase One of Construction of NA Aviation Operation Base Jaji: Constructed the Perimeter Fence at Maimalari. Contonment Constructed 5,546m Length Fence - NA iv. Operation AYAM AKPATUMA (Benue, Nasarawa and Taraba States) to address banditry/ Farmers -Headers clashes and other criminalities. v. Procurement of Ammunition by NA	**ARMY** i. Created Two New Army Divisions (6th and 8th Divisions) ii. Construct and Equipped the Counter Terrorist Village at NDA Permanent Site NDA Afaka iii. Procurement of Ammunition by NA **AIRFORCE** i. Procured 12 Super Tucano Aircraft, other important platforms and military hardware: 80% delivery of the first batch already achieved, while the delivery of the Super Tucano Aircraft is expected to commence by July this year; and Considerable progress has been recorded in the latest process of critical equipment procurement, with contract agreement already executed and letters of credit established in favour of seven Chinese Original Equipment Manufacturers.

S/N	ASPIRATIONS AND TARGET	ACHIEVEMENTS/YEARS						
		2014	2015	2016	2017	2018	2019	2020
		NAVY i. NN Participated in Op LAFIYA DOLE		and currently used for primary training of student pilots at 401 FTS Kaduna by NAF		vi. Part Payment for the Procured 3 X Jf-17 Thunder Aircraft, Support Equipment and Spares – NAF		
2	Secure Nigeria's territorial waters and end piracy in the Gulf of Guinea		**ARMY** i. Established a Battalion at Yenegoa, Bayelsa State. NA **NAVY** i.Procured Short Range and Ssm, Freight in gsam, 30mm of 2 forward units of 24.08 gun and metre 12.7 fast mm Aft attack gun craft	**NAVY** i. Acquired Capital Patrol Platforms across the country. ii. Upgraded the Regional Maritime Awareness Capability (RMAC) facility and installed FALCON EYE Surveillance infrastructure across the country.	**AIRFORCE** i. Provided Fleet Support Infrastructure across the country by NAF	**NAVY** i. Procured 3 X 9.5m Rigid Hull Inflatable Boats (RHIBS) – SBS by NN ii. Procured 2 X Tug Boats by NN iii. Restocked the Nod with Arms, Ammunition, Webbing and Ballistic Equipment – NN iv. Procured 1 X 38m Seaward Defence Boats	**NAVY** i. Procured 4 X 17m Inshore Patrol Craft ii. Acquired 3 X 24m Ocean Boats iii. Procured 5 X 8.2 Metre Flat Bottom Boats To SBS For The NN	**NAVY** i. Reduced Pirates activities in Nigerian Waters through Naval operations in the Nigerian territorial waters. ii. Shared Information with other Gulf of Guinea States through (C4I)
3	Protect Nigerian Oil installations on and offshore	**ARMY** i. Conducted Ex CROCODILE SMILE exercise which resulted in routing the militants from their hideouts and camps. Several illegal bunkers and oil thieves including arms and ammunition were captured by NA. **NAVY** i.Introduced the Choke Point Regime. NN's effort to make good its zero tolerance to crude oil	**NAVY** i. Acquired 2 X Offshore Patrol Vessels by NN ii. Procured mm Forward Gun, of 2 medium units of range 35.6 Metres ssm, Short fast range patrol/Attack sam and 12.7 craft mm with a ft Gun 30 by NN	**NAVY** i. Procured Hydrographic Survey Boats across the Naval Bases in the country. ii. Constructed landing ship tank for provision of sealift. iii. Nine (9) checkpoints established while 28 additional checkpoints have been identified for establishment of Naval Security in the Niger Delta Creeks.	**NAVY** i. NN Command of OPERATION DELTA SAFE: This led to arrest of ships, disruption of Illegal refineries, arrest of Barges, Wooden boats, Suspects arrested, Speed boats, Tanker trucks and Vehicles impounded. Percentage of attacks on shipping foiled is 61.76 per cent	**NAVY** i. Procured Hydro Survey Ship ii. Procured landing ship tank iii. Procured Arms and Ammo (50 X 12.7mm Browning Machine Gun from CAA) iv. NN Command of OPERATION DELTA SAFE: - Ships arrested. -illegal refineries disrupted. -78 Barges arrested -95 Wooden boats	**NAVY** i. Supply of 4 X Flat Bottom Boats to SALD for the NN, Port-Harcourt ii. Supply Of 5 X Flat Bottom Boats To SALD For The NN, Sapele	**NAVY** Reduction of Oil Theft and Illegal Bunkering, leading to increase in oil production. Operation RIVER SWEEP - The operation involved air surveillance, insertion of Special Forces, pulling down of identified illegal refining sites with the use of Swamp Buggies as well as arrest/ destruction of boats and barges found in such locations. Activated Operation DELTA SAFE: (Protection of Oil & Gas installations). Activated the Operation AWATSE: Helped to check the activities

S/N	ASPIRATIONS AND TARGET	ACHIEVEMENTS/YEARS						
		2014	2015	2016	2017	2018	2019	2020
		theft				arrested -573 Suspects arrested -169 Speed boats arrested -39 Tanker trucks arrested -31 Vehicles impounded Percentage of attacks on shipping foiled is **75.76 per cent.**		of Oil Pipeline Vandals within Lagos and Ogun Axis. Reduced Oil Theft and Illegal Bunkering, leading to increase in oil production. Provision of Escorts to Oil Companies Staff and Vessels. **NAVY** Constant Patrol of Waters by the NN ships and Helicopters to check illegal fishery, Oil theft/ illegal Bunkering: Total number of pirate attacks dropped by 74.03% success rate
4	Develop and maintain central security database among all security Agencies.		**ARMY** i. Procured Stimulator off or pyrotechnics military Training and Battle Master Weapon Training System	**ARMY** i. NA maintained robust partnerships with friendly/allied countries around the world. Some of the countries included ECOWAS/ LCBC Countries, Belarus, Germany, India, Pakistan, Russia, South Africa, Turkey, UK and USA amongst others. Major areas of partnership include, equipment procurement and technology transfer.		**ARMY** i. Design Fabrication and Launch of DSA R2-18 at DSA, FCT ii. Constructed New Headquarters of Nigerian Army Intelligence Corps Complex		**DICON** Intelligence Sharing/ cooperation amongst the fusion cells of the Various Security Agencies.
5	Develop an effective and functional Defence Industry	**DICON** i. Constructed Training Schools	**ARMY** i. Establishment of Nigerian Army Resource Centre (Abuja)	**DICON** i. Constructed Primer Cap Production line ii. Constructed Security Buffer Zone/	**ARMY** i. Established new formations, institutions and units including 2 new Divisions (6 and 8	**ARMY** i. Constructed 82 Div. Medium Water Treatment Plant at Abakpa Cantonment Enugu (NA	**ARMY** i. Upgraded Division Ordnance Tailoring Factories (DOTF) - NA	**DICON** i. Skills Acquisition and job Creation. ii. Completed 50 Bed Hostel at DICON, to Provide Suitable

S/N	ASPIRATIONS AND TARGET	ACHIEVEMENTS/YEARS						
		2014	2015	2016	2017	2018	2019	2020
			DICON i. Established a military and paramilitary Clothing and Accessories Factory in Kaduna – DICON	Access Control iii. Turn-Around Maintenance and Rehabilitation of Machine	Divisions), NA Cyber Warfare Command, NA Special Forces Command, NA Farms and Ranches Limited and NA Vehicle Manufacturing Company amongst others **NAVY** i. Capacity Development - NN **DICON** i. Renovated 113 Dilapidated Senior and Junior Staff Quarters- DICON ii. Constructed of Staff Quarters- DICON	Local Content **DICON** i. Constructed Seaward Defence Boat III by NDL ii. Procured Raw Materials, Tools and Toolings for Existing Production Lines iii. Renovated 113 Dilapidated Senior and Junior Staff Quarters- DICON iv. Constructed Staff Quarters- DICON v. Established Metallurgical Laboratory for R&DC vi. Established Material Testing Laboratory for R&DC vii. Constructed and Furnished 50 Bedroom Hostel Accommodation for DICON Training School	NAVY i. Upgraded the NSL for shipbuilding and third line maintenance capabilities - NN ii. Upgraded the NN Cen Workshop to support the Establishment of the Nigerian Army Industrial Complex **DICON** i. Installed and Supported for Production Lines - DICON ii. Turn-Around Maintenance and Rehabilitation of Machines - DICON iii. Established Chemical Laboratory for R&DC iv. Equipped Mechanical Laboratory - DICON v. Constructed Administrative Block for Primer Cap Production Line - DICON Furnished Training School - DICON	Accommodation for Trainees. iii. Commissioned some Locally Produced Military Hardware, iv. ICT Security Infrastructure at DICON
6	Collaborate with other Security Agencies to ensure domestic security	-	-	-	-	i. Conducted of annual EXERCISE OBANGAME EXPRESS WITH allied countries such as the USA, UK, France, Spain, Brazil, Ghana, Cameroun etc.	-	i. Built capacity on inter-agency synergy ii. Collaboration amongst AFN, Nigerian Police, Nigerian Security and Civil Defence Corps, National Intelligence Agency and Department of State Security in the following operations: iii. Operation HADARIN DA`JI (OPHD) in Zam-

S/N	ASPIRATIONS AND TARGET	ACHIEVEMENTS/YEARS						
		2014	2015	2016	2017	2018	2019	2020
								fara, Katsina, Sokoto and Kebbi States iv. Operation WHIRL PUNCH (OPWP) in Kaduna - Birnin Gwarri Road and Niger State v. Operation WHIRL STROKE in Benue, Nasarawa and Taraba States. vi. Operation THUNDER STRIKE – Abuja –Kaduna Road
7	Actively Collaborate With The Private Sector To Create A Large Number Of Well-Paying Jobs For Nigerian Youths Through Defence Industrial Efforts	**JSD** i. Completed Military Specialist Hospital, Kano, Kano State by JSD ii. Establish Zonal Educational Offices in Abuja, FCT and Ikeja, Lagos by JSD iii. Handed over NDA permanent site, Mando Road, Kaduna, Kaduna State by JSD iv. Rehabilitate National War Museum Umuahia by JSD	**ARMY** i. Improved Water Supply in NA Barracks **NAVY** i. Constructed 3 NN Schools **JSD** i. Rehabilitated Military Cemetery, Ikeja, lagos State by JSD ii. Rehabilitated National War Museum Umuahia by JSD iii. Rehabilitated Barracks nationwide by JSD	**ARMY** i. Barrack Rehabilitation (68 NARHY): Rehab of Soldiers' Blocks, Hospital in Gibson Jallo Cantonment, Yola ii. Completion of the Upgrade of 44 Nigerian Army Reference **NAVY** i. Procured of Training and other Infrastructural Upgrade Requirements, NN **AIRFORCE** i. Established Training Institutions at NAF Base Yola, Ipetuljesa and Kaduna **JSD** i. Completed 18 Projects in the Six Geo-Political Zones by JSD ii. Rehabilitate Barracks nationwide by JSD	**NAVY** i .Infrastructural Development of Nigerian Navy Schools **AIRFORCE** i. Rehabilitated Educational Infrastructure and Procured E-Learning Aids in Nigerian Air Force Schools. **DICON** i. DICON collaborated with 14 other private investors for local production and maintenance of military equipment/ platforms as well as the upgrade of the Defence Industries. **JSD** i. Completed 30 Project sites in the Armed Forces Barracks nationwide by JSD	i. About 11,000 young able-bodied Nigerians were recruited trained and equipped during the period (2017 - 2018). **ARMY** i. A set of about 4000 recruits were trained by the NA. ii. Procured and Installed Equipment for 44 Nigerian Army Reference Hospital Kaduna iii. Phase I of Muhammadu Buhari Barracks Giri Abuja: iv. Constructed Bde HQ at Makurdi: v. Constructed Transit Accommodation for Officers in 81 Div, Lagos: vi. Renovated Damaged HQ 35 Artillery Brigade Complex and Garrison Offices, Alamala	**ARMY** i. Provided and Rehabilitated Primary Healthcare Facilities in NA Units: ii. Acquired Accommodation for Soldiers in the FCT: NA iii. Constructed a Battalion at Doma, Nassarawa State by NA iv. Renovated Abandoned/ Dilapidated 10 x 30 Family CBQ Blocks D22, D51, D54, D87, D93, D123, D125, D144, D145 and D150 at Maxwell Khobe Cantonment Jos v. Rehabilitated and Renovated Officers and Soldiers Accommodation in Nigerian Military School Zaria vi. Establishment of Army Command and NAOWA Hospital Abuja vii. Establishment of	**ARMY** i. Constructe New Military Barrack for Guards Brigade and AHQ Garrison in Abuja ii. Movement of Headquarters Nigerian Army Physical Training School from Zaria to Giri Cantonment Abuja (Phase One) iii. Construction of Feeder Roads in Isuikwuato/ Umunneochi iv. Movement of Headquarters Nigerian Army School of Finance and Administration (NASFA) to Ojo **NAVY** i. Rehabilitation of Defence Jetty, Marina Lagos. ii. Rehabilitat and Upgraded Naval Dockyard, Apapa, Lagos **DICON** i. Established Military and Para-military Clothing and Accessories Factory at DICON, Kaduna **JSD**

S/N	ASPIRATIONS AND TARGET	ACHIEVEMENTS/YEARS						
		2014	2015	2016	2017	2018	2019	2020
						Barracks Abeokuta: **NAVY** i. Upgraded Medical Centres and Sickbays by the NN ii. Constructed Institutional Houses and Provided Infrastructure in Navy Schools. iii. Established Navy Primary School Kuje iv. Established NN Secondary School Zindi v. Developed Special Boat Services Training Centre at Navy Town, Ojo, Lagos State **AIRFORCE** i. Infrastructural Development in Newly Established NAF Bases, Bauchi, Lagos, Kaduna and Abuja. **DICON** i. Equipped Training School – DICON **JSD** i. Rehabilitated Kaduna and Lagos Military Cemetery by JSD ii. Rehabilitated Barracks nationwide by JSD	NA Special Forces School in BuniYadi Yobe State **NAVY** i. Established Naval War College. ii. Established Naval Intelligence school. iii. Established Naval military school. **JSD** i. Rehabilitated Barracks nationwide by JSD ii. Rehabilitated Military Cemetery (Abuja and PH) by JSD iii. Constructed New iv. Accommodation buildings at Keffi, Gwagwalada and Suleja Guards Brigades by JSD	i. Rehabilitate Barracks nationwide ii. Completed (85%) Armed Forces PTI School and Games Village Esa-Oke

b) Internal Security (FFS, NIS, NSCDC, NCoS)

S/N	Project Title	State	Geo-Political Zone	Percentage Completion
Ministry of Interior (Main Ministry)				
1.	Installation of Fire Fighting Equipment at Headquarters	FCT	North-Central	100%
2.	Installation of Hologram Machine	FCT	North-Central	100%
3.	Rehabilitation of Ministry's Headquarters	FCT	North-Central	100%
4.	Automation of Business and Citizenship Permit and Expatriate Quota	FCT	North-Central	100%
5.	Establishment of Inter-Agency Situation Room	FCT	North-Central	60%
Nigerian Correctional Services (NCoS)				
6.	Construction of Medium Security Custodian Yobe,Yobe State	Yobe	North - East	60%
7.	Construction of Damaturu New Custodian Centre Yobe, Yobe State	Yobe	North - East	100%
8.	Construction of Boundary Fence at Auchi, Edo State	Edo	South-South	100%
9.	Construction of Access Road (Major Road/Car Park 270M with Asphalt Finishing at Correctional Centre Koton-Karfe, Kogi State	Kogi	North-Central	10%
10.	Construction of 1 No Storey Blocks of 8 Units Bedroom Flat at the Correctional Centre Koton-Karfe, Kogi State	Kogi	North-Central	100%
11.	Rehabilitation of Controller of Correctional Service Quarters at Lokoja, Kogi State	Kogi	North-Central	100%
12.	Extension of High Tension Line at Okene Correctional Centre, Kogi	Kogi	North-Central	95%
13.	Completion of Fence at Suleja, New Correctional Centre, Niger State	Niger	North-Central	100%
14.	Construction of Workshop at Suleja, New Correctional Centre, Niger State	Niger	North-Central	25%
15.	Construction of Boundary at Suleja New Correctional Centre, Niger State	Niger	North-Central	100%
16.	Construction of Clinic at Suleja New Correction Centre, Niger State	Niger	North-Central	70%
17.	Consruction of 1 No Block of 1 Unit 1 Bedroom Flat at Suleja New Correctional Centre, Niger State	Niger	North-Central	70%
18.	Construction of Fence at CP Quarters, Lafia Nasarawa State	Nasarawa	North-Central	100%
19.	Construction of Storey Building Cell Block 212 at New Correctional Service Maiduguri, Borno State	Borno	North-East	Abandoned
20.	Hospital at Maximum Security Maiduguri, Borno State	Borno	North- East	Abandoned
21.	Renovation of Staff Quarters at Afikpo Lga, Ebonyi State	Ebonyi	South- East	40%
22.	Fencing of Prison Land at Umuahia, Abia State	Abia	South- East	100%
23.	Construction of 4 Units Bedroom Flats at Arochukwu, Abia State	Abia	South- East	100%
24.	Construction of Boundary Fence to Correctional Service Land at Owerri, Imo State.	Imo	South- East	100%
25.	Completion of Long Span Aluminium Roofs on Medium, Oyo State	Oyo	South- West	100%
26.	Construction of 4 Nos Boreholes at 400 Correctional Centre Ibadan, Oyo State	Oyo	South- West	100%
27.	Construction of Kitchen at the Birnin-Gwari Correctional Center, Kaduna	Kaduna	North- West	40%
28.	Construction of 1 No. Block of 4 Units 1 Bedroom Flats at the Satellite Correctional Service, Kujama, Kaduna State	Kaduna	North- West	100%
29.	Construction of 1 No. Block of 4 Units 1 Bedroom Apartment at the Kubacha Correctional Centre, Kujama Kaduna State	Kaduna	North- West	100%
30.	Construction of 3 Units Cell Block at the Kujama Farm Centre, Kaduna State	Kaduna	North- West	100%
31.	Construction of 72 Rooms Student Hostel at PSC, Kaduna State	Kaduna	North- West	100%
32.	Construction of Civil Works to Auditorium at the Correctional Staff College, Kaduna State	Kaduna	North- West	20%
33.	Construction/ Completion of 250 Standard Auditorium at the Correctional Staff College, Kaduna State	Kaduna	North- West	100%

S/N	Project Title	State	Geo-Political Zone	Percentage Completion
34.	Rehabilitation of Internal Roads (Phase B 2) at the Correctional Staff College, Kaduna State	Kaduna	North- West	100%
35.	Construction of Observation Tower, Katsina State	Katsina	North- West	100%
36.	Command Erosion Control of the Perimeter Fence Uyo, Correctional Centre, Akwa-Ibom	Akwa -Ibom	South-South	
37.	Construction of Broiler House, Lagos State Command, Lagos State	Lagos	South-West	100%
38.	Construction of Boundary Fence (2,418Mx 99,667.25M) for 3000 Capacity Correctional Center at the Janguza, Kano State	Kano	North-West	87%
39.	Construction of Access Road/Parking Lots at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	95%
40.	Construction of Patrol Roads at the 3000 Capacity Correctional Centre Kano, Kano State	Kano	North-West	95%
41.	Construction of Internal Access Road/Parking Lots at the 3000 Capacity Correctional Centre,Kano, Kano State	Kano	North-West	97%
42.	Provision of Water Supply at the 3000 Capacity Correctional Service, Kano, Kano State	Kano	North-West	85%
43.	Provision of Electrification at the 3000 Capacity Correctional Centre, Kano, Kano State	Kano	North-West	83%
44.	Construction of Central Sewage System Integrated Waste Treatment Plant at the 3000 Capacity Correctional Center Kano, Kano State	Kano	North-West	93%
45.	Construction of Standard Perimeter Fence Measuring (1,490 X 220.000) at the Correctional Centre, Kano State	Kano	North-West	90%
46.	Construction of Adminisrative Block (364X12.099.00) at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	85%
47.	Construction of maximum Custody at (136) 3000 Capacity Correctional Kano, Kano State	Kano	North-West	90%
48.	Construction of Medium Custody Block 1 (160) at the 3000 Capacity Correctional Center, Kano State	Kano	North-West	93%
49.	Construction of Medium Custody Block 2 (160) at the 3000 Capacity Correctional Center, Kano State	Kano	North-West	90%
50.	Construction of Medium Custody Block 3 (160) at the 3000 Capacity Correctional Center, Kano State	Kano	North-West	87%
51.	Construction of Dormitory Custody Block 1(216) at the 3000 Capacity Correctional Centre Janguza, Kano State	Kano	North-West	83%
52.	Construction of Dormitory Custody Block 2(216) at the 3000 Capacity Correctional Centre Janguza, Kano State	Kano	North-West	97%
53.	Construction of Dormitory Custody Blocks At 1(216) at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	95%
54.	Construction of Medium Custody Block 1 (160) at the 3000 Capacity Correctional Center, Kano State	Kano	North-West	93%
55.	Construction of Kitchen (1464M 3X120.66) at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	92%
56.	Construction of Hospital (110.81 X160.000) at the 3000 Capacity Correctional Center, Kano State	Kano	North-West	90%
57.	Construction of Inmates Vocational Centre (1474 X 160.00) at the 3000 Capacity Correctional Center, Kano State	Kano	North-West	88%
58.	Construction of Indoor Games Hall (84V12 X 3Nox99.000) at the 3000 Capacity Correctional Center, Kano State	Kano	North-West	93%

S/N	Project Title	State	Geo-Political Zone	Percentage Completion
59.	Construction of Football Pitch at The 3000 Capacity Correctional Centre, Kano State	Kano	North-West	90%
60.	Construction of Chapel at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	95%
61.	Construction of 10 Nos Observatory Post/ Tower at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	89%
62.	Construction of Laundry (268-13) at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	88%
63.	Construction of 3 Bedroom Bungalow with a Boys Quarters at the 3000 Capacity, Kano State	Kano	North-West	88%
64.	Construction of 4 Units of 3 Bedroom Bungalows (584.06 X120,000) at the 3000 Capacity Correctional Centre. Kano State	Kano	North-West	90%
65.	Construction of 8 Units 2 Bedroom of (1072 X 120,000) Flat 4 (4 Floor) Block 4 at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	92%
66.	Construction of 32 Units 1 Bedrooms Block of 4 Floors Of (3,217.52 X 120,000) Block at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	90%
67.	Construction of Dormitory Custody (C2) at the 3000 Capacity Correctional Center, Kano State	Kano	North-West	95%
68.	Construction of Medium Custody Block (C2) at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	98%
69.	Construction of 8 Units 2 Bedroom of Block Flats (4 Floors) at the 3000 Correctional Centre, Kano State	Kano	North-West	93%
70.	Construction of Maximum Custody Block (At3) at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	95%
71.	Construction of Medium Custody Blocks (Ct3) at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	91%
72.	Construction of Central Sewage System (Integrated Waste Treatment Plant at the 3000 Capacity Correctional Centre, Kano State	Kano	North-West	93%
73.	Construction of a 250 Seat Auditorium at the Correctional Centre, Karshi, Abuja	FCT	North-Central	95%
74.	Construction of a Central Store at the Correctional Centre, Karshi, Abuja	FCT	North-Central	95%
75.	Construction of a Boundary Fence (2,418M) for 3000 Capacity Correctional Centre, Karshi, Abuja	FCT	North-Central	85%
76.	Construction of a Gate/ Gatehouse at the 3000 Capacity Correctional Centre, Karshi, Abuja	FCT	North-Central	0%
77.	Construction of a Security Observation Towers (1 No Central and 4 Nos Subsidiary Post) 3000 Capacity Correctional Centre, Karshi, Abuja	FCT	North-Central	15%
78.	Construction of Access Road / Parking (Provisional) at the 3000 Capacity Correctional Centre (Asphalt) Karshi, Abuja	FCT	North-Central	0%
79.	Construction of a Concrete Perimeter Fence 3000 Capacity Msp, Karshi, Abuja	FCT	North-Central	15%
80.	Construction of Administrative Block at the 3000 Capacity, Karshi, Abuja	FCT	North-Central	15%
81.	Construction of a Maximum Custody SAT 13000 Capacity Correctional Centre, Karshi, Abuja	FCT	North-Central	15%
82.	Construction of a Maximum Custody SAT 1 3000 Capacity Correctional Centre, Karshi, Abuja	FCT	North-Central	15%
83.	Construction of a Dormitory SAT 1 (216) 3000 Capacity Correctional Centre, Karshi, Abuja	FCT	North-Central	15%
84.	Construction of a Dormitory SAT 2 3000 Capacity Correctional Centre, Karshi, Abuja	FCT	North-Central	15%
85.	Construction of a Dormitory SAT 2 3000 Capacity Correctional Centre, Karshi, Abuja	FCT	North-Central	15%
86.	Construction of a Dormitory SAT 2 3000 Capacity Karshi, Abuja	FCT	North-Central	0%

S/N	Project Title	State	Geo-Political Zone	Percentage Completion
87.	Construction of a Dormitory SAT 2 (160) 3000 Capacity Correctional Centre Karshi,Abuja	FCT	North-Central	15%
88.	Construction of a Medium Custody Block SAT 3 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	85%
89.	Construction of a Dormitory Sat 2 (160) 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
90.	Construction of a Dormitory SAT 2 (160) 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
91.	Construction of a Medium Custody Block SAT 1 3000 Capacity Correctional Centre, Karshi, Abuja.	FCT	North-Central	0%
92.	Construction of a Medium Custody Block Ct 2 (160) at the 3000 Capacity Karshi, Abuja	FCT	North-Central	20%
93.	Construction of a Medium Custody Block Ct 3 at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
94.	Construction of a Kitchen at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
95.	Construction of a Prison Hospital at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
96.	Construction of Inmates Vocational Centre (1474M2) / Production Centre at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
97.	Construction of Indoor Games Hall (14,830,074 X 3) at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	60%
98.	Construction of a Mosque at 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	25%
99.	Construction of a Chapel at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	50%
100.	Construction of a Squash Court (for Inmates) at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	86%
101.	Construction of Laundry (268.13) at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	60%
102.	Construction of a 3 Bedroom Bungalow with Boys Quarters at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
103.	Construction of a 3 Bedroom Bungalow at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	86%
104.	Construction of a 4 Units Bedroom Block A at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	60%
105.	Construction of 4 Units 3 Bedroom Block B at 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
106.	Construction of 8 Units 2 Bedroom Block A at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	60%
107.	Construction of 8 Units 2 Bedroom Block B at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
108.	Construction of 8 Units 2 Bedroom Block C at 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	35%
109.	Construction of 32 Units 1 Bedroom (4 Floors) at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
110.	Construction of Indoor/ Table Tennis at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	86%
111.	Construction of 28 Units 2 Bedroom Block of Flats Block A at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	45%

S/N	Project Title	State	Geo-Political Zone	Percentage Completion
112.	Construction of 4 Units 3 Bedroom Staff Quarters Block C at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	60%
113.	Construction of 8 Units 2 Bedroom Staff Quarters Block D at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	50%
114.	Construction of 3 Units 2 Bedroom Detached Staff Quarters Block B at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
115.	Construction of 4 Units 3 Bedroom Staff Quarters Block B at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
116.	Construction of Squash Hall (Staff) at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
117.	Construction of Site Office 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	85%
118.	Construction of Boundary Fence at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
119.	Construction of 2 Nos Culvert & Provision of temporary Access Road at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
120.	Construction of Concrete Perimeter Fence at the 3000 Capacity Correctional Centre Karshi, Abuja	FCT	North-Central	15%
121.	Modification of Sally Port and Entrance Gates with Cell Burglary at the Correctional Centre, Ilorin Kwara State	Kwara	North-Central	100%
122.	Rehabilitation of Perimeter Fence at the Gumel, Jigawa State	Jigawa	North-West	60%
123.	Construction of Access Road at the New Correctional Centre, Bori Rivers State	Rivers	South-South	45%
124.	Site Clearance of New Correctional Centre, Bori, Bori State	Rivers	South-South	100%
125	Construction of Boundary Fence (2,802.73M) at the New Correctional Centre, Rivers State	Rivers	South-South	65%
126.	Construction of Main Entrance Gate at the New Correctional Centre, Bori, Rivers State	Rivers	South-South	0%
127.	Construction of Standard Perimeter Fence (1,413,38 X 128,000) Gate at the New Correctional Centre, Bori Rivers State	Rivers	South-South	15%
128.	Construction of Dormitory Block at 1 New Correctional Centre, Bori Rivers State	Rivers	South-South	10%
129.	Construction of Administrative Block at the New Correctional, Bori, Rivers State	Rivers	South-South	35%
130.	Construction of Dormitory Block at the New Correctional Centre, Bori Rivers State	Rivers	South-South	10%
131.	Construction of Kitchen at the New Correctional Centre, Bori Rivers State	Rivers	South-South	5%
132.	Construction of Anti Climb Port-Harcourt at the New Correctional Centre, Rivers State	Rivers	South-South	100%
133.	Construction of Central Sewage System (Bio Fill Integrated Waste Treatment Plant Phase 1 at the Port-Harcourt Correctional Centre, Rivers State.	Rivers	South-South	100%
134.	Construction Of 240 Bed Solid Concrete Storey Wall Block at the Port-Harcourt Correctional Centre, Rivers State	Rivers	South-South	30%
NIGERIAN IMMIGRATION SERVICES (NIS)				
135.	Construction of 2 Blocks of Rooms for the Officers of NIS at the Tulutuwa, Yobe State	Yobe	North -East	100%
136.	Installation of Radio Equipment, Yobe State	Yobe	North -East	100%
137.	Construction of New Command Complex at Ado-Ekiti, Ekiti State	Ekiti	South- West	70%
138.	Provision of Solar Powered Borehole for Zone D Headquarters with rehabilitation of facilities, Minna, Niger State	Niger	North-Central	100%
139.	Construction of Auditorium at the Headquaters, Sauka	FCT	North-Central	95%
140.	Construction of Central Store at the NIS, Sauka	FCT	North-Central	100%
141.	Construction of Fuel Dump at the Headquarters, Sauka	FCT	North-Central	100%
142.	Construction of Immigration Senior Management Staff Quarter at the Kado Abuja	FCT	North-Central	100%

S/N	Project Title	State	Geo-Political Zone	Percentage Completion
	Phase I			
143.	Construction of Immigration Senior Management Staff Quarter at the Kado Abuja Phase II	FCT	North-Central	100%
144.	Re-Construction of Main Gate at the Nigeria Immigration Service, Suaka	FCT	North-Central	100%
145.	Construction of Mechanic Workshop at the Nigeria Immigration Service, Suaka	FCT	North-Central	70%
146.	Construction of Block of 36No Room Self Contain for Senior Officer at the Headquaters, Sauka, Abuja	FCT	North-Central	90%
147.	Construction of Technology Buildings at Headquaters, Sauka, Abuja	FCT	North-Central	70%
148.	Construction of Command Office Complex at the NIS Land along Sango Road, Ilorin, Kwara State	Kwara	North-Central	50%
149.	Provision of Solar Powered Borehole at the Gurin and Michika, Adamawa State	Adamawa	North –East	100%
150.	Construction of 2 Nos 5 Room Block at the Abong, Taraba State	Taraba	North-East	100%
151.	Construction of 2 Nos 5 Room Block Obosi, Anambra State	Anambra	South-East	80%
152.	Construction and Fencing of Divisional, Anambra State	Anambra	South-East	100%
153.	Construction of New Command Complex, Enugu State	Enugu	South-East	100%
154.	Construction of Immigration Command Complex, Owerri, Imo State	Imo	South-East	90%
155.	Provision of Solar Power at the Calabar Barracks Border Control Post, Cross River	Cross River	South-South	100%
156.	Construction of Borehole at the NIS Control Post Alagbe/Ilara, Ogun State	Ogun	South-West	60%
157	Provision of 2 Nos 5 Room Block at the NIS Plot of Land Along Maiduguri Road Kiyawa LGA, Jigawa State	Jigawa	North-West	100%
158.	Provision of Solar Powered Borehole at 2 Bedroom Semi Detached Flat Dutse Jigawa State	Jigawa	North-West	100%
159.	Renovation of Maigatory Control Post, Jigawa State	Jigawa	North-West	100%
160.	Construction of Divisional Office at the Garli LGA, Jigawa State	Jigawa	North-West	100%
161.	Provision of Solar Powered Borehole at Old Command Office, Bayelsa State	Bayelsa	South-South	100%
162.	Construction of New Command Complex at Sokoto State	Sokoto	North-West	80%
163.	Provision of Solar Powered Borehole at the Kangiwa Control Post, Kebbi State	Kebbi	North-West	100%
FEDERAL FIRE SERVICE (FFS)				
164.	Construction of Metropolitan Fire Station at the Uyo, Akwa-Ibom State	Akwa Ibom	South-South	Abandoned
165.	Renovation of Federal Fire Service Ebutemetta, Surulere, Satellite Town and Apapa Station and Barracks Lagos State	Lagos	South-West	100%
166.	Construction of Metropolitan Fire Station, Kano State	Kano	North-West	Abandoned
167.	Provision of Electrification Service at National Fire Academy Sheda, Abuja	FCT	North-Central	100%
168.	Construction of Internal Road Network at National Fire Academy, Abuja	FCT	North-Central	100%
169.	Construction of Administrative Block at the National Fire Academy Sheda, Abuja	FCT	North-Central	54%
170.	Construction of Commandant Quarters at the National Fire Academy Sheda, Abuja	FCT	North-Central	100%
171.	Design and Construction of Fire House at the National Fire Academy Sheda, Abuja	FCT	North-Central	100%
172.	Renovation of Block of Flat(High Rise) at National Fire Academy Sheda, Abuja	FCT	North-Central	100%
173.	Construction of One (1) L-Shape Hostel Block at the National Fire Academy Sheda, Abuja	FCT	North-Central	25%
174.	Construction of Breathing Apparatus Gallery at the Sheda, Abuja	FCT	North-Central	45%

S/N	Project Title	State	Geo-Political Zone	Percentage Completion
175.	Construction of Flood Rescue Prop at the Sheda, Abuja	FCT	North-Central	5%
176.	Provision of Water Supply to flood Rescue Prop at Sheda ,Abuja	FCT	North-Central	40%
177.	Provision of Conventional Street Lighting at the National Fire Academy, Sheda, Abuja	FCT	North-Central	100%
178.	Construction of Access Road to National Fire Academy Sheda, Abuja	FCT	North-Central	40%
179.	Construction of 60 Nos Parking Lots at the National Fire Academy Sheda, Abuja	FCT	North-Central	65%
180.	Change of use of Clinic to Administrative Block at the National Fire Academy Sheda, Abuja.	FCT	North-Central	100%
NIGERIAN SECURITY AND CIVIL DEFENCE CORPS (NSCDC)				
181.	Construction of Administrative Complex with in-built Cell and Armoury for NSCDC Ekiti Command, Ekiti State	Ekiti	South-West	100%
182.	Construction of Administrative Complex with in-built Armoury,Edo State	Edo	South-South	40%
183.	Construction of Administrative Complex with in-built Cells and Armoury for NSCDC Corps Ibuzor, Delta State	Delta	South-South	50%
184.	Construction of One Block of 6 No of 2 Bedroom Flats In Rafiyansi, Niger State	Niger	North-Central	35%
185.	Interlocking and Paving Works in Administrative Complex with in-built Cells and Armoury in Three Arm Zone Minna, Niger State	Niger	North-Central	100%
186.	Concreting & Interlocking of Parade Ground and Quarters Guard and the Construction of Gate House & General Control of Erosion in NSCDC, Katsina State	Katsina	North-West	100%
187.	Concreting / Renovation of Cooperative Block, Reconstruction of Collapsed Fence, Replacement of Damage Roofing Materials and the Tilling Works in NSCDC, Katsina State	Katsina	North-West	100%
188.	Renovation of Inherited Staff Quarters (2 Blocks of Bedroom, 2 Blocks of 9 Bedroom) and the Renovation tf ICT/ Disaster Management Block of NSCDC College, Katsina State.	Katsina	North-West	100%
189.	Construction of Administrative Complex with in-built Armoury and Cells for Corps Taraba State,	Taraba	North-East	40%
190.	Construction of NSCDC Armoury,Admin Blocks and Offices at the Isiagwu, Anambra State	Anambra	South-East	80%
191.	Construction of Administrative Complex with in-built Cells and Armoury for NSCDC at Abakaliki, Ebony State	Ebony	South-East	100%
192.	Construction of One Block of 6 Nos. of 2 Bedroom Flats in Owerri, Imo State	Imo	South-East	50%
193.	Construction of Administrative Complex with in-built and Armoury for NSCDC, Ogun State,	Ogun	South-West	95%
194.	Construction of a Storey Building of 20 Nos of One Self Contain at the Headquarters, Abuja	FCT	North-Central	50%
195.	Construction of a Storey Building of 12 Nos of Two Bedroom Flats at the Headquarters, Abuja	FCT	North-Central	35%
196.	Construction of a Storey Building of 20 Nos of One Self Contain at the Sauka, Abuja	FCT	North-Central	80%
197.	Construction of an Automated Mechanical Workshop, Sauka, Abuja	FCT	North-Central	48%
198.	Construction of Arms Store, Sauka, Abuja	FCT	North-Central	70%
199.	Construction of Bridge between the Finance and Commandant-General Office at the National Hqt, Abuja	FCT	North-Central	100%
200.	Construction of Interlocking of the National Hqt Entrance and Parking Lot of the NSCDC, Abuja	FCT	North-Central	100%
201.	Construction of Administrative Complex with in-built Armoury and Cells at the Western Bye Pass Road, Sokoto State	Sokoto	North-West	75%
202.	Construction of Administrative Complex with in-built Armoury and Cells at the Aliero Quarters, Kebbi State.	Kebbi	North-West	80%

Source: Ministry of Defence

3.7.2 Targets for the Security Agencies

Table 3.44: Civil Defence Infrastructure Target

Sub-sector	Description	2017	2018	2023 (Target)	2043 (Target)
POLICE	Police Stations	1,598	1,743	2,206	4,057
	Standard Correctional Centres	240	241	245	272
	Correctional Service Barracks	30	50	100	200
	Training Schools	6	6	7	8
	Armouries	1	3	15	37
FIRE SERVICE	Fire Stations	322	750	1,500	2,500
	Disaster response centres	0	2	4	6
	National Data Centres	0	1	1	1
	Number of fire service training school (intermediate and officers	5	13	26	44
	Fire hydrants in major cities and towns (percentage of towns)	≤5	20	40	≥80
ROAD SAFETY	Unit Command	182	282	482	744
	Academy	0	1	3	6
	Driver's licence farm	1	3	4	6
	Number of plate production farm	3	6	9	15
	Drivers' licence centres	140	240	440	744
	Roadside accident clinic	24	124	174	400
	Training school	0	1	12	37
	Accommodation units	5	82	130	234
	Traffic incident fatality/100,000 population, numbers	4	3	3	2
	Ratio of personnel/100,000 population number	11	15	19	22
	Reduce vehicle per personnel numbers	451	350	300	200

Source: NCSDC.

Table 3.45: Military Defense Sector Target

Agency	Outcome KPI	2017	2018	2023 (Target)	2043 (Target)
Airforce	Operation Response Time	72hrs	48hrs	36hrs	12hrs
	Emergency Response Time	48hrs	24hrs	12hrs	6hrs
	Disaster Response Time	24hrs	12hrs	6hrs	1hrs
Navy	Regional Maritime Awareness Capacity	MDAs	Enhanced MDAs	TSC	TSC
	Coastal Maritime Surveillance System	MDAs	Enhanced MDAs	TSC	TSC
	Berthing Space for Ships	Poor	20%	60%	100%

Source: Ministry of Defence.

Table 3.46: Military Defence Infrastructure Target

Agency	Description	2017	2018	2023(Target)	2043(Target)
Airforce	Command (Barracks)	4	5	6	8
Navy	Naval Airforce Units	14	20	26	36
	Jetty Locations	8	12	20	All
	Slipways Location	4	10	15	All
	Dockyard/Shipment Locations	2	3	4	All
	Helipads Locationns	2	6	10	All
	Fleet Support Group Workshops	2	3	5	5
	Forward Operating Base Locations	5	10	15	15
	Communications/ICT Infrastructure Locations	6	20	100	All

Source: Ministry of Defence.

Table 3.47: Other Security Agencies Sector Targets

Sub-sector	Outcome KPI	2017	2018	2023(Target)	2043(Target)
DICON	Percentage of small arms and Ammunition produced locally	25%	45%	60%	90%
	Quality and Quantity of small arms and Ammunition supplied to security agencies	35%	50%	65%	85%
	Use of excess capacity for civilian Products	Poor	20%	40%	80%
Nig-ComSat	Satellite base communication	30%	50%	50%	50%
	Indigenous navigation system using the L-band	50%	100%	100%	100%
	Remote isolated Systems integration and connectivity between security agencies	Nil	20%	40%	100%

Source: Ministry of Defence.

3.7.3 Required Infrastructure Investments

Security is still exclusively the responsibility of the Federal Government.The NIIMP estimates that Nigeria needs to spend a total of USD 45 billion over the next 23 years on vital registration and security. This estimated amount would be spent on military and civilian security infrastructure as well as expanding infrastructure backbone for vital registration. It does not include expenditure on military and civilian security hardware, weaponry, personnel and general operations of the military and para-military agencies. Priority will be given to provision of barracks, operational buildings (stations, outstations, correctional centres, etc), training infrastructure and communication.

3.7.4 Private Sector Expectations and Priorities

The Security Sector is largely managed by the Federal Government. The recommendation on enablers for private sector participation and priorities for the Vital Registration and Security sector deals with:

- Establishment of core and support infrastructure to ensure national security
- Inclusion of security training in curricula for primary and secondary schools;

- Creation of a security training academy;
- Professional and proactive regulatory agency for private security companies
- Availability of low-interest loan facilities to private security companies; and
- CCTV and other surveillance systems installed on all roads and connected to control rooms of database and biometrics banks to support forensic laboratories.

3.7.5 Legal Enablers

The primary legislation reviewed for this sector was the Prisons Act. The provisions of the Constitution places Correctional centres solely under the purview of the Federal Government; the Prisons Act does not make provisions for the private sector to establish Correctional Centres. The Act does not allow private sector investments in the sector and encourages States participation, as only the Federal Government can regulate matters relating to the nation's Correctional Centres. There is room for the Act to be amended in order to allow States and private investors to invest in Correctional Centress in line with global best practices. Furthermore, there is need for institute reforms in the Correctional Centres, particularly with regards to decongestion of the nation's inmates.

REGIONAL INFRASTRUCTURE INVESTMENT PRIORITIES

4.0 REGIONAL INFRASTRUCTURE INVESTMENT PRIORITIES

4.1 Regional Starting Positions and Economic Priorities

Nigeria's commitments toward regional development are conveyed by her National Development Plans and such development policies like the River Basin Development Authorities Act 1990, the Niger Delta Development Commission Act 2000 and recently, the North-East Development Commission Act 2017. Also, the South East Development Commission Bill is still undergoing the processes of passage at the National Assembly. Other regional efforts include the creation of the Development Agenda for Western Nigeria (DAWN) Commission.

Central to these policies is to engender simultaneously balanced economic growth and development across the 6 geopolitical zones, and to provide the basis for regional planning and development by ensuring that both rural and urban areas are equipped to achieve equitable socioeconomic and spatial development to function appropriately in their roles in the development of the national economy. Although appreciable levels of these goals have been accomplished, existing urban-rural development disparities are attributed to weak policy implementation coordination, lack of mechanisms for regional and economic integration, weak governance framework, poor funding and inadequate resource allocation, and lack of integrated regional infrastructure clusters.

Against this background, national development plans have consistently pursued a regional development goals as means of ensure even or balanced development among the regions in the country. The most recent ERGP identified a clear need for an integrated regional development policy that will cater for Nigeria's immediate and future development needs by identifying short, medium and long-term development programmes that can drive economic growth and prosperity on the basis of a clear regional development strategy. The goal of such an integrated approach is to harness the benefits of clustering certain sectors around prevalent basic resources and to leverage the creation of economic corridors as a basis for the distribution of critical infrastructure deployment across the geo-political zones. This would promote integration, sustainable use of renewable resources, improve local participation in industries and reduce poverty.

The objectives of Nigeria's integrated regional development are to:

- galvanise all existing regional development policies into a single integrated National regional Development Policy/framework;
- formulate a system of integrated infrastructure clusters in the wider regional context;
- create a comprehensive rural-urban integration system and hierarchical ordering of settlements;
- improve access to all areas within the country;
- balance economic development of the regions; and
- achieve economies of scale and high degree of self-sufficiency in food production.

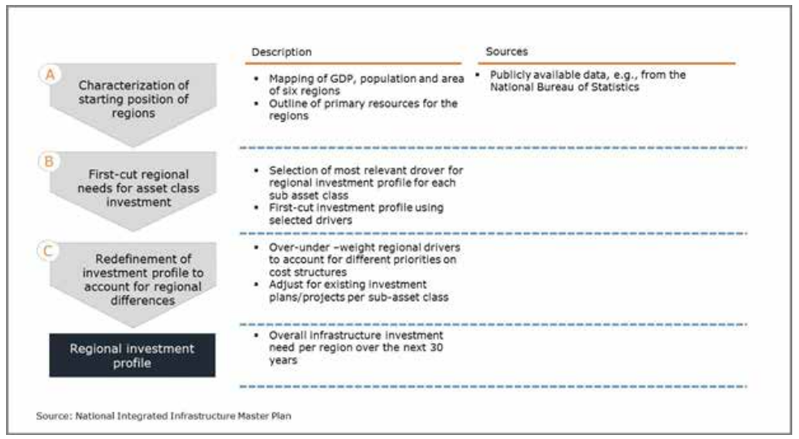
In this plan, consideration has been given to infrastructure investment requirements across regions, based on regional baselines, and natural endowments that can provide regional competitive advantage and serve as a starting block for regional planning and development of regional economic corridors.

4.2 Regional Development Potentials and Priorities

The NIIMP identified required investment priorities of the six geopolitical zones using a 3-step approach (See Figure 4.1):

- Characteristics of each region were considered, including demographical spread of population across regions, the spread of economic activities, area of the region and primary resources that can form a basis for comparative advantage for the region determine economic focus areas.
- Each of the asset classes under consideration was then reviewed and a preliminary assessment of requirements for infrastructure was performed based on the key drivers for each asset class as well as minimal infrastructure requirements;
- Finally, the requirements were adjusted based on economic development patterns and development priorities for each region (e.g., increased investments in rail are required in regions with higher potential for the mining industry, as well as for connectivity to ports). These adjustments were based on a validation workshop with the states' infrastructure TWG, followed by validation workshops in each of the six geopolitical zones.

Figure 4.1: Approach for Driving Regional Development Priorities



Specific potential and comparative advantages as well as challenges facing the various regions can be summarised as follows:

North West – The region has potentials in wind and solar energy development and is endowed with vast deposits of solid minerals (iron ore, gold, and kaolin). There is a significant potential for up-scaling agricultural production, and with an estimated population of about 49.5 million people in 2016, it is also the most populous of the 6 regions, which conveys an abundance of inherent human resources potential. The region's challenges include poor road infrastructure, a harsh climatic condition with significant threats of erosion and desertification, a weak industrial base and a rapid increase in rural-urban migration.

Recent activities of cross border bandits and cattle rustlers have heightened security related crises within the zone and has further imposed the need to enhance the existing national security and defence infrastructure in the zone.

North East – The region, being the largest of the six regions in terms of landmass, possess abundant arable land for agricultural cultivation, significant amount of surface water resources (including for hydropower), huge deposits of solid mineral (limestone, barite, coal), and vast potentials for wind and solar power development. Currently, Gas reserves in the region are being explored. However, the region's challenges include security concerns, undeveloped rural areas, lack of storage for excess agricultural produce, and lack of a detailed base map.

North Central – The region has potential in surface water resources, large solid minerals reserves (iron ore, coal, limestone, tin etc.), fertile land, skilled manpower and long stretches of inland waterways. The region's challenges include poor industrial presence, poor sanitation as only 20 per cent of the population has access to good sanitation, heavy erosion in the Jos (Plateau) area caused by uncontrolled mining, and a lack of detailed base maps for the zone.

Also, with a high and rapidly growing population influx and increased economic activities, the Federal Capital Territory has peculiar characteristics that differ from the rest of the country and the region. Its high urbanisation and population density favour manufacturing and commercial activities, but also means an over stretched urban infrastructure base and a substantial need for the rapid expansion of the infrastructure base, particularly in transportation, housing, urban city works and health and education. Being home to the nation's capital, the FCT also requires the development of particular security infrastructure development needs to match its character.

The activities of the Boko Haram insurgents have led to a gradual degradation of the public infrastructure utilities existing in the zone. This has imposed the need for rehabilitation and reconstruction of the infrastructure within the zone.

South West – The region constitutes a major economic centre of Nigeria. It has very high potentials in the supply of skilled manpower, high population density and urbanization, solid minerals (gold, glass sand, and granite), huge number of commercial clusters, high industrial density, vast network of inland waterways and very fertile land for agricultural development. The region's challenges include inadequate physical infrastructure (transport, housing, health, education and power), rapid unplanned urbanisation, high unemployment, low agricultural productivity and environmental degradation.

South East – The region has potential in oil and gas and solid minerals reserves (coal, black marble, etc). Its high urbanisation rate and population density favours manufacturing clusters as well as commercial activities of wholesale trade and retailing, and financial establishments. The region suffers from a poor infrastructure base to support intensified trade and commerce (e.g., transportation, communications infrastructure, power and water supply), as well as intense issues of erosion.

South South – The region has extremely huge potentials in oil and gas development. It possesses a very huge amount of surface water resources and a vast network of inland waterways. The region has exceptionally fertile land and favourable climate for agriculture, a huge amount of forest resources, and very high potentials for the development of tourism, seaports and inland ports. The region's challenges include poor road network, underdeveloped waterways and shores, lack of railway service (except the Port Harcourt to Kaduna link), extensive environmental degradation (oil pollution, coastal erosion and gas flaring) and security issues arising from the activities of militant groups and other violent youth militias that engage in kidnapping, sabotage and arson.

4.3 Regional Infrastructure Investment Priorities

In order to identify the regional infrastructure investment priorities, the main drivers for regional deployment of infrastructure and adjustments in this distribution were considered as shown in Table 4.1: Regional Infrastructure Investment Drivers

Table 4.1: Regional Infrastructure Investment Drivers

Sector	Responsible	Main adjustments made and rationale
Transport	• Locations of largest cities (urban transport) • Sites of economic importance (road/rail links) • Economic activity (all other assets)	• Maritime and aviation infrastructure needs to reflect major port and airport locations • Rail infrastructure requirements should consider main rail expansion plans
Energy	• Population and economic activity (power infrastructure) • Oil and gas industry cluster (oil and gas infrastructure)	• Higher generation and transmission investment in regions of higher processing and manufacturing importance • Exploration needs of new potential oil and gas reserves in the North East
ICT	• Population and economic activity	• High urbanization and population density favour fibre backbone investments
AWM	• Space for agriculture, soil fertility (agriculture) • Water storage capacity, population (water) • Natural resources, location of minerals processing clusters (mining)	• Higher investments into regions with largely unexploited potential (e.g., northern regions for agriculture)
Housing	• Population	• Different housing costs in different areas of the country
Social Infrastructure	• Population (all asset classes)	• Consideration of economic activity for labour and productivity and education sub asset classes
Security and Vital Registration	• Population	• Necessity to settle security issues around industrial assets (e.g., oil and gas assets in the South South) • Need to address political situation in the North East

Source: National Integrated Infrastructure Master Plan

Larger shares of regional infrastructure investment required on the basis of asset class across the six geopolitical zones are investments in energy (power generation and transmission) and transport infrastructure. Ramping up investment in these asset classes, particularly in the South-south, South-west and North Central zones to meet the high energy requirements of industrial scale mineral processing and manufacture would drive innovations and the development of local capacities in technology. To escalate the distribution of finished goods and the supply of raw materials, improved networks of transport infrastructure, particularly railways and roads connecting economic nodes and industrial clusters would, drive trade and commerce across the six zones.

Table 4.2: Regional Infrastructure Investment Priorities

Region	Demand/Potentials	Infrastructure Investment Ramp-up Priorities
North-Central	Huge energy needs Poor transport network	• Power generation, transmission and distribution • Road rehabilitation and expansion • Rail network for mining
North East	Transport for link remote agric producing areas Optimizing alternative energy sources	• Road rehabilitation and expansion • Alternative power generation/mini grids • Cross-national railway links
North-West	Transport for link remote agric producing areas Energy demand to meet industrial activities	• Road rehabilitation and expansion • Power generation, transmission, and distribution • Urban transport network expansion and upgrade • Cross-national railway links
South-East	Energy demand to meet industrial activities Transport network to support industrialization and mining activities	• Power generation, transmission and distribution • Railway infrastructure to mining sites • Urban transport network expansion and upgrade
South-South	Multi-nodal transport network to link seaports and inland waterways Energy demand gap Huge oil and gas potentials	• Power generation, transmission and distribution • Oil and gas exploration and refining • Urban transport network expansion and upgrade
South-West	Energy demand to meet industrial activities Multi-modal transport network Upgraded urban and inter-city transport networks	• Power generation, transmission and distribution • Urban metro and inter-city rail links • Road rehabilitation and expansion

Source: NIIMP Review TWG

In the South-south and South-west, transport infrastructure requirements are closely linked with connecting seaports and inland waterways with inland ports and economic centres. Improved railway and road infrastructure in the North-west, North-east and North-central is required to evacuate agricultural produce to industrial clusters for processing and value-chain improvements, likewise, improvements of railway and road infrastructure in the Southern regions would particularly support trade and commerce, especially in the southeast, and stronger supply chains.

Generally, the potentials for domestic energy consumption and the global focus on the environment drives investments in the development of marginal oil fields and gas processing in the South and Greenfields in the Northeast. The global pace of economic digitization and the burgeoning local financial technology market propels increased investment in ICT infrastructure, while the up scale of supply of critical social infrastructure is to optimize the competitive advantage of a very young and mobile human capital base.

MEDIUM - AND LONG-TERM SECTOR TARGETS

5.1 Transport

During the plan period, the transport sector will focus on the following infrastructure development priorities: Roads – priority portfolios focus on refurbishing and expanding the cross-national highway network. This include general rehabilitation and dualisation of major routes, and the rehabilitation and expansion of regional road networks.

Rail – emphasis is placed on the rehabilitation of all existing railway lines and to build additional lines for enhanced reach and service delivery. Priority is given to railway links to sites of economic importance as priority.

Aviation – the air transport sector needs to upgrade and expand existing airport infrastructure. Particularly, 11 airports are to be renovated and its facilities upgraded to international standards for passengers and cargo handling.

Maritime – the short-term focus in maritime sector is on increasing the share of inland waterway transportation through dredging of waterways and upgrading inland ports. Also, 2 new seaports are to be constructed and existing ports are to be upgraded and expanded.

Urban transport – in the short-term, investment is needed in the provision of shuttle buses, establishment of road terminals, bus lanes, Motor Park, traffic control system and initial works for rail mass transit systems. In the long-term, the construction of rail mass transit for urban areas with population of more than 1 million people would require substantial investments later than the initial 5-year period.

5.2 Energy

The Energy sector will focus on the following infrastructure development priorities:

Power: First, power generation was set to reach the target level of 20 GW in 2018. Immediate focus has been on gas and hydro-power generation through the planned execution of 13 priority hydro and five priority gas projects, with an option to add alternative power sources after 2023. Secondly, transmission capacity is envisaged to increase with an immediate focus on the cross-national grid. Adequate transmission lines (330KV, 132KV, 66KV) are to be extended and commensurate with the capacity of sub-stations to wheel 20 GW in the short-term. The extension/growth of the transmission capacity is planned such that transmission losses, ease of connectivity to planned production plants and access to distribution points are taken into consideration. The planned increase in both production and transmission capacity is to be put in place along with the building of adequate manpower capacity to manage installations and handle associated projects. The establishment of a plant each is planned for biomass, wind, solar and nuclear energy during the plan period. Ongoing construction work on three Centres of Excellence in Hydropower Research and Development in University of Ilorin, Ilorin; Centre of Excellence in Petroleum Research and Development in Abubakar Tafawa Balewa University, Bauchi; and Centre of Excellence in Energy Efficiency and Conservation in University of Lagos, Lagos will be completed during the plan period to ensure sustained flow of technical manpower in the management and maintenance of associated infrastructure in Nigeria.

Oil and gas: Over the next five years, increase in the capacity of the pipeline network is planned to support gas-to-power and gas-to-industry needs. The planned projects include ELPSII, OB3, QIT-OB3, Calabar-Umuahia Ajaokuta, Obigbo Node – Ajaokuta, and Ajaokuta-Kaduna-Kano pipelines and related gas handling and processing facilities and LPG and LNG processing and bottling plants. Also, establishment of industrial park Ogidigbe free trade zone is foreseen. Four refineries in Akwa Ibom, Lagos, Kogi, and Bayelsa States are also planned to meet the domestic demand for petroleum products. Continued investments in crude production and exploration projects are planned to meet the sector targets.

5.3 ICT

During the plan period, the ICT sector will focus on the following infrastructure development priorities:

Telephony – priority portfolios are set to enhance and expand the mobile network to ensure ubiquitous and continuous coverage. This includes expansion of satellite and ground infrastructure, expansion of base stations and establishment of last mile connectivity in major cities.

Internet and broadband – priority portfolios will be on expanding the fibre-optic network in order to increase end-user access to the existing broadband capacity. Internet access for underserved parts of the population is set to increase by creating Public Access Venues and Universal Access Centres. The objective to establish Nigeria as a centre of ICT technology and entrepreneurship development shall be advanced by the establishment of fabrication centres for ICT hardware as well as ICT-enabled incubation centres.

5.4 Agriculture, Water and Mining

The extended Agriculture, Water and Mining sector focus in the development of infrastructure priorities is as follows:

a. **Agriculture** – The prospect of the Nigerian agricultural sector revolves around partnerships that would deliver an affordable mechanization to farmers, access to timely supply of standardized inputs, revamping extension services and an integrated approach to value-chain development that would ensure an effective link between the agricultural sector and the industrial sectors. With COVID-19, the potential of agriculture as a viable growth and employment alternative to crude oil is even more pronounced. In appreciation of the potential of the agricultural sector in ensuring food security, growth and employments, the Ministry is embarking on a four-year strategic plan to consolidate on the successes of ATA and APP and also bridge implementation gaps while focusing on local knowledge generation, local sourcing of inputs and changing the rudimentary farming practices. Ultimately, the policy envisaged massive reduction in food import bills, with emphasis on reducing over-reliance on diary and fish importation, among others. Specifically, FMARD envisaged to launch and implement National Agricultural Technology and Innovation Plan (2021-2024). The policy strategy is designed to:

i. Implement the integrated Livestock development by implementing model grazing reserves and integrated diary processing for adoption in states;
ii. Implement a comprehensive mechanization programme that would cover all the rural local governments across the country;
iii. Repositioning and restructuring Agriculture Research Institutes and Colleges for increased research output to be used in boosting agricultural productivity;
iv. Introduce a cluster model for promoting commodity value chains in partnership with interested States and Private Sector;
v. Work with States to build rural road, electricity and water to increase farm to market access and support enterprise initiative across the Federation;
vi. Re-launch Zero-Reject initiative along with Commodity Standardization programme and operationalizing the Seeds and Fertilizer laws;
vii. Establish Embryo Transfer Centres to improve domestic milk production;
viii. Revamp extension services starting with the training of 75,000 extension worker, strengthening farmer education, and e-extension; and integrating N-Power beneficiaries in the extension programmes;
ix. Establish Agro-industrial Processing Zones of food and cash crops across the country;
x. Fast-track the recapitalization of the Nigerian Agricultural Insurance Cooperation and Bank of Agriculture in collaboration with CBN, Ministry of Finance, Budget and National Planning;
xi. Support the development of Private-Sector led Agricultural commodity exchange to enable Nigeria become

Agricultural Commodity Marketing hub in the West African Region and beyond;

xii. Support the establishment of 5 modern abattoir 1 each in Enugu, Rivers, Taraba, Benue and Bauchi States;
xiii. Engaging in land clearance and development in collaboration with State and Local Governments to widen the area of operation and expand agricultural activities nationwide;
xiv. Implementing programmes on Transboundary Animal Diseases/Pests Control, and upgrade Veterinary Hospitals/Animal Health Care Centres and Apiculture Development;
xv. Rehabilitating and constructing Water Harvesting Structures and Mini-Earth Dam across the States to augment rain-fed agriculture, assist dry season farming and increase agricultural production in the country;
xvi. Intensifying National Accelerated Fish Production Programme through the exploitation of marine resources in the Nigeria's Deep Sea/Exclusive Economic Zone (EEZ) by Nigeria's fish merchants, as well as the exploration of inland water bodies by fish farmers to diversify domestic fish species, for overall sufficiency of national fish requirements;
xvii. Supporting food and nutrition programme to enhance the quality and safety of food production consumption from crop, livestock and fishery value chains through proper standardization, certification and control; and
xviii. Enhancing National Food Reserve Stock by procuring crops at harvest, mopping-up excess production, balancing price volatility and enabling farmers to increase output.

b. **Water** – emphasis is placed on ensuring sustainable access to safe and adequate water resources to meet the socio-economic needs of all Nigerians. Accordingly, priority portfolios focus on water supply schemes, sanitation, drainage and irrigation, with inter-basin water transfers and basic databank infrastructure also being in scope. The medium – long term targets include:

i. Completion of inherited projects;
ii. Enhanced operations of RBDAs;
iii. Vigorously pursue the "Clean Nigeria: Use the Toilet" Campaign and implementation of Executive Order No. 009;
iv. Implementation of the WASH ACTION PLAN including the PEWASH programme;
v. Accelerated implementation of the Transforming Irrigation Management in Nigeria (TRIMING) projects;
vi. Expansion of the network for the Telemetry Data Collection Platform (DCPs) and upgrading of Hydrological Modelling Centre;
vii. Support for transboundary activities and programmes;
viii. Accelerate implementation of the National Irrigation Development Programme (2016-2030);
ix. More collaborative efforts between the three tiers of Government that would provide funding for critical investment in water and sanitation infrastructure/programmes across the country;
x. Delineation of floodplains in the 36 States of the Federation and Production of Flood Vulnerability Maps;
xi. Groundwater Monitoring and production of Hydrological Maps of the country;
xii. Expansion of a Flood Early Warning & Alert System (Real -time Based System) and upgrading of Web - based and database Hydrological Information System;
xiii. Source funding for the Flood Management Master Plan for Rivers Niger and Benue Study;
xiv. Commence Design studies for the engineering works on the improvement of the hydraulicity of the River Chari – Logone and reservoir capacity of the Lake Chad as Phase I of the Interbasin Water Transfer Project;
xv. Source funding for the Final Design of the water transfer project based on the selection of the feasible components that could meet the objectives of restoring and maintaining the Lake Chad sustainably; and
xvi. Future programmes and projects of the Ministry will be guided by the provisions of the Water Resources Master Plan (2016 -2030), the Water Sector Roadmap (2016 - 2030) and the Sustainable Development Goals (2016 - 2030).

c) **Mining** – priority portfolios of the Minig sector include:

i. Complete automation of payment processes in respect of royalty, permits, and licenses;

ii. Complete upgrade, automation, and integration of the mining cadastre office (MCO) license online application and renewal processes;
iii. Resolve all pending legal issues in respect of titles in line with the Nigerian Minerals and Mining Act, 2007 and resolve all community consent and community development agreement disputes;
iv. Review current holders of bitumen mining leases and pursue the biding process for delineated bitumen blocks;
v. Embark on extensive exploration activities to improve the geological data of the county's mineral resources to attract investment;
vi. Finalize the national goal policy as well as the presidential initiative on gold mining and implementation for the purpose of job creation and revenue generation;
vii. Unlocking the socioeconomic potentials of artisanal and small scall mining for job creation and poverty reduction;
viii. Continues formalization programme and empowerment of artisanal and small-scale miners; and
ix. Effective management and prevention of heavy metals poisoning associated with artisanal mining.

5.5 Housing

The extended priority for the Housing sector is to increase the available over 12 million housing units to 17.4 million units in 2025, 23.5 million units by 2030, and about 40 million by 2043. This will be achieved through the provision of legal enablers to stimulate investments in the development of local capacities and value-chains to mass produce housing based on domestic technological base, and modernization of existing land and property registry systems.

Other priorities are strengthening mortgage financing to support longer-term lending at very minimal single digit rates, and to make land easily available, transferable and affordable for housing development through the domestication of the NIIMP by subnational governments, preparation and adoption of regional development plans, preparation of National Street Addressing System and formulation of an appropriate National Land Policy.

Some specific short-term activities to drive the objectives of the plan, include:

- Construction of Building Material Testing Workshop at Kuje, Federal Capital Territory;
- Provision of infrastructure (Roads, Drainages, electricity supply and water supply in new towns in FCT;
- Upgrading of cadastral geographic information system laboratory in headquarters and zonal offices;
- Construction of office headquarters for 5 regulatory bodies in housing sector in Abuja, FCT;
- Slum upgrade: construction of classrooms blocks, primary healthcare, skill acquisition centres, borehole, electricity, erosion control, etc. in 36 states of the federation and FCT.
- Collaboration with research institutions and public sector to build houses for Nigerians are lowest possible cost.

5.6 Social Infrastructure

The extended focus for Social Infrastructure comprises of the following infrastructure development priorities:

a) **Health** – the priority is to develop an integrated healthcare system with an infrastructure base that guarantees high quality, affordable and sustainable world-class healthcare services for all. Identified projects include building hospitals, health centres and specialist centres across the whole country, as well as establishing health education centres and drugs/vaccines manufacturing centres. Specifically, focus will be on establishment of 6 world-class specialist hospitals, primary health centres in each political ward, 3 health centres in each LGA and 3 general hospitals, as well as establishment of reference laboratories equipped for virology research and the development of realtime healthcare solutions.

Women – priority portfolios focus on establishing basic infrastructure for the advancement of the development of capacities in women and girls and the promotion of maternal and child health.

b) **Education, Youth, Sport, Environment, Tourism, Information, Labour and Productivity** – priority portfolios for all of these sub sectors centre around creating new infrastructure and rehabilitating/upgrading existing ones, such as facilities for education, sports and youth development, pollution and waste management systems, environmental control, information dissemination, training institutes and safety net centres.

5.7 Vital Registration and Security

The sector focus is on the following infrastructure development priorities:

a) **Vital Registration** – the priority is to provide adequate infrastructure for Vital Registration services, i.e., establish a functional registration system across the whole country.
b) **Security** – priority portfolios focus on the provision of adequate internal security by establishing effective crime prevention, effective correctional services, state-of-the-art fire services and adequate road safety. In terms of immigrations, the provision of the state-of-the-art immigration security infrastructure would address the operational challenges of modern migration and enhance immigration related service delivery. For external security, adequate state-of-the-art modern military infrastructure is to be provided and cooperation with indigenous industries would be leveraged in advancing local development and production of military technologies.

5.8 Federal Capital Territory

The FCT focus is on the following infrastructure development priorities:

a) **Housing** – including slum upgrades, and the establishment of new residential districts and satellite towns.
b) **Transportation** – include construction and expansion of the road and rail networks required to transport the FCT's fast-growing population
c) **Social Infrastructure** – include the expansion of health and education infrastructure to accommodate the rapidly growing population.
d) **Security** - infrastructure to meet the evolving security challenges.

5.9 Quick Wins

Special consideration is given to projects that are considered "quick wins". These projects have potentials of immediate benefits or "low hanging fruits". Very high priority is placed on immediate "quick wins" on a national scale, i.e. projects with the largest economic and social benefits. Projects considered as in the category include:

Energy:

- Power and gas infrastructure, especially to increase generation and transmission network capacity. As the privatisation of generation and distribution assets continues and is expected to support growth of the country's power capacity, it is important to ensure timely availability of critical inputs (such as gas pipelines, with ELPSII and OB3 being most critical), as well as evacuation capacity through the transmission network.

Transportation:

- Rehabilitation of major cross-national transport links, particularly major South-North road connections such as the Lagos-Kano link, East-West connections such as Calabar-Lagos-Badagry/Seme link, East-North connections, such as Port-Harcourt-Abuja link and the rehabilitation of existing railway network.

- Improvement of cross-model connectivity links. Today, the connectivity from one model of transport to another mode of transport is limited, both for human and material goods transport. The connection links between major ports with the relevant road networks and airports is of utmost priority.
- Upgrading of major airports, as well as enhancing connectivity of international-international and international-domestic links, e.g., in Lagos airport.
- Improvement of urban transportation. Many of Nigeria's major urban centres, such as Lagos and Port Harcourt for example, are currently struggling to meet the demands of urban transportation. Upgrades in capacity and quality are required in urban mass transportation to significant cut-down on efficiency.

Agriculture, Water Resources and Mining:

- Development of Staple Crop Processing Zones and linking these areas to the market.
- Development of priority minerals, including iron ore and coal. Today, Nigeria has a very limited development of iron and steel industry, which is disproportionate to the available iron ore reserves. Also, despite locally available coal, it uses as a power generation source is non-existent. To stimulate growth in these sector, quick wins can be realised through intensified exploration studies and increased mining infrastructure development like the completed Ajaokuta-Warri Railway to support existing Steel iron and steel processing Plants.

ICT:

- Expansion of broadband connectivity to improve existing internet access and to make internet connectivity from landing points available to the end-users across the country.

Social Infrastructure:

- Development of public health facilities and diagnostic centres to provide basic health services to the population across the country.
- Upgrading of primary, secondary and tertiary education facilities. This should be considered jointly with a broader set of changes and reforms required in the education sector to intensify innovation and Research and Development activities, especially in areas of the country's comparative advantage.

Security and Vital Registrations:

- Rehabilitation of security facilities and infrastructure to improve the provision of quality security services and identification of citizens and other residents.

Housing:

- On-going development of mass housing market in Nigeria to significantly reduce the housing deficit through investment in local capacities for building materials manufacturing and middle-level technical capacities.
- With the support of the Central Bank of Nigeria, N200 billion is being invested to deliver 200,000 new homes and millions of jobs. The Federal Mortgage Bank of Nigeria (FMBN) is playing a major part in this with an initiative to invest about N40 billion to deliver 5,000 houses across the country as our contribution to economic development over a 12-month period.
- Fast track statutory approvals for new housing developments with inputs of relevant built-environment design professional.
- Train and certify 200,000 artisans in trades within housing delivery value-chain.
- Develop modular housing production facilities across 2 states in respective geopolitical zones.
- Develop new low-cost local building materials based on indigenous technologies and increase volume of local materials and technologies.

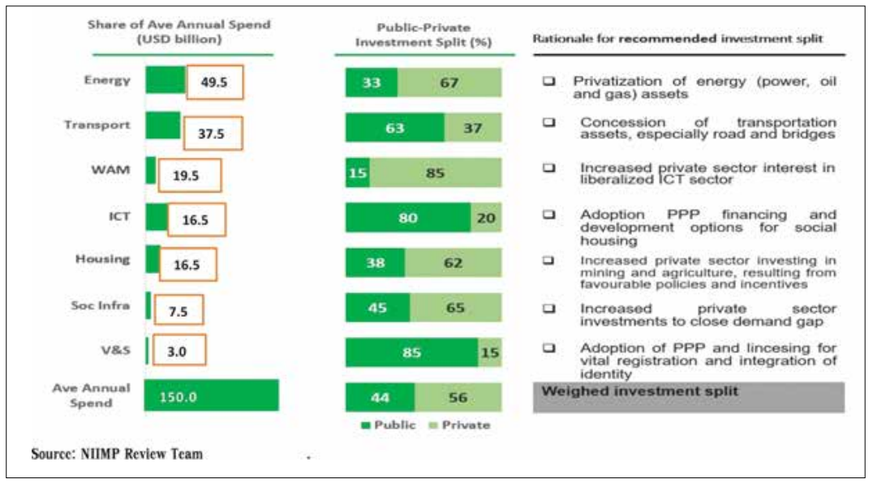
FINANCING PLAN

6.1 Financing the Plan

As governments around the world continue to take extraordinary measures in response to the impact of the COVID-19 pandemic, scaling up public investments in infrastructure is expected to play a key role in supporting productivity, economic recovery and job creation. Nigeria, in particular, requires significant investment in critical infrastructure to ensure economic recovery and meet its medium to long-term development needs. Overall, the implementation of this master plan is estimated to require a total investment need of USD 2.3 trillion over the 23-year period. However, for the next five years of the plan, about USD 150.0 billion is an expected annual financing requirement from both the public and private sectors as shown in Figure 6.1.

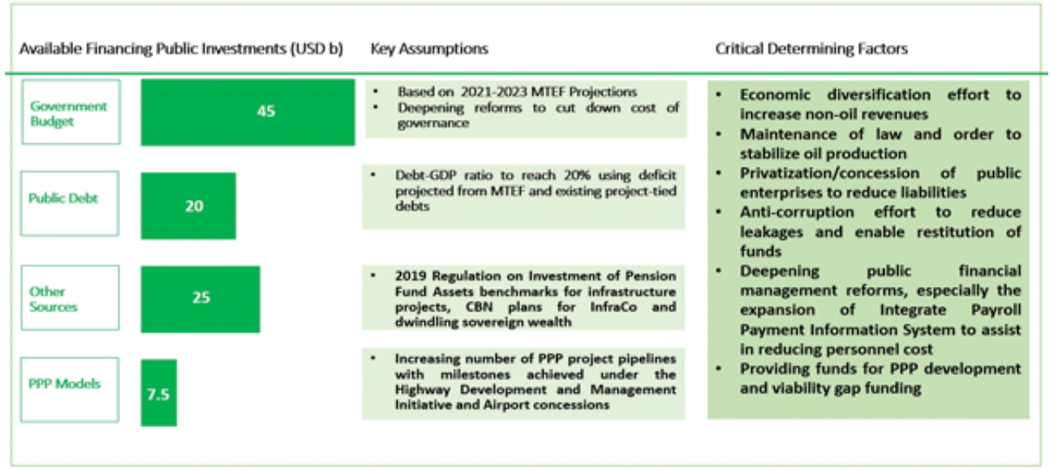
Between 2014 and 2018, the private sector was expected to account for about 48 per cent of the infrastructure investments in Nigeria. However, increase adoption of PPP financing models, particularly in the transport, energy, vital registration and housing sectors, is expected to further increase the share of private sector investment. With the implementation of privatization plans and deepening of reforms, the share of private sector investments is therefore expected to increase to about 56.0 per cent or USD 84 billion by 2025. The private sector share of spending primarily accounts for assets that are fully owned and financed by the private sector.

Figure 6.1: Expected Public-Private Infrastructure Investment Split (2021-2025)



The remaining 44.0 per cent of the required infrastructure investment (USD 66 billion) will be financed annualy by the public sector using a combination of funding models and sources. These include: 1) government budgets (federal and state), 2) new borrowing, 3) other public sources (e.g. InfraCo, SWF), and 4) public-private partnerships (PPPs). Figure 6.2 summarizes the estimated amount of financing resources from each of these sources as well as the underlying assumptions and enablers.

Figure 6.2: Available Financing for Public Investments

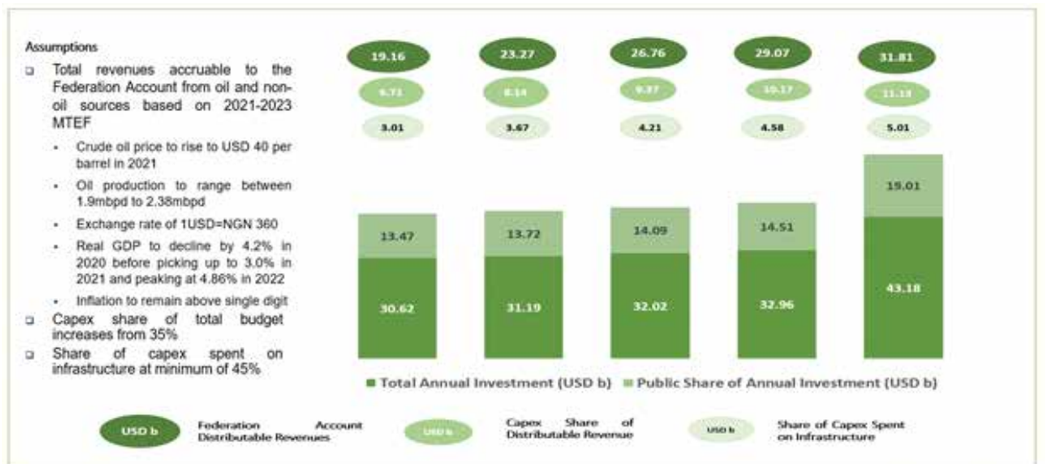


Source: 2021-2023 MTEF and NIIMP Review Team.

6.1.1 Government Budgets (Federal and States)

Federation Account distributable revenues is projected at about USD 129 billion over the next five years, based on projections from the 2021-2023 MTEF (see Figure 6.3). Up to USD 45 billion could be freed up for capital expenditure, if governments intensify effort aimed at cutting down the cost of governance to moderate the growth of recurrent expenditure. This will enable the proportion of capital expenditure in the total annual budget to rise to a minimum of 35.0 per cent while the share of capital expenditure spent on infrastructure increase to a minimum of 45.0 per cent. It is expected that the level of implementation of capital budget will be sustained at above 75.0 per cent during the period.

Figure 6.3: Annual Investment Requirement (2020-2024)



Source: NIIMP Review Team.

6.1.2 New Borrowings

The COVID-19 pandemic, no doubt, has contrained the fiscal space in a number of countries and pushed debt levels to new heights. Compared to end-2019, the IMF projected average debt ratios by 2021 to rise by 20.0 percent of GDP in advanced economies, 10.0 per cent in emerging economies and about 7.0 per cent in low income countries. However, with Nigeria's debt-GDP ratio of 19.7 per cent in 2019 and the need to ensure rapid economic recovery from an imminent recession, government can still afford new borrowings of about USD 20 billion to finance its infrastructure over 2020-2024, without stepping out of the fiscal safe zone of 25.0 per cent of GDP.

The share of sovereign bonds in infrastructure financing is expected to increase during the plan period, with the Sukuk Sovereign accounting for substantial part. It is assumed that up to 80.0 per cent of additional debt from both capital and financial markets incurred during the period will be used directly or through deficit financing for infrastructure projects.

6.1.3 Other Public Sources

Government could also employ alternative sources of public investments to finance the required infrastructure needs. For instance, the CBN InfraCo PLC initiative has the potential of bridging financing gap in the public sector. This special infrastructure development vehicle, which would be managed by an independent fund manager, could generate up to USD 22.5 billion (i.e. over 55.0 per cent of the target to be raised in five years) through debt and equity.

6.1.4 Increasing the Share of PPPs

With limited fiscal space occasioned by the response to the COVID-19 pandemic, PPPs will be crucial to mobilize new sources of long-term financing for infrastructure investment. There is therefore need to professionalize the PPP function in the public service, by making it a career cadre whereby relevant officers can take ownership of this arrangement and drive the financing initiative accordingly. Over the years government has demonstrated commitment to the adoption of PPP financing option and there are stong indications of optimizing potentials of this mode of financing in the future. This is established from the following major developments in the Nigeria PPP ecosystem since the beginning of NIIMP implementation:

- Development and deployment of the ICRC-World Bank PPP Projects Disclosure Portal, the first of its kind in the world;
- The number of PPP project pipelines published by ICRC increased significantly from 18 in 2013, 48 in 2014, 77 in 2017 to 158 in 2020;
- Establishment of Presidential Infrastructure Development Fund;
- Initiation of the Road Infrastructure Development and Refurbishment Investment Tax Credit Scheme which is leveraging private sector capital for the development and refurbishment of road networks in industrial clusters and key economic areas in Nigeria;
- Nigerian Sovereign Investment Authority (NSIA) and Third-Party Infrastructure Guarantee Fund (InfraCredit);
- By December 2020, there were 158 pre-contracts at development and procurement phases;
- By December 2020, there were 73 post-contract projects under implementation;
- A total of 96 Ouline Business Case (OBC) and 40 Full Business Case (FBC) Compliance Certificates were issued by ICRC from inception to 2020; and
- Between 2010 and 2018, PPP projects worth USD 8.0 billion were approved by the Federal Government.

The interest in and commitment to financing infrastructure using the PPP option is expected to increase in the coming years. It is estimated that up to USD 7.5 billion of infrastructure investments could be financed through PPPs over the next five years.

6.2 Key Financing Decisions Required

More than ever before, the COVID-19 crisis has heightened the need to take bold steps and make strategic choices required to improve allocation efficiency, ensure fiscal discipline, and optimize non-budgetary sources. The share of recurrent expenditure needs to be moderated and capital project prioritization process need to be improved to reduce leakages and imprudence. Already, government has taken steps to reduce its debt-revenue ratio and vulnerabilities through improved domestic revenue mobilization drive, optimization of public expenditure through the IPPIS implementation across MDAs and discontunation of the costly subsidy regime on PMS in other to free-up scarce resources for priority infrastructure projects.

In addition to the above, approvals for key reform initiatives need to be accelerated to build confidence of the private sector and seize the opportunity created by the pandemic. Of importance are the CBN InfraCo initiative, deepening liberalization as well as privatization and concession of selected public assets.

These financing decisions will need to be made on a project-by-project basis to ensure optimal risk allocation. Government has to follow a carefully structured process when considering whether to finance.

Four important questions can help to determine which financing option is best for a given project. These are:

- What are the main goals to be achieved by the asset? (What is the public service mission of the asset? What are the non-financial goals?); who needs to maintain ownership over the asset or its revenues? (Public developer, private developer or a mixture of both?);
- Which option will minimize financing costs? (How important is minimizing the cost of financing to the project?);
- What overall project budget can be supported by each financing option? What degree of flexibility is required for repayment of debt? What level of risk is inherent in the project?); and
- What are the capabilities required for the project, and who is in the best place to ensure these capabilities? (How important are specialized skills? Where do these skills exist today? Where should they exist?).

6.3 Strategies to Increase Private Sector Participation

Increased private sector participation, both through PPPs and full privatization, is required to decrease the burden of the infrastructure investments on the public sector. To enable increased participation, the government needs to address issues that discourage private sector players from investing in infrastructure. Such issues include:

- Difficulties in access to and cost of finance due to lack of maturity in Nigeria's credit/venture capital market
- Security concerns, corruption and other governance issues
- Lack of economic incentives in some sectors to encourage private sector investment
- Inconsistency in enforcing policies and unpredictable regulatory regimes that limit investors' ability to protect investments
- Insufficient public sector capability to design and implement PPP projects.

Nigeria will, therefore, need to address these issues in order to unlock the private sector investment required to successfully implement the master plan. Key actions that need to be taken include:

a) **Access to capital:** Establish long-term financing and refinancing mechanisms for viable projects, especially, in the early stages (e.g., specialized funds for infrastructure).

b) **Political/Cost Risks:** Assure macroeconomic stability policy consistency and eliminate corruption. Provide electricity to support growth and reduce cost of operations. Provide critical infrastructure such as link roads. Ensure standardization and central access to infrastructure and provide partial risk guarantees to projects, as appropriate.

c) **Fiscal incentives:** Offer business and fiscal incentives to encourage private sector investments in infrastructure (e.g., granting pioneer status and duty exemptions, especially during construction).

d) **Government rules and regulations:** Establish a clear legal and regulatory framework for private financing of infrastructure and establish a standard process for delegating authority from the Federal Government for infrastructure development.

e) **Capabilities in managing PPPs:** Establish a well-functioning PPP unit to build capabilities and manager financing of PPPs; Develop capacity building initiatives for public sector stakeholders; Identify/establish implementation teams within the MDAs; Develop templates for PPP procurement and implementation.

These actions (which are further summarized in Table 6.1) align with some of the recommendations proffered by the Central Bank of Nigeria for increasing PPP activity in Nigeria. Specifically, these include:

- Create an Infrastructure Project Development Facility to finance early project development activities so as to create a pipeline of bankable PPP projects
- Establish a dedicated, cash backed fund (Government Resource Fund) outside the annual budgetary allocation process to finance the government's contributions on infrastructure involving the private sector
- Establish long-term refinancing mechanisms aimed at refinancing short-term infrastructure loans
- Provide fiscal incentives, such as exemptions from customs duties for equipment to be used for infrastructure development, for selected infrastructure projects.

The private sector has indicated its readiness to take complete responsibility for selected sectors, provided government puts in place a clear, transparent and consistent enabling environment for private sector investments. Such sectors include Agriculture, Aviation, Housing, Oil and Gas, SMEs, and Trade and Commerce. It also indicates readiness to participate in the power and transport sectors under PPP schemes.

Table 6.1 Recommendations for Increasing Private Sector Financing

Access to capital	• Establish long-term financing and refinancing mechanisms for viable projects, especially in the early stages
Political/cost risk	• Assure macroeconomic stability, policy consistency and eliminate corruption • Provide electricity to support growth and reduce cost of operations • Provide critical infrastructure such as link roads • Ensure standardization and central access to infrastructure • Provide partial risk guarantees to projects as appropriate
Fiscal/ monetary incentives	• Offer business, fiscal, and monetary incentives to encourage private sector investments in infrastructure • Reform interest rate regime to reduce cost of funding
Government rules and regulations	• Establish a clear legal and regulatory framework for private financing of infrastructure • Establish a standard process for delegation of authority on infrastructure development • Provide framework for ensuring continuity of government rules and regulations
Government rules and regulations	• Develop pipeline of bankable PPP projects • Establish a PPP unit to build capabilities and manager financing of PPPs • Develop capacity building initiatives for public sector stakeholders • Identify/establish implementation teams within the Ministries, Departments and Agencies (MDAs) and provide PPP support to states • Develop templates for PPP procurement and implementation

6.4 Legal Enablers to Increase Private Sector Participation

A review of relevant infrastructure-related legislations for increasing private sector participation in infrastructure pointed to some of the key legal enablers for Public Private Partnerships (See Table 6.2). The primary focus was on Public Private Partnerships as regulated by the Infrastructure Concession Regulatory Commission Act. The Commission was established to provide an enabling institutional, legal and regulatory environment within which the public and private sectors could partner to bridge the infrastructure gap in Nigeria.

The ICRC Act empowers the Commission with the functions and powers to:

- Provide general policy and guidelines, rules and regulations;
- Take custody of every concession agreement; and
- Ensure efficient execution of any concession agreement or contract entered into by the Federal Government.

The Act also provides for MDAs (Ministries, Departments and Agencies) to enter into contracts with or grant concession to any du ly pre-qualified private sector proponent for the financing, construction, operations and maintenance of any infrastructure that is financially viable or any development facility of government.

Another key regulation is the National Policy on PPPs (N4P), which provides MDAs with operational guidelines for PPP project development. However, this policy and the ICRC Act have some limitations which include:

- Limited scope, with an emphasis on concession contracts to the exclusion of other PPP options
- Legislations regarding jurisdictions and definition of terms. The Act is presently somewhat insufficient. The proposed amended Act before the National Assembly seeks to fill all noticeable gaps in the current Act.
- Lack of clarity on the Commission's role as facilitator, as well as regulator of PPPs in Nigeria
- No powers conferred on the Commission to summon parties to a PPP contract in order to obtain information or intervene in runaway transactions
- No provision for unsolicited bids or inherited legacy of PPP projects.

While the ICRC Act has no identifiable conflicts with the Constitution, in the area of conflicts with other laws, there are areas of difficulties between the provisions of the Act, and the Bureau for Public Enterprises and the Bureau of Public Procurement.

Table 6.2: Suggested Initiatives for Increasing Share of PPPs

	Description	Responsible	Rationale
Infrastructure Project Development Facility (IPDF)	• Facility to finance early project, development (PD) activities ahead of procurement of private sector investors and ensure (a) creation of pipeline of bankable PPP projects; (b) clear direction of government's development priorities; (c) optimal allocation of risk between public and private sectors	• NPC, FMoF, MDAs, Budget Office	• Financing of PD by specialized company enhances timely preparation of PPP project pipeline • Effective allocation of risks between public and private sectors • Continuity in project implementation via competitive selection process
Government Resource Fund (GRF)	• Provision of a dedicated, cash-backed fund outside annual budgetary allocation to finance government's contributions on infrastructure involving private sector	• FG, NASS, • Donor Partners, DMO	• Dedicated fund will provide financing independent of annual budgetary cycle to support PPP projects • Improve commercial viability of projects and attract capital
Long Term Refinancing Mechanisms	• Group of mechanisms aimed at refinancing short-term infrastructure loans, including infrastructure assets refinancing facility (IARF), cash flow securisation and establishment of specialized infrastructure financing companies	• FG, CBN, NIF, SEC	• Encourage continuous debt and equity investments from banks and private equity funds • Cash flow securitization will support development of the Nigeria debt capital market
Long Term Refinancing Mechanisms	• Existing incentives promoting industrialization extended to infrastructure projects, such as exemptions from customs duty on machinery and spare parts to be used for infrastructure development	• Presidency, Nigeria Customs Service	• Reduction of overall project cost • Incentivize private sector participation in infrastructure development
Supporting initiatives • Clear legal and PPP regulatory framework • Standardized public and private procurement process • Immediate capacity building programme for public stakeholders		• Implementation of shared investment appraisal services for pension and insurance fund administrators • Standard process for delegation of authority by FG on infrastructure development	

IMPLEMENTATION PLAN

7.0 IMPLEMENTATION PLAN

7.1 Introduction

Infrastructure development in Nigeria is mainly hindered by challenges that border on inadequate comprehensive legal and regulatory governance framework, poor project preparation, programming and implementation coordination, poor results documentation, very low private sector participation, and huge technical and resource capacity gap. To address these challenges, short and medium-term measures are outlined to accelerate the achievement of desired results on the NIIMP implementation. This would quickly create steam and address structural issues that are critical to sustaining the long-term impact of the NIIMP.

7.2 Short Term Measures

7.2.1 Strengthen the Legal Framework for the NIIMP

This Plan is expected to create greater access to new and improved social and economic infrastructure that would support economic recovery, sustained and inclusive growth, increased job creation and poverty reduction. To accelerate the achievement of the plan objectives, a legislation is required to remedy and clear clogs from existing legislations that interfere with accelerated infrastructure development. Table 7.1 shows some legislations that affect NIIMP implementation.

Table 7.1: Some Legislative challenges to infrastructure development

Legislation	Sector	Challenges
NNPC Act, Petroleum Act	Energy	- Many and complex laws making it challenging for investors. - Little room for states to support investments.
Land Use Act	All	- Creates several bottlenecks that discourage capital inflow.
Nigerian Mining Corporation	Mining	- Prevents private sector involvement. - Corporation has sole responsibility for exploration, prospection, and mining of minerals.
Nigerian railway Corporation Act, Nigerian Ports Authority Act, National Inland Waterways Act	Transport	- Prohibits construction/ extension of some infrastructure (e.g. rail) without Ministerial permission. - Limits private sector participation.
Federal Highway Act	Transport	- Reduced private sector involvement, - Minister of works responsible for all construction and maintenance.
ICRC Act	All	- Emphasize concession contracts to the exclusion of other PPP options. - Unclear role of Commission as facilitator or regulator. - No provision for unsolicited bids of legacy projects.

Note:
- Selected examples highlighted. Total of about 20 acts are in need of adjustments.
- A NIIMP act to consolidate all required challenges should be considered.
- Act will be challenging. However, it may be a faster route than changing respective laws, one-by-one

7. 2.2 Strengthen the Capacity of the Infrastructure Delivery Coordination Unit

Successful implementation of the NIIMP requires a significant effort to co-ordinate and implement the plan. It was in this context that the Infrastructure Delivery Coordinating Unit (IDCU) was established in the Federal Ministry of Finance, Budget and National Planning to provide coordination to the implementation of planned programmes and projects. The Unit is expected to undertake several important functions for the implementation of the NIIMP, which include:

- **Plan monitoring and evaluation:** Develop and implement M&E strategy, collect and analyse data on NIIMP implementation, produce reports and identify implementation areas that require intervention;
- **Programme Management and Development:** Analyse programmes/projects implementation as per asset class/ sector, implementing MDAs and other partners, and make recommendations on how to address bottlenecks and improve implementation results;
- **Communication and Capability building:** Communicate progress of the NIIMP internally and externally, support MDAs and other partners with crucial capability building initiatives and facilitate ongoing dialogue with the private sector.
- **Projects Support and Private Sector Investment:** Support high-priority projects and attract private sector investment.

For effective and efficient delivery on these mandates, it is important to reposition and strengthen the capacity of the Unit.

7.2.3 Establish a National Council on Infrastructure (NaCoInfra)

For efficient and effective implementation of infrastructure projects, the National Council on Infrastructure [NCoInfra] and a Technical Working Group [TWG] to handle technical level analysis and appraisal of issues and policies to support the delivery of infrastructure projects in the country need to be established. The Council, when established, is expected to meet twice in a year while the TWG meetings will be at least four times in a year. Outside of the quarterly meetings, the TWG could meet to address emerging issues that require urgent attention. This is in conformity with the NIIMP Governance Structure. The Council shall be chaired by the Vice President of the Federal republic, and assisted by the Honourable Minister of Budget and National Planning. The Permanent Secretary, Ministry of Budget & National Planning shall serve as the secretary and head of Council's Secretariat to be domiciled in the Ministry.

7.2.4 Ensure Financing for Immediate Projects

Federal, state, and local governments are expected to employ a standard framework for prioritising projects to ensure the right strategic fit, commercial viability and socio-economic impact. Priority projects should be refined and submitted by September of every year to ensure that they form part of the succeeding year's annual budget appropriation.

7.2.5 Launch Broad Communication Programme

Continuous engagement and broad communication of the intent and provisions of this document to all stakeholders remain critical for its successful delivery. The Plan must be effectively communicated to at least the following four (4) core stakeholder groups:

- The public sector, MDAs and States, to inform them of the required infrastructure investments and co-ordinate their activities to execute/implement;
- Private sector/potential investors, to generate investment interest and gather support for implementation;
- Donors/Development partners, to co-ordinate the Master Plan with donor activities and obtain their support

for implementation; and
- The general public, to create awareness and public support for the plan.

7.3 Medium-Term Initiatives

Medium-term initiatives are aimed at addressing three major concerns:
- How to ensure that the right infrastructure projects are prioritized and implemented;
- How to ensure effective project execution; and
- How to align both public and private sector investments with the NIIMP.

Within these context, four medium-term initiatives are crucial for the success of the NIIMP:
- Optimise the public infrastructure governance model;
- Promote alignment/support of the private sector;
- Bridge the capability gap; and
- Develop engineering infrastructure.

7.3.1 Optimise the Public Infrastructure Governance Model

Currently, public projects selection process is confronted by many challenges that frequently distorts the original objectives of projects. To address these shortcomings, four (4) reforms to optimise the process include:

- Making mandatory feasibility studies as critical resource for project(s) preparation;
- All infrastructure projects must be reviewed and cleared by the Budget and National planning (National Planning Arm) before it can be admitted into the budget;
- All projects must be costed;
- Restructured budget cycle process to ensure prompt release of project implementation funds;
- Establish a functional and robust Result-Based Monitoring and Evaluation system to support project implementation; and
- Leverage existing public asset management system.

7.3.2 Promote Alignment/Support of the Private Sector

As the volume of PPP projects in Nigeria significantly lags those of other successful developing economies, there is an urgent need to align projects with private financing to ramp up investments in the NIIMP. To accelerate result delivery, the current PPP framework should be strengthened to foster increased private sector participation in infrastructure investment. Key activities include:

- **Expand the scope of existing PPP Units to identify potential PPP projects:**
  - ✓ Develop a shortlist of potential projects for PPPs;
  - ✓ Refine the process to identify future potential PPP projects; and
  - ✓ Introduce standard tools and analytics to ensure all potential PPP projects are assessed on merit.

Tables 7.2 and 7.3 below show the list of projects in the Housing and Road Sectors being implemented under the PPP arrangement:

Table 7.2: List of projects in the Housing sector implemented under the PPP Arrangement

HOUSING

S/N	ACTIVITY	LOCATION	REMARK
1	Housing Development through Contractor Finance Initiative (CFI)	Across the States of the Federation	2015-Date. 2165 completed houses
2	On-site and Off-site Infrastructure/Sites & Services Schemes	Across the States of the Federation	2015-Date with over 25km road networks
3	Affordable Housing Development & Management Initiative (AHDMI) Pilot Project Gwagwalada	FCT, Abuja	2020-Date. Includes 16.5km road network Over 3,500 housing units to be delivered.
4	Automated Debit Platform to facilitate monthly house rent collection and Rent-to-Own Initiative	For use across the Federation	2021 and beyond
5	Collaboration with Public/ Private/Research Institution to establish Modular Construction Facilities for the construction of Affordable Houses	Six (6) Geo-Political Zones	2022 and beyond
6	Marina Quay Side Smart City Project	Lagos	2023 and beyond
7	Lagoon Smart City Project	Lagos	2023 and beyond
8	Construction of Legacy PPP Smart City Estates	FCT & Six (6) Geo-Political Zones	2023 and beyond
9	Introduction of Hostel Accommodation	FCT & Six (6) Geo-Political Zones	2023 and beyond

Table 7.3: List of projects in the Road Sector implemented under the PPP Arrangement

HIGHWAY (ROAD)

Table 7.3: List of projects in the Road Sector implemented under the PPP Arrangement

HIGHWAY (ROAD)

S/N	ACTIVITY	LOCATION/CORRIDOR	REMARK
1	Concession of the Pilot 12 roads under the Highway Development & Management Initiative (HDMI)	Across the six (6) Geo-Political Zones	2020 - 2022.
2	Concession of the 2nd phase 12 HDMI road corridors	Across the six (6) States of the Federation	2023 - 2024
3	Development of Lagos-Abuja Direct Greenfield Road Corridor under a Design, Build, Operate & Transfer (DBOT) arrangement		2022 - 2027
4	Development of a Greenfield Golden Triangle Super Highway (Lagos-Calabar-Kano-Kongolam-Lagos) through a Design, Build, Operate & Transfer (DBOT) arrangement	Lagos-Calabar-Kano-Kongolam-Lagos	2022 - 2027
5	Development of a Greenfield Badagry-Kaiama-Babana-Kaoje-Gwambu-Fokku-Sokoto Road in Lagos, Ogun, Oyo, Kwara, Niger, Kebbi, and Sokoto States, (1,046km) under a Build, Operate & Transfer (DBOT) arrangement	Lagos, Ogun, Oyo, Kwara, Niger, Kebbi, and Sokoto	2024 - 2030
6	Development of a Greenfield Asaba-Abuja Expressway Project under a Design, Build, Operate & Transfer (DBOT) arrangement		2024 - 2027
7	Development of a Greenfield Enugu-Abuja Expressway under a Design, Build, Operate & Transfer (DBOT) arrangement		2024 - 2027
8	Development of Maiduguri-Monguno-Baga-Kauwa-abadama-Mallum Faori road in Borno State under DBOT	Maiduguri-Monguno-Baga-Kauwa-abadama-Mallum Faori	2026 - 2028
9	Development of Maiduguri-Bama-Bank under DBOT		2025 -2026

Source: Federal Ministry of Works and Housing

- **Provide financial incentives for investors:**
  - Set up a government-backed fund (e.g., government resource fund for infrastructure projects) that will offer financial support to PPPs and boost investor confidence;
  - Establish a specialised Development Finance Organisations (like the IDC in South Africa, and IDFC in India) that focuses purely on financing infrastructure projects;
  - Leveraging pension funds for long-term financing of PPPs.

- **Refining the legal framework to encourage PPP investment:**
  - Review current legal framework to better cater for PPPs as opposed to the current focus on public sector financing;
  - Institute standard PPP procurement framework based on global best practice;
  - Commit to a competitive transparent procurement process. ICRC guidelines on the procurement process takes cognizance of this and accord with best practices;
  - Offer sector specific tax incentives through reductions or removal of import tariffs, tax breaks, tax credit scheme and subsidies to encourage investments; and
  - Offer revenue guarantees to investors for specific projects (e.g. toll roads).

7.3.3 Bridge the Capacity and Resource Gap

Nigeria requires an increase in the number of skilled workers, especially in two areas. First, the construction industry requires an estimated 600,000 additional trained workers over a period of 5 years to build new infrastructure and maintain existing stock. These professionals include architects, building and services engineers, surveyors, technicians and high-skilled artisanal craftsmen. Secondly, the training of additional 7.7 million people in the next 5 years is required to operate this infrastructure. These groups of users include doctors, nurses, policemen, teachers, farmers, etc.

To address the gap in capacity and resources, immediate priority is to ensure that sufficient technical capacity required to build this infrastructure is available by:

- **Building a robust basic skills base** – Focus is to scale up the training capacity of the Industrial Training Fund (ITF) to meet industry needs in terms of workers with basic skills and engage public vocational training institutes and private companies under the supervision and coordination of the ITF. Also, strengthen existing job-creation programmes develop required skills among the unemployed. Priority is on the use of skill development centres in tertiary institutions and vocational centres for a broad-based skill development outcome;

- **Ensure skills transfer** – Focus is to provide incentives to skilled Nigerians in the Diaspora to return and work in infrastructure development. Ensure that infrastructure contracts and conditions of engagement for highly skilled expatriate workers facilitate the transfer of specialised and technical skills through clear contractual agreements for apprenticeship, training, etc.

In the medium-term, the priority is to build Nigeria's local skill base to meet appropriate quality standards, by:

- **Establishing strong standards** – Introduce international certification standards per sector, regulated and enforced by the ITF and provide additional training programmes to allow experienced workers to acquire certification.

- **Building advanced/specialised skills** – Increase the capacity and quality of current institutions to train the necessary number of specialist engineers, architects, etc. The actions to develop human capacity for building, maintaining and operating infrastructure should be considered in the context of broader reforms within the

education system.

7.3.4Develop Engineering Infrastructure

In order to successfully build the required infrastructure, consideration must be given to the creation of 'engineering infrastructure', which comprises of:

- **Infrastructure standards** – Development and enforcement of industry standards is necessary to manage the quality of infrastructure planning, development, operation and maintenance. These standards would provide a basis for audits and validations, as well as package new projects for PPP, ensuring consistent high-quality delivery of infrastructure.

- **Technologies for infrastructure development** – Infrastructure development related research and development would be up-scaled to accelerate the domestication of modern technologies and innovations that ensures cost effective and high-quality infrastructure.

- **Availability of raw materials** - Promotion of local industrial development need to be prioritised to ensure sustainable supply of critical input material for manufacture and construction, among others, in the medium- to long-term. In the short-term, it is important to increase investment in the development of locally available raw materials that are required at significantly higher volumes. For example, Nigeria has the 12th largest iron ore deposits in the world but its current steel production is only approximately 0.4 Mtpa, significantly lower than for example, South Africa (8.5 Mtpa), Brazil (33 Mtpa) and India (67 Mtpa). Similarly, considerations should be given to other construction materials, such as asphalt for roads, glass, and other metals. Only in cement industry has Nigeria achieved self-sufficiency to date. However, even in this area, considerations should be given to specialty cement availability.

7.4 Role of the State and Local Governments

There is need to critically synergize the efforts made at developing public infrastructure utilities at the federal level and at the various sub-national levels (these include the infrastructure development plans and programmes executed by the 36 State Governments and FCT as well as the 774 Local Governments spread across the country).

The 1999 Constitution of the Federal Republic of Nigeria (as amended with all the relevant provisions) has outlined the different areas of responsibilities assigned to each of the tiers of Government. While some responsibilities fall under the Exclusive List, many others are under the Concurrent List (which implies that these are areas that the Federal Government and other Sub-National Governments have varying and joint responsibilities).

The critical functions that need to be carried out at the State and Local government levels include:

- **Development of State Integrated Infrastructure Master Plans (SIIMPs)** – state Government and the FCT are expected to develop their Integrated Infrastructure Master Plans with medium term operational delivery plans in line with their priorities and with consideration of national strategies/priorities in order to ensure a single seamless effort. The aggregate of these plans will invariably feed into the consolidated NIIMP. The efforts made at the sub-national levels are to be complimentary to the efforts carried out at the national level.

- **Prioritisation of Projects for Implementation** – Following a similar logic as proposed in the prioritisation framework, states and local governments will need to review projects for implementation, and prioritise projects based on their alignment with their local priorities. In doing this, it is expected that preference would be given to projects with the highest socio-economic benefits and the most positive business cases while taking into account the integrated perspective of infrastructure development – (e.g. considerations of inter-modality and inter-sector linkages). For federal projects, it is recommended that feasibility studies should be completed for local projects, to ensure availability of complete and accurate information for project selection.

- **Monitoring and Evaluation of implementation at State and Local Government level** – Infrastructure Delivery Coordination Units are also expected to be set up at the sub-national levels to collect and process data on the implementation of their respective infrastructure plans. This is necessary to review progress, identify areas requiring intervention, and perform post-implementation reviews to ensure completion of projects in line with initial expectations.

- **Programme Management and Development** – the state Infrastructure Delivery Coordination Unit should also analyse execution per asset class/sector, and support collaboration with the Federal Delivery Unit to ensure information exchange and alignment, as well as collect and provide information to the federal government for planning purposes.

- **Communication and Private Sector Collaboration** – the Infrastructure Delivery Coordination Unit will also be responsible for communicating the plans and progress of infrastructure projects internally and externally, and to facilitate ongoing dialogue with the private sector for engagement in sub-national projects. Due to the high level of priority required for infrastructure investments, it is recommended that local infrastructure development teams should report to the highest level of authority at their respective levels.

The following areas are of importance to the sub-national infrastructure development efforts:

- **Transport:** There is need to construct, rehabilitate and maintain existing Trunk B and C roads nationwide. There is also the need to construct and maintain internal transport systems within the different states that will fit into modern intermodal transport network. Particular attention should be given to development of good quality rural access roads that will aid rural development, facilitate trade and improve economic activities and wellbeing of the people.

- **Energy:** Working in collaboration with relevant federal regulatory authorities, sub-national authorities can develop power generation utilities (including mini and off grid power generation solutions). Also, there is the need for collaboration with the REA to develop efficient and affordable rural access to power.

- **ICT:** Development of broadband ICT infrastructure at the sub-national levels in order to improve and increase Internet connectivity. Also, investment in the development of e-Government platforms across the country is equally important.

- **Social Infrastructure:** Education and health fall under the Concurrent List. The state governments have responsibilities for the development of infrastructure to support basic education and up to the senior secondary school level. They also own and maintain tertiary institutions (Universities, Teaching Hospitals, Polytechnics, Colleges of Education and Technology). Within the health sub-sector, the sub-national governments have responsibilities for the provision Primary Health Care facilities that handle among other maternal and childcare related health care requirements. Some state governments also have tertiary institutions that run Teaching Hospitals which provide tertiary health care services.

- **Housing:** This also falls under the Concurrent List. Under the Land Use Act, the ownership of land in each state is vested in the State Governor. The States issue land titles and maintain land registries that hold such records of assigned land titles and approved surveys. They also issue building permits and have responsibilities to ensure the enforcement of building regulations. The sub-national governments can also make investments

in development of Housing Schemes as well as various Urban Renewal, Regeneration and Development Schemes. The purpose of these schemes essentially is targeted at checking the prevalent rural-urban migration that has put pressure on facilities at the designated urban areas.

- **Agriculture, Water Resources and Mining:** The Sub-national governments are also expected to make substantial investments within their localities that are aimed at improving the enabling environment to carry out commercial faming activities. These will seek to improve on the wide-spread subsistence farming that is the current prevalent practice. These can be achieved by investment in the development of a good and well-maintained rural access road networks. These roads will greatly facilitate agricultural activities. Other required investments required will be in the development of crop processing installations, grain storage facilities, agriculture produce markets, abattoirs and meat processing installations etc. Governments at the sub-national levels can make investments, in active collaboration with the River Basin Development Authorities within their catchment's areas, in the development of water harvesting facilities, mini earth dams, and irrigation channels. These water resources development infrastructure utilities will go a long way in boosting agricultural activities within these areas. In the Mining Sub-Sector, and acting within the limits set under the Mining Act, states can make investments in the development of solid mineral resources that are found within their areas.

APPENDIX

APPENDIX 1

Table A1: Priority Road Projects as at 2020.

S/No.	Route/Description	Project Location	Road Characteristics
1	Abuja-Abaji Road (Section 1, International Airport Link Road Junction-Sheda Village Junction) C/No.5862	FCT	Dual Carriageway
	Abuja-Abaji Road (Section ii, Sheda Village Junction-Abaji) C/No.5863	FCT	Dual Carriageway
	Abuja-Lokoja Road Section iii (Abaji-Koton karfi) C/No.5884	Kogi	Dual Carriageway
	Abuja-Lokoja Road Section iv (Koton Karfi-Lokoja) C/No.5885	Kogi	Dual Carriageway
2	Kano-Maiduguri Road (Section i, Kano-Wudi-Shuari) C/No.5878	Kano	Dual Carriageway
	Kano-Maiduguri Road (Section ii, Shuari-Azare) C/No.5879	Bauchi	Dual Carriageway
	Kano-Maiduguri Road (Section iii, Azare-Potiskum) C/No.5880	Bauchi	Dual Carriageway
	Kano-Maiduguri Road (Section iv, Potiskum-Damaturu) C/No.5881	Yobe	Dual Carriageway
	Kano-Maiduguri Road (Section v, Damaturu-Maiduguri) C/No.5869	Borno	Dual Carriageway
3	Dualisation of Obajana Junction to Benin Phase 2: Section 1 (Obajana Junction to Okene) C/No.6135	Kogi	Dual Carriageway
	Dualisation of Obajana Junction to Benin Phase 2: Section ii (Okene to Auchi) C/No.6136	Edo	Dual Carriageway
	Dualisation of Obajana Junction to Benin Phase 2: Section iii (Auchi to Ehor) C/No.6137	Edo	Dual Carriageway
	Dualisation of Obajana Junction to Benin Phase 2: Section iv (Ehor-Benin) C/No.6138	Edo	Dual Carriageway
4	Rehabilitation of Enugu-Port Harcourt Dual Carriageway Section I: Lokpanta-Umuahia in Abia State C/No.6208	Enugu	Dual Carriageway
	Rehabilitation of Enugu-Port Harcourt Dual Carriageway Section ii: Umuahia-Aba in Abia State C/No.6209	Abia	Dual Carriageway
	Rehabilitation of Enugu-Port Harcourt Road Section iii: Enugu-Lokpanta C/No.6251	Abia	Dual Carriageway
	Rehabilitation of Enugu-Port Harcourt Road Section iv: Aba-Port Harcourt C/No.6252	Rivers	Dual Carriageway
5	Rehabilitation, Construction & Expansion of Lagos-Shagamu-Ibadan Dual Carriageway Section I in Lagos State C/No.6204	Lagos	Dual Carriageway
	Rehabilitation, Construction & Expansion of Lagos-Shagamu-Ibadan Dual Carriageway Section ii in Oyo State C/No.6205	Oyo	Dual Carriageway
6	Construction of Main Works for The Second Niger Bridge Linking Anambra and Delta States C/No.6475	Anambra/Delta	Single Carriageway
	Early Works iv for the Construction of Second Niger Bridge including Access Roads Phases 2a and 2b in Anambra and Delta States C/No.6296	Anambra/Delta	Single Carriageway
	Construction of Access Road to The Second Niger Bridge Linking Asaba and Onitsha in Delta/Anambra States (Phase 2a)	Anambra/Delta	Single Carriageway
	Construction of Access Road to The Second Niger Bridge Linking Asaba And Onitsha in Delta/Anambra States (Phase 2b)	Anambra	Single Carriageway
7	Reconstruction of The Outstanding Sections of Beni-Ofosu-Ore-Ajebandele-Shagamu Expressway Phase Iii, C/No.6133	Ondo	Dual Carriageway
	Pavement Strengthening and Asphalt Overlay of Ajebandele- Ijebu Ode-Shagamu Road in Ogun State C/No.6241	Ogun	
8	Dualisation of Ibadan-Ilorin Section ii in Oyo State Contract No.1793a	Oyo	Dual Carriageway
9	Rehabilitation of Ilorin-Jebba-Mokwa-Bokani Road in Kwara State C/No.6210	Kwara	Single Carriageway
	Dualization of Ilorin-Jebba-Mokwa/Bokani Junction Road Section I: Ilorin-Jebba in Kwara State C/No.6468	Kwara	Dual Carriageway
	Dualization of Ilorin-Jebba-Mokwa/Bokani Junction Road Section ii: Jebba-Mokwa-Bokani Junction in Kwara and Niger States C/No.6469	Kwara/Niger	Dual Carriageway
10	Rehabilitation of outstanding Section of Onitsha-Enugu Expressway: Amansea- Enugu State Border C/No.6266	Anambra	Dual Carriageway
	Rehabilitation of Enugu bound Carriageway of the Onitsha-Enugu Road, Phase I of Section I) in Anambra State C/No.5929	Anambra	Dual Carriageway
	Rehabilitation of Onitsha-Bound Carriageway of the Onitsha-Enugu Road, Phase I of Section ii) in Anambra State C/No.5929a	Anambra	Dual Carriageway
	Rehabilitation of Onitsha-Enugu Dual Carriageway Section ii (Anambra State Border-Enugu) in Enugu State, C/No. 5988	Enugu	Dual Carriageway
11	Dualization of Kano-Katsina Road Phase 1: Kano Town at Dawanau Roundabout to Katsina State Border in Kano State C/No.6213	Kano	Dual Carriageway
12	Rehabilitation of Calabar-Ugep-Katsina Ala Road Section ii (Ugep-Katsina Ala) in Benue/	Cross River	Single Carriageway

S/No.	Route/Description	Project Location	Road Characteristics
	Cross River States, C/No. 5991		
13	Rehabilitation of Odukpani-Itu-Ikot Ekpene Road in Cross River State Section I: Odukpani-Itu Bridge Head in Cross River State	Cross River	Single Carriageway
14	Construction of Apakun-Murtala Muhammed International Airport Road in Lagos State on Dbfomt Basis Under A PPP Scheme	Lagos	
15	Design Aand Dualization of Otukpo Township Road (General Hospital Otukpo to Enugu Roundabout) C/No.6259	Benue	Dual Carriageway
16	Dualisation Of Onitsha - Owerri Road and Onitsha Eastern Bypass C/No. 5660	Anambra/Imo	Dual Carriageway
17	Rehabilitation of Abuja-Kaduna- Zaria-Kano Road Section i: Abuja-Kaduna in FCT/Kaduna State	FCT/Kaduna	Dual Carriageway
	Rehabilitation of Abuja-Kaduna- Zaria-Kano Road Section ii: Kaduna - Zaria Kaduna State	Kaduna	Dual Carriageway
	Rehabilitation of Abuja-Kaduna- Zaria-Kano Road Section iii: Zaria -Kano in Kaduna/Kano States	Kaduna/Kano	Dual Carriageway
National Priority Projects 2: Projects on Major Branch Routes			
1	Dualisation of Sapele-Ewu Road: Section I: Sapele-Agbor in Delta State C/No. 6249	Delta	Dual Carriageway
	Dualisation of Sapele-Ewu Road: Section ii: Agbor- Ewu in Delta State C/No. 6250	Edo	Dual Carriageway
2	Addendum iii to Dualisation of Lagos-Otta Road in Lagos State C/No.3278a	Lagos	Dual Carriageway
3	Rehabilitation of Hadejia-Nguru Road in Jigawa State Phase Ii: Kirikasama- Nguru in Jigawa State C/No. 6072	Jigawa	Single Carriageway
	Rehab. of Nguru-Gashua-Bayamari Rd. Section I (Nguru-Gashua) C/No. 5966	Yobe	Single Carrriageway
	Rehabilitation of Nguru-Gashua-Bayamari Road, Section I (Nguru-Gashua) Phase ii (Km 30+000-62+000) in Yobe State C/No. 6348	Yobe	Single Carrriageway
	Rehabilitation of Nguru-Gashua-Bayamari Road, Section ii (Gashua-Bayamari) Phase ii (Km 22+000-59+000) in Yobe State C/No.6479	Yobe	Single Carrriageway
	Rehab. of Nguru-Gashua-Bayamari Rd. Section ii (Gashua-Bayamari) C/No.6139	Yobe	Single Carriageway
4	Construction of Kaduna Eastern By-Pass, C/No. 5346	Kaduna	Dual Carriageway
5	Construction of Kano Western Bye Pass C/No. 5960	Kano	Dual Carriageway
6	Rehabilitation of Vandeikya-Obudu-Obudu	Benue	Single Carriageway

S/No.	Route/Description	Project Location	Road Characteristics
	Cattle Ranch Road (Vandeikya-Obudu Section) in Benue State C/No. 6156		
7	Rehabilitation of Ilorin-Kabba-Obajana Road in Kwara/ Kogi States C/No. 6212	Kogi	Single Carriageway
	Rehabilitation of Ilorin-Kabba-Obajana Road in Kwara/ Kogi States C/No. 6212a	Kwara	Single Carriageway
8	Construction of Oshogbodo-Oweto Road C/No. 6265	Benue	Single Carriageway
9	Reconstruction of Nasarawa -Loko Road in Nasawara State C/No. 5846	Nasarawa	Single Carriageway
10	Construction of Panyam-Bokkos-Wamba Road, Wamba-Wanse Road in Nasarawa State C/ No.6258	Nasarawa	Single Carrriageway
11	Rehabilitation of Okene-Itobe Road in Kogi State C/No.6260	Kogi	Single Carriageway
12	Construction of Bidda-Sacci-Nupeko Road and the Nupeko/Patigi Bridge across River Niger Linking Nupeko And Patigi in Niger/Kwara States C/No. 6648	Niger/Kwara	Single Carriageway
13	Rehabilitation of Kontagora-Rijau-Tunga Magajia Road in Niger State C/No. 6141	Niger	Single Carriageway
14	Construction of Damasak-Dutse (Nigeria)-Diffa (Niger Republic) Road in Borno State C/No. 6071	Borno	Single Carriageway
15	Rehabilitation of Maiduguri-Bama-Gwoza-Mubi-Hong Road Section I: Maiduguri-Bama With Spur to Banki in Borno State, C/No. 5974	Borno	Single Carriageway
16	Rehabilitation of Damaturu-Biu Road in Yobe/ Borno States C/No. 6256	Yobe	Single Carriageway
17	Construction of Ningi-Yadagungume-Fuskar Mata Road Phase II in Bauchi State C/No. 6264	Bauchi	Single Carriageway
18	Rehabilitation of Maiduguri-Dikwa-Gamboru Road Section Ii: Dikwa-Gamboru I n Borno State C/No. 6069	Borno	Single Carriageway
19	Design and Construction of Birnin Gwari-Dan Gulbi Road in Kaduna/Zamfara States C/No. 6257	Kaduna/Zamfara	Single Carriageway
20	Rehabilitation of Zaria-Funtua-Gusau-Sokoto-Birnin Kebbi C/No. 6029	Zamfara	Single Carriageway
	Rehabilitation of Zaria-Funtua-Gusau-Sokoto-Birnin Kebbi C/No. 6029a	Zamfara	Single Carriageway
21	Rehabilitation of Funtua - Yashi - Dayi - Kano State Border Road. C/No. 5264	Katsina	Single Carriageway
22	Design and Construction of Road from Wudil-Utai-Acika-Darki-Jigaware in Wudil LGA C/No. 6140	Kano	Single Carriageway
23	Construction of Nsukka - Obollo - Afor - Ehamafu	Enugu	Single Carriageway

S/No.	Route/Description	Project Location	Road Characteristics
	- Nkalagu C/No. 5962		
24	Rehabilitation of Oba-Nnewi Road Section I in Anambra State, C/No. 5986	Anambra	Single Carriageway
	Rehabilitation of Oba-Nnewi Road Section ii in Anambra State, C/No. 5986a	Anambra	Single Carriageway
25	Rehabilitation of Ozalla-Akpugo-Amagunze-Ihuokpara-Nkomoro-Isu-Onicha (Enugu-Onicha) with a spur to Onunweke C/No. 6078	Enugu	Single Carriageway
26	Construction of Yenegwe-Okaki-Kolo-Nembe-Brass Road C/No. 5990	Bayelsa	Single Carriageway
27	Construction of Ikot Ekpene Border-Aba-Owerri Dualization C/No. 6155	Akwa Ibom	Single Carriageway
28	Dualisation of Yenegwe Road Junction-Kolo-Otuoke-Bayelsa Palm (20km) C/No. 6248	Bayelsa	Single Carriageway
29	Dualisation of Ibadan Road (Mayfair Junction)-Lagere-Iremo-Enuwa-Ilesha Bypass C/No. 6080	Oyo	Single Carriageway
30	Dualisation of Ijebu Ode-Ibadan Road Phase I: Rehab of Ijebu-Ode-Mamu Oyo S/B Road in Ogun State C/N. 6082	Ogun	Dual Carriageway
31	Rehabilitation of Oshogbo-Ilesha Road in Osun State C/No. 6075	Osun	Single Carriageway
32	Emergency Repairs of Apapa-Oworonsoki-Ojota Expressway Km 1+900-Km7+080 in Lagos State C/No. 6203	Lagos	Dual Carriageway
33	Dualisation of Abeokuta-Ibadan Road C/No. 6081	Ogun/Oyo	Dual Carriageway
34	Completion of Rehabilitation of Ogbomosho - Oko - Oshogbo Federal Road in Oyo -Osun States Route 35a/F26. C/No. 6031	Oyo/Osun	Single Carriageway
35	Construction/Rehabilitation of Gbongan-Iwo-Oyo Road in Oyo State C/No. 6102	Oyo	Single Carriageway
36	Rehabilitation of Otukpo - Oweto Road in Benue State C/No. 6076	Benue	Single Carriageway
37	Rehabilitation of Otukpa-Ayangba-Ajaokuta-Okene Road in Kogi State C/No. 6030	Kogi	Single Carriageway
38	Rehabilitation of Mararaba-Pambeguwa-Saminak-Jos Road, Section Iii Pambeguwa-Saminaka Road in Kaduna State C/No. 6013	Kaduna	Single Carriageway
39	Rehabilitation of Lafia-Obi-Awe-Tunga Road in Nasarawa State C/No. 6065	Nasarawa	Single Carriageway
40	Potiskum - Udubo - Gamawa - Gamayin Road (R333) Section Ii (Udubo - Gamawa - Gamayin Road) in Bauchi State C/No. 6067	Bauchi	Single Carriageway
41	Rehabilitation of Bauchi-Dass-Tafawa Balewa Road in Bauchi State, C/No. 6068	Bauchi	Single Carriageway
42	Rehabilitation of Funtua--Gusau-Sokoto Road	Sokoto	Single Carrriageway

S/No.	Route/Description	Project Location	Road Characteristics
	Sections Ii & Iii, C/Nos. 5694 & 5695		
43	Reinstatement of Washouts at Km 6+750 on the Onitsha Bound Carriageway and two (2nos) others on the Enugu Bound Carriageway (Km 30+400 And 35+325 Rhs) along Onitsha-Enugu Dual Carriageway in Anambra and Enugu States as additional works to the subsisting contract No.5929	Anambra	Dual Carriageway
44	Emergency Reinstatement of Gully Erosion at Km 127+000 Along Benin-Okene Road Route 50(A2) and Km 14+000 Along Auchi Agenebode Road in Edo State C/No.6120	Edo	Single Carriageway
45	Re-Alignment and Construction of Dangerous Curves Between Akwanga And Lafia Road (Km 10+300 - Km 23+600) in Nasarawa State, C/No. 5972	Nasarawa	Single Carrriageway
46	Emergency Reinstatement of Collapsed Section of Wukari-Mutum Biyu Road in Taraba State C/No.6123	Taraba	Single Carriageway
47	Potiskum - Udubo - Gamawa - Gamayin Road (R333) Section I (Potiskum - Udubo Road) in Yobe State C/No. 5896	Yobe	Single Carriageway
48	Construction of Takum-Wukari Road Section Ii Phase I: Chanchangi Bridge C/No.6245	Taraba	Single Carriageway
49	Rehabilitation of Owerri - Umuahia Road with Roundabout at Knwogwu: Section ii (Spur at Enyiogugu To Aboh In Imo/Abia States C/No.6126	Imo	Single Carriageway
50	Rehabilitation of Calabar-Itu-Ikot Ekpene-Aba-Owerri Road Section iii: Ikot Ekpene Border - Ikot Umuessien-Aba in Akwa Ibiom State C/No. 6036	Akwa Ibom	Single Carriageway
51	Completion of Auchi Poly-Ekperi-Uzea-Ohe (With Spur to Fugar) Afuda-Usugbenun Road; (Water Works-Ivue-Ibore/Irrua, Section I and Reconstruction of a Pedestrian Bridge at Auchi Poly Main Gate in Edo State C/No.6142	Edo	Single Carriageway
52	Rehabilitation of Umuahia-Ikot Ekpene Road Phase I in Abia and Akwa Ibom States C/No. 6083	Abia	Single Carriageway
53	Design and Construction of Benin/Adumagbae - Egba - Akure Road (25km) C/No.6235	Edo	Single Carriageway
54	Rehabilitation of Yola-Hong-Mubi Road in Adamawa State	Adamawa	Single Carriageway
55	Rehabilitation of Cham-Numan Section of Gombe-Yola Road in Adamawa State C/No.6300	Adamawa	Single Carriageway

S/No.	Route/Description	Project Location	Road Characteristics
National Priority Projects 3: Roads to Refineries, NNPC Depots, Ports and Mineral Producing Areas			
1	Rehabilitation of Apapa - Oshodi Express Way in Lagos Phase ii Sections I & II C/No.6202	Lagos	Dual Carriageway
2	Construction of Bodo-Bonny Road with a Bridge Across the Opobo Channel in Rivers State C/No. 6247	Rivers	Single Carriageway
3	Dualisation Of Suleja-Minna Road in Niger State C/No.6077	Niger	Dual Carriageway
	Dualisation Of Suleja-Minna Road Phase ii C/No.6267 (Km 40+000 - Km 101+000) in Niger State C/No.6267	Niger	Dual Carriageway
4	Construction of Agaie-Katcha-Baro Road in Nigeria State C/No.6254	Niger	Single Carriageway
5	Rehabilitation of Access Roads to NNPC Depot at Ejigbo in Lagos State C/No. 6026	Lagos	Single Carriageway
6	Access Roads to Apapa/Tincan Port, NNPC Depot (Atlass Cove) To Mile 2 C/No. 6005	Lagos	Single Carriageway
7	Rehabilitation of Access Road to Apapa/Tincan Island Port - NNPC Depot in Lagos State C/No.6246	Lagos	Single Carriageway
8	Rehabilitation of Ikorodu Shagamu Road Including Access Road to Mosimi In Lagos State C/No.6253	Lagos	Single Carriageway
	Rehabilitation of Ikorodu Shagamu Road in Lagos State C/No..6289a	Lagos	Single Carriageway
9	Rehabilitation of Access Roads to Eleme Port Harcourt Refinery C/No. 6025	Rivers	Single Carriageway
10	Access Roads to Warri Refinery C/No. 6051	Delta	Single Carriageway
National Priority Projects 4: Roads Through Agricultural Producing Areas			
1	Rehabilitation of 9th Mile-Enugu-Port Harcourt Dual Carriageway in Enugu/Benue States, C/No 6018	Enugu	Dual Carriageway
2	Rehabilitation Of 9th Mile-Oturkpo-Makurdi Road (Otukpa-Oturkpo Section) in Benue State, C/No. 5983	Benue	Single Carriageway
3	Rehabilitation of Sokoto-Tambuwal-Jega-Kontagora-Makera Section I in Sokoto/Kebbi States C/No.6161	Sokoto/Kebbi	Single Carriageway
	Re-Construction of Sokoto-Tambuwal-Jega-Kontagora-Makera Section ii in Niger State C/No.6162	Niger	Single Carriageway
4	Rehabilitation of Wukari-Mutum Biyu-Jalingo-Numan Road Section I: Wukari-Mutum Biyu Road in Taraba State, C/No. 5981	Taraba	Single Carriageway

S/No.	Route/Description	Project Location	Road Characteristics
5	Rehabilitation of Abakaliki-Afikpo Road Section I: Abakalilki-Onueke-Abomega Road in Ebonyi State, C/No. 5989	Ebonyi	Single Carriageway
	Rehabilitation of Abakaliki-Afikpo Road Section Ii: Abomega-Afikpo With Spur to Ugba-Akam/Ahabba Junction Road in Enugu State, C/No. 5989a	Enugu	Single Carriageway
6	Rehabilitation of Makurdi-Gboko Road (Wannune-Yandev Section) in Benue State C/No. 6159	Benue	Single Carriageway
7	Rehabilitation of Akure-Ondo-Ore C/No.6115	Ondo	Single Carriageway
8	Rehabilitation of Aba-Azumini-Opobo Road: Aba-Azumini Road Section I: (Ch0+500 - Ch13+800) In Abia State	Abia	Single Carriageway
9	Construction of Efire (Ogun State)-Araromi (Ondo State)-Aiyede (Ogun State)-Aiyela (Ondo State)	Ogun/Ondo	Single Carriageway

Source: Federal Ministry of Works and Housing

APPENDIX 1

REVIEW COMMITTEE TECHNICAL WORKING GROUP

i.	Olusola O. Idowu (Mrs.)	-	Permanent Secretary (MBNP), Chairman/ Overall Coordinator
ii.	Arc. Isa Garba Halidu	-	Member
iii.	Mr. Adeosun David Taiwo	-	Member
iv.	Prof. Akpan H. Ekpo	-	Member
v.	Prof. Dahiru H. Balami	-	Member
vi.	Dr. Adenuga A. O	-	Member
vii.	Dr. Usenobong Akpan	-	Member
viii.	Mr. Aremu A. Ade	-	Member
ix.	Mr. Henry Famakinwa	-	Member
x.	Mr. Aderemi Olawore Adesoji Mathew	-	Member
xi.	Mr. Kenneth Onyemaechi Kwujeli	-	Member
xii.	Mr. Jeminiwa Charles	-	Member
xiii.	Mr. Abdulrahman Naibi Rajab	-	Member
xiv.	Mr. Abdullahi Ahmed J.	-	Member
xv.	Engr. Adebayo Aderolu	-	Co-opted Member
xvi.	Mr. Odu Ada Tony	-	Co-opted Mmeber
xvii.	Mr. Ali A. Garba	-	Co-opted Member
xviii.	Mr. Inuwa A. Tony	-	Co-opted Member
xix.	Mr. Osaretin Evbuomwan	-	Co-opted Member

SECTOR EXPERTS

xx.	Mr. Adedun Olalekan
xxi.	Mrs. Abubakar Halima
xxii.	Mr. Olayiwola Temitope Yusuf
xxiii.	Mr. Jonah Mshelia
xxiv.	Arc. Igboke Augustine Bassey
xxv.	Mr. Hassan Mubaraq Bayo

SECRETARIAT

i.	Late Mrs. Oparah Charity Jude
ii.	Mr. Inalegwu Sam Ogbe

APPENDIX 2

CIRCULAR

Ref No. SGF,50/s,371111749

Office of the Secretary to the
Government of the Federation,
The Presidency,
Shehu Shagari Complex,
Three Arms Zone,
Abuja.

14th September 2020

Chief of Staff to the President

Deputy Chief of Staff to the President, Office of the Vice-President,

Honourable Ministers/Ministers of State,

Head of the Civil Service of the Federation,

Permanent Secretaries,

National Security Adviser,

Special Advisers/Senior Special Assistant,

Chief of Defence Staff/Service Chiefs/Inspector-Genral of Police,

Governor, Central Bank of Nigeria,

Chairman, Federal Civil Service Commission,

Chairman, Police Service Commission,

Chairman, Code of Conduct Bureau,

Chairman, Code of Conduct Tribunal,

Chairman, Revenue Mobilization, Allocation and and Fiscal Commission,

Chairman. Federal Inland Revenue Service,

Chairman, Independent National Electoral Commission,

Chairman, National Population Commission,

Chairman, Independent Corrupt Practice & Other Relate Offences Commission,

Chairman, Economic & Finance Crimes Commission,

Chairman, National Drug Law Enforcement Agency,

Chairman, National Salaries Incomes & Wages Commission,

Chairman, National Assembly Services Commission,

Surveyor-General of the Federation,

Director General Executive Secretary/Managing Director

ADMINISTRATION OF CONCESSION PROGRAMME OF THE FEDERAL GOVERNMENT OF NIGERIA

Following the absence of clear distinction between the functions of the infrastructure Concession Regulatory Commission (ICRC) and Bureau of Public Enterprise (BPE) and its consequences on investors confidence in th Nigerian Economy the Federal Government has approved the following guidelines for use in applying the National Policy on Public Private Partnership (PPP) vis-a-vis the extant laws guiding the operators of the Infrastructure Concession Regulatory Commission (ICRC) and Bureau of Public Enterprises (SPE) in the administration of PPP processes. The guidelines are:

a. The BPE in line with the provisions of the Public Enterprises (Privatization and Commercialization) Order 2012 (as amended) shall:

i. Be responsible for the concession of Public Enterprises and Infrastructure already listed in the First and Second Schedules of the Public Enterprises (Privatization and Commercialization) Act, and

ii. Act on behalf of the Federal Government, either alone or in conjunction with relevant Ministry, Agency, Corporation of body, as the counterparty on all infrastructure projects being developed on a Public Partnership basis;

b. The ICRC shall act as the regulatory Agency for PPP transactions, with powers to inspect, supervise a well as monitor the projects and process, in order to ensure compliance with relevant laws, policies and regulations; and

c. In processing any PPP transaction under paragraph (a) above I BPE and the relevant Agency of Government shall ensure compliance 1h the provisions of the Infrastructure Concession Regulatory Commission (Establishment, Etc.) Act, 2005.

2. This Circular, which supersedes any previous directive on this subject, shall take immediate effect and should be read in conjunction with all Extant Laws, Regulations, Orders and Guidelines.

Boss Mustapha
Secretary to the Government of the Federation