

Federal Republic of Nigeria

JICA Country Analysis Paper

Japan International Cooperation Agency
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The JICA Country Analysis Paper is a document prepared by JICA that analyzes each country from a development perspective, and is intended to be used by development agencies in considering and implementing effective cooperation with the Country concerned. It is also intended to provide information from a development perspective for the Japanese government when formulating aid policies such as Country Development Cooperation Policies. The actual contents of cooperation and projects to be implemented in a country will be reviewed and determined according to the policies of the Government of Japan, the size of the budget for each fiscal year, and the circumstances surrounding the project.

Executive Summary

1. Growth Potential and Development Challenges

Nigeria boasts Africa's largest economy (approximately US\$440.8 billion) and population (approximately 206.14 million people), and it is predicted that by 2100 the population will reach 800 million (second largest in the world). Given such a huge market, interest has been increasing as a destination for foreign companies to enter the market and for foreign investment, and in recent years the startup market has experienced remarkable growth. The Country is also rich in natural resources (crude oil and natural gas), with vast fertile land suitable for agriculture and water resources, etc., but while it has potential for further growth, this potential has not yet been fully utilized due to the following development challenges.

- 1) **Challenge 1 – Shifting from a resource-dependent economic structure and eliminating factors that hinder economic growth:** The Country's economy is dependent on natural resources and its economic structure is vulnerable to external shocks such as oil price fluctuations, etc., so there is an urgent need for industrial diversification and promotion, but low agricultural productivity and delays in infrastructure development are hindering economic development.
- 2) **Challenge 2 – Promoting social development to “Leave No One Behind”:** The Country has the world's largest population of poor (with a poverty rate of 40.1% of the population), and economic disparities between urban and rural areas and between the north and south are particularly serious; there are also noticeable delays in social development including health indicators which remain below sub-Saharan Africa averages for life expectancy and under-five mortality rate, etc., and the largest number of out-of-school children in the world. The same delays are noticeable in terms of SDGs, with a low score of 54.2 (139th out of 165 countries) in the “SDGs Index Score” published by the Sustainable Development Solutions Network.
- 3) **Challenge 3 – Peace and stability:** There is conflict and violence in various regions of the Country, mainly in the North East, with a total of more than 300,000 refugees and more than 2 million internally displaced persons, numbers which are increasing every year. The unstable security situation not only hinders stable economic activity and social development, but the increasing cost of security measures every year also puts pressure on national finances, making this a major factor hindering the growth of the Country.

2. Economic and Social Conditions

- **Economy** At one point in 2020, the GDP growth rate had a historic decline of 6% due to the decline in crude oil prices and the impact of COVID-19. As oil prices later rose, the GDP growth rate recovered to 3.2%, but Nigeria does not have any domestic crude oil refining facilities and is reliant on imports for many refined petroleum products and has introduced fuel subsidies to keep the market price of oil down which has increased the current account deficit (foreign currency outflow) and the fiscal deficit. As a result, the public debt to GDP ratio increased from 29.2% at the end of 2019 to 36.6% at the end of 2021 and is expected to exceed 40% in the medium term.
- **Trade** According to analysis by the World Bank, Nigeria is expected to be one of the greatest beneficiaries of AfCFTA, particularly through stronger exports in the non-oil sector, but it is noted that it will be important to unify exchange rates, suppress customs duties, and streamline/shorten import procedures to maximize profits.
- **Political Situation** There has been government instability with repeated republics and military regimes since gaining independence from Britain in 1960, but in 1999 the transition was made to a civilian government, with President Obasanjo of the Peoples Democratic Party taking office. The first democratic change of government was achieved in 2015 when President Buhari of the All Progressives Congress took office, and he was reelected in 2019, serving another term until 2023.
- **Geopolitical Perspective** The Country recognizes its leadership responsibilities in sub-Saharan Africa, especially in West Africa, and has a strong presence in the African Union (AU) and the Economic Community of West African States (ECOWAS). With its position as a central country in West Africa in terms of economic corridors and infrastructure networks, it also has high expectations for its contribution to regional economic development and integration.
- **Peace and Stability** Islamic extremist organizations such as Boko Haram, etc. are active in the northeastern area around Lake Chad, and damage has spread to neighboring countries (Cameroon, Niger, and Chad). Nigeria has engaged in the above organizational measures, fighting with neighboring countries, and also contributes to financial resources and troops to ECOWAS peacekeeping missions. Cooperation in Nigeria will contribute to peace and stability not only in the Country itself, but also in the West African region.

3. Overview of Development Plans and Development Cooperation

- **National Development Plan** In 2021, the Nigerian government announced the “National Development Plan (NDP) (2021-2025),” which targeted the effects of

economic growth, poverty reduction, job creation (especially for young people), and enhanced administrative governance capabilities. A long-term national development plan for 2050, “Agenda 2050” is also currently being formulated. The goal of both plans is to “lift 100 million Nigerians out of poverty within 10 years.”

- **Status of Cooperation with Nigeria** Nigeria is one of the largest recipients of assistance in sub-Saharan Africa, with a focus on humanitarian aid centered on support for the northern region, followed by health care (maternal and child health, and infectious disease control for malaria and tuberculosis, etc.). The major donors are the World Bank, China (mainly transportation infrastructure), US, UK, EU, Global Fund, and Germany. JICA occupies a certain position in the areas of electricity and agriculture where it has focused its efforts in recent years, but in 2019 the total amount of aid from the Japanese government ranked it 7th as a bilateral donor and 17th on a multi-lateral basis.

4. Future JICA Cooperation Policy

To develop strategic projects based on the development issues and current circumstances described above, seven cooperation programs have been prioritized under three key areas.

- Top Priority Programs: “Agricultural development”, which is one of the most important industries for industrial diversification and from the perspective of food security, and “Improvement of Health and Medical Systems,” to strengthen the response to infectious disease, which accounts for 50% of deaths in the Country.
- Priority Programs: “Business environment improvement and the promotion of innovation” to promote economic growth leveraging the potential of Nigeria, which is attracting a lot of interest for its rapidly expanding startup market and as an investment destination for foreign companies, and “peace and stability” to contribute to the realization of human security which is the premise behind all development.
- Given the importance of contributing to economic and social development, JICA will also steadily advance cooperation and work to make a development impact in other areas to those programs above. JICA will also promote action on gender equality and climate change measures across all programs.

Medium	Cooperation	Assistance Policy	Priority
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Goals	Programs		
Building a foundation for a sustainable and resilient society for economic growth	Agricultural development	Support the entire value chain connecting production, processing and distribution for rice, for which the Country is the largest producer in sub-Saharan Africa, and other agricultural and livestock products which can make use of Japanese technologies.	◎
	Business environment improvement and innovation promotion	Promote innovation by nurturing local entrepreneurs and startups, support the improvement of the business/investment environment, the strengthening of governance systems, and the development of industrial human resources, and promote domestic industry diversification/enhanced competitiveness and foreign direct investment.	○
	Improving power supply	Support the development of power transmission and distribution infrastructure and the enhancement of power system management capabilities. Also promote the introduction of rural mini grids, improving disparity in access to electricity and promoting the transition to renewable energy.	
	Urban development	Support the formulation of development plans for major cities, infrastructure development, and enhance the capacity of public service entities.	
Building an inclusive and resilient health and medical system	Improving health and medical systems	Focus on the early detection of infectious diseases by enhancing response capabilities with accurate and rapid testing, contributing to the enhanced response to infectious disease in Nigeria and throughout the region.	◎
	Nutrition and hygiene	Support the improvement of nutrition through agriculture and the development of sanitary facilities/improvement of habits, etc., enhancing systems to protect people's	

		health and contributing to the achievement of universal health care (UHC).	
Promoting peace and stability	Peace and stability	Support the enhancement of administrative capacity for regional reconstruction and development for victims of conflict and violence, improving the living environment of host communities, and contributing to efforts to spread education among out-of-school children, etc. and the realization of sustainable peace and stability.	○

◎: Top Priority Program, ○: Priority Program

5. Considerations when Implementing Cooperation

The following points should be carefully considered when implementing cooperation.

- Given the unstable security situation in Nigeria and limitations on the scope of JICA's activities, for the time being project development will focus in urban areas such as Abuja and Lagos. In doing so, (1) model success stories with a view to medium- to long-term regional expansion, (2) leverage impact by cooperating with other development partners and private companies (including startups), (3) promote cooperation that can be implemented remotely using STI/DX, (4) strategically develop projects through cooperation with initiatives under JICA Global Agenda (JGA), and (5) consider contributions to regional economic integration and the development of the surrounding regional economy and society, with attention to a) thorough safety measures, b) making a contribution to regional balance and decentralization, c) governance, and d) macroeconomic stability.
- Actively consider the use of loan aid, given the planned implementation of economic stimulus measures in public works projects by government to secure employment, etc., even though the Country is in a position of needing to focus on debt sustainability. On the other hand, given the fact that the Country still has the world's largest layer of poor people in spite of being classified as a "lower middle income country" under the DAC standards, JICA will provide comprehensive support including grant aid and technical cooperation.

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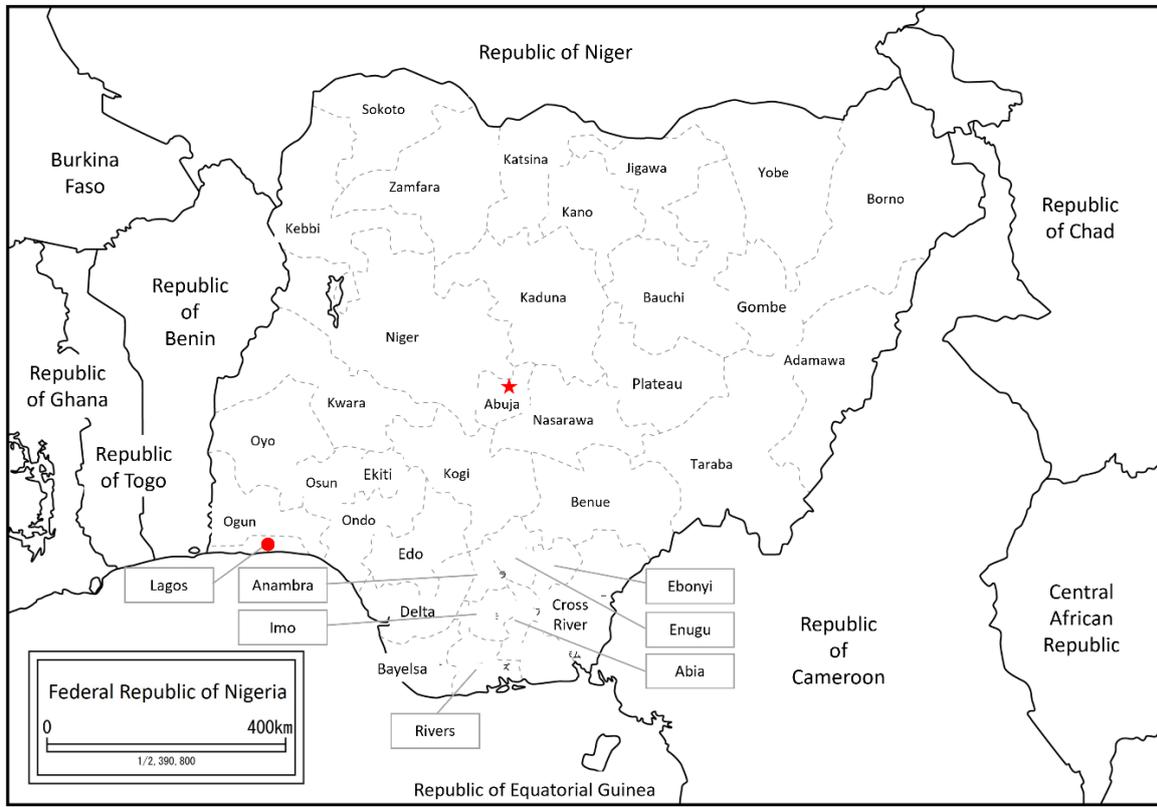
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Glossary

AFD	Agence Française de Développement
AfDB	Africa Development Bank
CARD	Coalition for African Rice Development
COVID-19	Corona Virus Disease 2019
DX	Digital Transformation
ECOWAS	Economic Community of West African States
ERPG	Economic Restoration and Growth Plan
EPSA	Enhanced Private Sector Assistance
FCT	Federal Capital Territory
FCTWB	Federal Capital Territory Water Board
FMFBNP	Federal Ministry of Finance, Budget and National Planning
GDP	Gross Domestic Products
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GNI	Gross National Income
IDA	International Development Association
ICT	Information and Communication Technology
IDP	Internally Displaced People
IFNA	Initiative for Food and Nutrition Security in Africa
ILO	International Labor Organization
IMF	International Monetary Fund
ISWAP	Islamic State - West Africa Province
JETRO	Japan External Trade Organization
JCIF	Japan Center for International Finance
JGA	JICA Global Agenda
NCDC	Nigeria Center for Disease Control
NBS	National Bureau of Statistics
NDC	Nationally Determined Contribution
NDP	National Development Plan 2021-2025
NEDC	North East Development Commission
NGO	Nongovernmental Organization
NINJA	Next Innovation with Japan
NPO	Nonprofit Organization
PPP	Public-Private Partnership

SDGs	Sustainable Development Goals
SGBV	Sexual and Gender Based Violence
SHEP	Smallholder Horticultural Empowerment Project
SSA	Sub-Saharan Africa
STI	Science Technology and Innovation
TCN	Transmission Company of Nigeria
TICAD	Tokyo International Conference for African Development
UBEC	Universal Basic Education Commission
UHC	Universal Health Coverage
UN	United Nations
UNICEF	United Nation Children's Fund
UNDP	United Nations Development Program
USAID	United States Agency for International Development
USD	United States Dollar
VC	Venture Capital
WB	World Bank
WHO	World Health Organization

Map



(Source: <https://www.freemap.jp/itemDownload/africa/nigeria/3.png>)

★...Capital: Abuja FCT

●...Largest Commercial City: Lagos

*The states in Nigeria are divided into administrative divisions in the form of the following six “Geopolitical Zones.”

North:

- North East: Adamawa, Borno, Yobe, Bauchi, Gombe, and Taraba
- North Central (also known as the Middle Belt): Benue, Kogi, Kwara, Nasarawa, Niger, Plateau, and the Abuja Federal Capital Territory (FCT)
- North West: Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto, and Zamfara

South:

- South East: Abia, Anambra, Ebonyi, Enugu, and Imo
- South South: Akwa Ibom, Bayelsa, Cross River, Rivers, Edo, and Delta
- South West: Ekiti, Lagos, Ogun, Ondo, Osun, and Oyo

Basic Information about Nigeria

Area	About 920,000 km ²
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Population	About 206.14 million (WB, 2020) *Largest in Africa
Ethnicity and Culture	There are more than 250 ethnic groups, including the three main ethnicities (Hausa (about 30%), Yoruba (about 20%), and Igbo (less than 20%)), and are said to be more than 500 languages, and due to this diversity, every region is thought to always have elements that can escalate from a small run-in to a full conflict.
Religion	Christian (about 50%, south), Islam (about 40%, north), Traditional religion (about 10%)
Political System	There has been government instability with repeated republics and military regimes since gaining independence from Britain in 1960, but in 1999 the transition was made to a civilian government, with the inauguration of President Obasanjo of the Peoples Democratic Party (PDP) in 1999. The first democratic change of government was achieved in 2015 when President Buhari of the All Progressives Congress took office, and he was reelected in 2019, serving another term until 2023.
Diplomacy	With the largest economy and population in sub-Saharan Africa (SSA), the Country recognizes its leadership responsibilities in the SSA, especially in West Africa, and in addition to a strong presence in the African Union (AU) and the Economic Community of West African States (ECOWAS), the Country has produced many talented individuals ¹ who have held key positions in international organizations, etc., and exercises a great influence within the region and in the international community.
Peace and Order	Islamic extremist organizations are active in the area around Lake Chad in the North East, and damage has also spread to neighboring countries (Cameroon, Niger, Chad). Elsewhere, in the South South zone, there is instability with conflict among armed groups/separatist movements and herders and farmers throughout the region, with a total or more than 300,000 refugees and more than 2 million people internally displaced, a number which is increasing every year. At the same time, there are areas where people are returning home and there is a recognized need for development support and importance of the Triple Nexus (humanitarian, development and peacebuilding).

Key Economic Indicators (IMF,2022)

	2017	2018	2019	2020	2021

¹ Ngozi Okonjo-Iweala, Director-General of the WTO, and Dr. Akinwumi A. Adesina, President of the AfDB, etc.

Nominal GDP (1 Billion USD)	375.75	421.74	448.12	429.42	441.54
GDP Growth Rate (%)	0.8	1.9	2.2	▲3.4	3.6
GNI per Capita (USD)	2,070	1,980	2,050	2,020	2,080
Consumer Price Index (Annual Ave. %)	16.5	12.1	11.4	13.2	16.9
Fiscal Balance (Percent of GDP)	▲5.4	▲4.3	▲4.7	▲5.7	▲6.0
Current Account Balance (Percent of GDP)	3.4	1.5	▲.3.3	▲4	▲0.4
Public Debt Balance (Percent of GDP)	25.3	27.7	29.2	34.5	37.0

1.1 Nigeria's National Development Plan

The “National Development Plan (NDP) (2021-2025)” was announced in December 2021. Also, as of December 2022, the long-term national development plan for 2050, “Agenda 2050” is also currently being formulated. The goal of both plans is to “lift 100 million Nigerians out of poverty within 10 years.”

The NDP targets the effects of economic growth, poverty reduction, job creation (especially for young people), and enhanced administrative governance capabilities.

(1) Long-term Development Plan

“Agenda 2050” is currently being formulated as a follow-up to the previous long-term NDP, “Vision 2020” (2009-2020). The goal of this plan is to “lift 100 million Nigerians out of poverty in the next 10 years.” The initial aim was for this to be published in July 2021, but as of December 2022 it has not yet been completed and its publication date is unknown.

(2) Medium-term Development Plan

In December 2021, the medium-term national development plan, “National Development Plan (NDP) (2021-2025)” was formulated. The vision of the NDP is “to make Nigeria a country that has unlocked its potential in all sectors of the economy for a sustainable, holistic, and inclusive national development” with the four strategic goals of 1) “a broad-based real GDP growth rate of about 5% on average during the plan period,” 2) “through an inclusive growth in lifting 35 million people out of poverty over the plan period (by 2025),” 3) “increased employment generation of about 21 million jobs by leveraging the young workforce,” and 4) “significantly enhancing administrative capacity at national and local levels.” These goals are further divided into six sectors, with key performance indicators (KPIs) set for each development challenge.

Table 1 “National Development Plan (NDP) (2021-2025)” Strategic Goals, Sectors and Development Challenges

Strategic Objectives	Sector	Development Challenges
1) Establish a strong foundation for a concentric diversified economy, with robust MSME growth, and a more resilient business environment 2) Invest in critical physical, financial, digital and innovation infrastructure 3) Build a solid framework and enhance capacities to strengthen security and ensure good governance 4) Enable a vibrant, educated and healthy populace	Economic growth and development	Macro economy, agriculture, food security, rural development, manufacturing and industry, oil & gas and steel, business and investment environment, culture, creative, and tourism
	Infrastructure	Transportation and power supply, alternative energy and living environment, and urban development, digital economy, science and technology, and finance
	Public administration	National defense and peace, and security, governance, foreign policy and international economy
	Human capital development	Education, health, food, and nutrition
	Social development	Water and sanitation, environment and disaster prevention, gender equality, population and identity, poverty reduction and social protection, humanitarian assistance, youth and sports, job creation, and people with special needs
	Regional development	Collaboration with local governments

(Created based on Japanese translation by JICA, from NDP, 2021)

Challenges

- **Growth Potential:** Boasts the largest economy and population in Africa, and given such a huge market, has seen increasing interest as a destination for foreign companies to enter the market and for foreign investment, and has a startup market that has experienced remarkable growth in recent years. Also rich in natural resources (crude oil and natural gas), with vast fertile land suitable for agriculture and water resources, etc., but while it has potential for further growth, this potential has not yet been fully utilized due development challenges such as those below.
- **Challenge 1 – Shifting from a resource-dependent economic structure and eliminating factors that hinder economic growth:** The Country’s economy is dependent on natural resources and its economic structure is vulnerable to external shocks such as oil price fluctuations, etc., so there is an urgent need for industrial diversification and promotion but delays mainly in infrastructure development have hindered economic development.
- **Challenge 2 – Promoting social development to “Leave No one behind”:** The Country has the world’s largest population in poverty, with particularly serious economic disparities between urban and rural areas and between the north and south, and there are also noticeable delays in social development including health indicators such as life expectancy and the under-five mortality rate below the SSA average, and the largest number of out-of-school children in the world.
- **Challenge 3 – Peace and stability:** Violence is occurring in various parts of the country, led by Islamic extremist organizations in the North East, and the safety of citizens is at threat across the country. The unstable security situation not only hinders stable economic activity and social development, but the increasing cost of security measures every year also puts pressure on national finances, making this a major factor hindering the growth of the Country.

2.1 Nigeria’s Growth Potential

The Country has Africa’s largest oil and natural gas reserves and boasts the largest economy and population in Africa with a Gross Domestic Product (GDP) of over US\$429.2 billion (IMF, 2020), and a population of over 200 million people. Given the scale of economy and population, the Country recognizes its leadership responsibility, particularly in West Africa, having a strong presence in the African Union (AU) and the Economic Community of West African States (ECOWAS), and producing many

talented people who hold important positions in international organizations, etc., exerting a great influence within the region and the international community. The population growth rate is around 2.6% and is predicted to reach 800 million in 2100, becoming the second largest in the world, and with the scale of its workforce, mainly comprised of young people, the Country has the potential to lead the African market. There are also entrepreneurs and startups who see the piling social issues and huge market as business opportunities, and an ecosystem has been forming mainly in Lagos to support them. In 2021, venture capital (VC) investment ranked first in Africa, both in number of projects and amount invested, and corporate venture capital (CVC) investment by Japanese VCs and trading companies has also commenced (JETRO, 2022). The role to be played by such startups in leading innovation in Nigeria and Africa, with their many social issues, is highly anticipated all over the world.

In addition, in terms of natural resources other than crude oil and natural gas, Nigeria has vast fertile land suitable for cultivation (about 77% of the Country) and abundant water resources, and agriculture has great potential as a key industry to replace crude oil. In particular, the Country is large producer of staple foods, ranking first in the world in the production of cassava and yams, and first in Africa in the production of rice (MAFF, 2022). In recent years there has also been rapid growth in the fishing industry, especially in aquaculture, which is the largest scale in SSA, and this is expected to be a new means of livelihood for the poor and for women. (FAO, 2021)

2.2 Analysis of Nigeria's Major Development Challenges

2.2.1 Challenge 1 – Shifting from a resource-dependent economic structure and eliminating factors that impede economic growth

Nigeria's economic structure is heavily weighted towards the major export industries of natural resource-related sectors such as crude oil and gas, accounting for approximately 30-50% of government revenue and approximately 70% of total export value, with a heavy reliance also on foreign currency acquisition (IMF, 2022). As a result, the national economy and finances are susceptible to external factors such as fluctuations in natural resource prices, etc., and responses and recovery from their impact tends to be slower than other SSA countries, making it difficult to maintain stable national management and growth.

In addition, although the Country is an oil producing country, it has no crude oil refining facilities and relies on imports for many of its refined petroleum products. Also, fuel subsidies that have been introduced to suppress the market price of oil are expenditures from the proceeds of the sale of crude oil by the National Petroleum Company. The recovery and rise in oil prices from the second half of 2020 has led to

a recovery in the GDP growth rate (from -1.8% in 2020 to 2.6% in 2021) due to increased sales profits, but at the same time, this has also led to an increase in fuel subsidy expenditures, which has strained national finances and has also led to the outflow of foreign currency. According to World Bank estimates, the fuel subsidies in 2022 will be approximately US\$9 billion, or about 2% of GDP, exceeding the total budget allocated to education, health, and social security (WB, 2022). Also, due to the deterioration of domestic security and a lack of capacity to maintain and manage crude oil production and transportation facilities and equipment, as well as the rampant destruction of crude oil pipelines and theft of oil, and environmental destruction in oil-producing areas, resulting in associated protests by local residents and issues with compensation payments, etc., crude oil production capacity is not being fully utilized and is currently unable to make a sufficient contribution to economic growth and the expansion of national revenue.

The ratio of government revenue to GDP over the past five years in Nigeria has been about 5-7%, which is very low on a global basis (SSA average 17.5%; G7 country average 36.6%) and is below the level required for adequate growth and national development (12.75%) (WEO, 2022; IMF, 2021). Given the situation described above and considering the increased security spending in light of the security situation in recent years, Nigeria's budget deficit in the medium term is expected to maintain a high level of -5-6% of GDP. If the current conditions continue, given that the deficit is covered by borrowing, expenditures for loan repayment will continue to increase into the future and will place a burden on national finances. Public investment is expected to further increase in the future as the population grows, so there is an urgent need to restore fiscal soundness by increasing revenue through increased tax revenue, etc., and to abolish fuel subsidies, etc. which place particular pressure on spending. The Nigerian government is aware of these issues, and in 2021 the Petroleum Industry Act (measures aimed at increasing oil revenues through the efficient operation of the oil industry and promoting investment) came into effect, and based on this law the government has declared that fuel subsidies will be abolished by the end of 2022. However, there has been a lot of opposition from the public to the abolition of subsidies and the official date of abolition has not yet been determined, so it is too soon to expect that there will be a rapid improvement in the financial situation. In addition, Nigerian conglomerate Dangote (Dangote Industries Limited.) is currently building the world's largest oil refinery in Lagos, which is expected to be completed in 2023. Once it begins operation it will be capable of refining 650,000 barrels of oil per day, generating a positive economic impact, but the long-term economic effect remains questionable with the accelerating trend towards decarbonization around the world, so there is also a need to break away from dependence on oil.

The main measures aimed at breaking away from an economic and national fiscal structure that is dependent on the oil and gas industry are (1) industrial diversification, (2) the promotion of foreign direct investment by improving the business environment, and (3) infrastructure development and urban development in support of (1) and (2). In addition, for these measures to proceed strategically and efficiently with limited national financial resources, it will be important to simultaneously improve national fiscal management and debt management capabilities. A more detailed analysis of (1) through (3) will be made below.

(1) Industrial diversification

Looking at the real GDP composition ratio of Nigeria in 2021, mining, including crude oil and gas, accounted for 7% of the total, showing that industrial diversification is progressing. In particular, the **agricultural** sector accounted for approximately 26% of GDP (NBS, 2022), which was larger than any other sector, and maintained positive growth even while the whole economy experienced negative growth during the COVID-19 pandemic, and the working population in the sector also accounts for about 34% of the total workforce (WB, 2019) etc., making this a key industry alongside oil and gas which is expected to play a role in further driving economic growth in the future. In addition, as Nigeria’s population continues to increase, with the prediction of being twice as large as the current population by 2050, the agricultural sector will also play a key role from the perspective of food security.

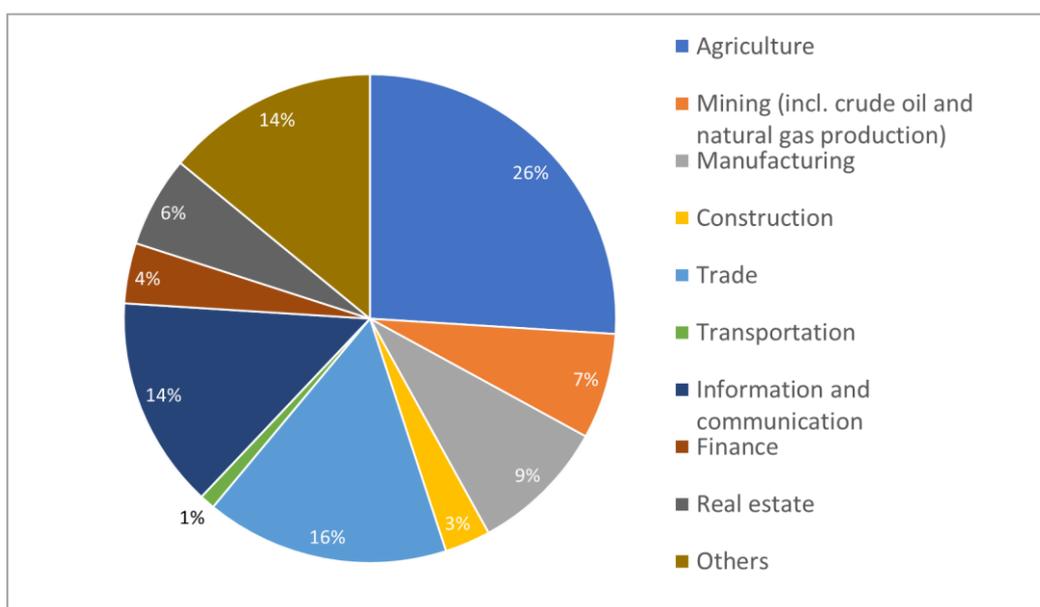


Fig. 1: Real GDP Composition Ratio by Industry (2021) (Created by JICA, from NBS, 2022)

In addition, **micro, small and medium enterprises (MSMEs)** account for 48% of

total GDP and about 6% of total exports, as well as approximately 80% of employment (SMEDAN, 2017), and the development of MSMEs has the potential to be a driving force for national economic growth and job creation. The effects of economic stagnation and COVID-19 have caused the Nigerian unemployment rate to increase from 6.4% (NBS, 2014) to 33.3% (NBS, 2020), and, the unemployment rate for those in particular aged 25-34, who make up the largest proportion of the working population, is 37.2%, which is higher than the national average (NBS, 2020), and this high unemployment rate and resulting poverty is thought to be linked to social anxiety among young people and the deterioration of security in recent years. As the working population of young people is expected to increase further with future population growth, there are high expectations for job creation through the promotion of MSMEs.

On the other hand, as described below, both farmers and MSMEs mostly belong to the informal sector that is not subject to tax collection, so their contribution to national revenue is low. In addition, because of the small scale of the economic activity of the informal sector with a low level of technology, export production is low and export competitiveness tends to be poor. As a result, the proportion of total exports from agriculture and MSMEs remains low, so it is not contributing to the acquisition of foreign currency. In the future there is a need to raise the standard of both sectors with the aim of increasing tax revenue and export value from industries aside from mining to stabilize national finances and diversify the means of acquiring foreign currency.

• Agriculture:

There are expectations for the future for further increases in production and profitability from the perspective of economic growth and food security, but there are challenges in improving agricultural productivity and the quality of agricultural products.

In Nigeria, about 90% of agricultural production is carried out by small-scale farmers, who make up the majority of rural residents (about 100 million people). Small-scale farmers mainly use traditional farming methods on small plots of land, and financial limitations on agricultural inputs and the fragile nature of the infrastructure environment, etc. make improving agricultural productivity a challenge. Also, inappropriate post-harvest treatments, etc. result in low quality agricultural products, and in the case of rice, for example, while the production volume ranks first in Africa, domestically produced rice is traded at a lower price than imported rice, and this reduces the motivation of farmers to expand rice production. As a result, along with the continued increase in the demand for rice due to population growth, the rice self-sufficiency rate remains at about 50% (Obi, 2019).

Many small-scale farmers engage in low-profit agriculture and have difficulty

transitioning to commercial farming, and expanding agricultural production through improved agricultural productivity and crop quality does not necessarily lead to higher income. Therefore, in terms of poverty rate, the poverty rate is significantly higher in rural areas where farmers are concentrated, being 18% in urban areas and 52.1% in rural areas (NBS, 2019). There is a need to work on improving profitability through the promotion of market-oriented agriculture to improve farmer incomes and thereby reduce poverty.

There are also significant post-harvest losses due to an undeveloped food value chain including agricultural product storage, processing facilities, and refrigerated transportation, etc., as well as poor road conditions, and in a food value chain survey conducted by JICA agricultural policy advisors in 2020 it was reported that post-harvest losses amounted to US\$10 billion annually, which represented a 40-50% loss of economic value for agricultural crops. In addition, given the lack of development and inefficient operation of ports and surrounding infrastructure, it takes about five days to export, causing agricultural crops to deteriorate and leading to a decline in commercial value. As a result, agricultural export income in Nigeria remains sluggish at 2% or less of total export income, and this has become a major issue in improving the profitability of the agricultural sector.

Regarding stable domestic food supply, there has been a decline in per capita food production because the agricultural production growth rate has been lower than the population growth rate, and domestic food prices are rising rapidly (the inflation rate is 23% (NBS, 2021)) as a result of the disruption of global food supply chains due to the recent impact of COVID-19 and the expansion of food exports to neighboring countries due to the depreciation of the naira. This results in putting pressure on the lives of the poor and is causing serious food shortages, especially where security is unstable in the North East. There is an urgent need to improve domestic food production and supply systems, especially in preparation for further food price increases that are expected due to the impact of climate change, etc.

Regarding livestock and fisheries, their proportion of agricultural GDP is low, with livestock accounting for just 5.7% and fisheries 4.5%, while crops account for the majority of total agricultural GDP (89%), and since production has not kept up with domestic demand there is a significant dependence on imports. In the case of livestock, sanitary control systems for slaughtering are inadequate, and the enhancement of epidemic prevention capabilities as measures against meat contamination originating in slaughterhouses and the transmission of livestock infectious diseases from slaughterhouses is an issue.

Given such circumstances, the Nigerian government is actively working to promote agribusiness by improving agricultural productivity through agricultural mechanization

and the use of high-quality agricultural inputs, and by expanding agricultural investment and improving financial access. Raising funds for the agricultural sector remains difficult, with the agricultural sector accounting for just 3.8% of total investment from private financing (PwC, 2018). The cause of this is the hindered growth potential in the agricultural sector (an inability to get a sufficient return even if investment is made) due to there being a limited number of banks that invest in the rural areas where most agriculture is carried out, and the lack of development of infrastructure (electricity and transportation, etc.) in rural areas (JICA, 2021).

- Private sector development (MSMEs and startups)

There is a strong need to fill the funding and skills gap faced by MSMEs.

99.8% of MSMEs in Nigeria have 9 or fewer employees, and the development of these small businesses will be key for the future. On the other hand, MSMEs, including micro-enterprises, are generally considered high financial risks, so many financial institutions set high interest rates on loans to MSMEs and require a certain amount of collateral, posing a barrier to financing for MSMEs.

At the same time, many MSMEs face issues such as a lack of management knowledge such as production management, quality control, financial management, and marketing, etc., and a lack of employees with technical skills, and these kinds of issues are typically difficult to resolve through the efforts of MSMEs alone. Thus, interventions to strengthen these areas are essential for the promotion of MSMEs.

Given such circumstances, the Nigerian Federal Ministry of Industry, Trade and Investment (FMITI) formulated a “National Policy on Micro, Small, Medium Enterprises” in 2021 aimed at developing laws and regulations on MSMEs, improving access to financial support, and promoting BDS, etc., but in terms of policy implementation systems, there are complex relationships among many related ministries, agencies, and local governments, and there are challenges in building a system and strengthening collaboration to improve policy effectiveness due to insufficient cooperation between relevant parties.

Also, the startup market in Nigeria has grown rapidly to US\$1.8 billion in total funding in 2021 (US\$370 million in 2020), accounting for 34% of total funding in Africa (Partech, 2022), and in the “Global Startup Ecosystem Index 2021,” a ranking of ecosystems around the world by market published by startup ecosystem research organization Start Blink, the Country ranked 61 out of 100 countries (2nd behind South Africa in SSA), and the city of Lagos ranked 81 out of 1,000 cities to be the only SSA city in the top 100, and both rankings have increased for the past three years in a row. The background to this is believed to include the legislative progress on the “Nigerian

Startup Bill”² which was announced in 2021 and enacted in October 2022, and the many tech and incubation hubs centered in Lagos. On the other hand, according to a Nigerian Startup Ecosystem Report by JICA, there is a similar large funding gap to that for MSMEs and access to funds is an issue, and the lack of infrastructure development (especially electricity and communications) is also a major issue that inhibits the smooth operation and expansion of business (JICA, 2021). In addition, startups are currently concentrated in Lagos, both in terms of the amount of startup investment and number of startups, and the benefits of promoting startups (economic benefits, solving social issues) is said to not be widely distributed throughout Nigeria (especially in rural areas where there is no sufficiently developed communications environment). Therefore, there is a need in the future to expand and strengthen the startup system throughout Nigeria through ecosystem development and the development of infrastructure to allow each startup to expand its own services regionally in other cities such as Abuja (473rd) and Ibadan (661st) that are also ranked in the Global Startup Ecosystem Index. Also, prior to the promotion of startups, the World Intellectual Property Organization (WIPO) in its “Global Innovation Index 2022”³ ranked Nigeria 114th out of 132 countries, which is low even in comparison with other SSA countries. According to this indicator, in addition to the above-mentioned delays in infrastructure development, governance structures, market sophistication, the production of knowledge and technology, and human resource development and research were evaluated poorly and there is a need to foster the startup ecosystem while at the same time establishing systems for startups to innovate, investing in and developing researchers and research institutions (including universities), and promoting collaboration between these researchers and research institutions and startups.

(2) Promoting foreign direct investment by improving the business environment:

Delays in infrastructure development and a lack of transparency and consistency in relevant systems are seen as major barriers to market entry, and not enough foreign capital is being attracted.

In the “World Bank Doing Business (DB) Ranking,” an indicator used to evaluate the business environment, efforts by Nigeria such as the establishment of the Presidential Enabling Business Environment Council (PEBEC) in 2016 resulted in a

² A regulation on regulatory support, tax and fiscal incentives, financing, and training, etc. For limited companies established less than 10 years earlier and startups for which 51% or more of shares are held by one or more Nigerians, the startup and its employees and investors can enjoy the following tax benefits (JETRO, 2022).

³ And evaluation of innovation capabilities and achievements in 132 countries and regions based on the 7 items of (1) institutions, (2) human capital and research, (3) infrastructure, (4) market sophistication, (5) business sophistication, (6) output of knowledge and technology, and (7) creative outputs

significant improvement from 170th in 2016 to 131st in 2019, but this is still a low ranking, and the greatest obstacle was seen as “getting electricity” (ranked 169th). Also, the Country ranked 149th out of 180 countries on the Corruption Perceptions Index 2020 because of widespread corruption, a multiple exchange rate system (existence of an official rate and a market rate) and complicated foreign exchange regulations, insufficient intellectual property protections observed in the mass distribution of counterfeit products, and the reform of systems without warning as symbolized in the 2020 Finance Act⁴, and there are also increasing serious business risks and costs associated with issues such as unclear customs clearance and other import/export procedures and the regulation of company registration and real estate registration, etc. Such a poor business environment, together with the lack of a consistent and effective policy to promote industry, is a major impediment to the development of non-oil related sectors such as manufacturing and to attracting foreign capital.

(3) Infrastructure development and urban development as a foundation for economic growth:

Infrastructure is an essential foundation for economic development and there is also huge demand for infrastructure in Nigeria, but the Country is currently unable to keep up with the need. In the **power** sector in particular, chronic power outages are the Country’s greatest bottleneck to economic growth. In Nigeria, economic functions are concentrated in cities, and this has resulted in a significant increase in urban populations, and there is a particularly urgent need for **urban development** and associated urban planning and infrastructure development in Lagos, Africa’s largest commercial city, and Abuja, the center of administrative functions. In addition, the **logistics** network connecting these two cities and other urban and rural areas is not sufficiently developed, leading to higher logistics costs and longer transportation times, and causing associated regional disparities. There is also a need to proceed with the development of **communications** infrastructure, including the development of the internet environment, for the promotion of startups, which are expected to see further success in the future as discussed above, and for the use of digital technologies which is being actively promoted by the Nigerian government. The issues associated with each of these items will be further analyzed below (power, urban development, logistics, and communications).

⁴ The 2013 National Automobile Development policy increased tariffs on imported cars with the aim of fostering the domestic auto industry and attracting OEM companies from Europe, the US and Japan, etc., but the Finance Act of 2020 suddenly significantly reduced the tariffs on imported cars. This resulted in a major hit to domestic auto related industries with a series of withdrawals from OEM arrangements and relocations to neighboring countries, etc.

• **Power:**

There are many challenges facing the entire power system, and the power supply is very unstable, which is the biggest bottleneck for economic development. There is a need to promote off-grid development in parallel with the power grid to improve access to power in non-electrified areas.

The previously state-owned power generation sector was privatized in 2013, but while some progress has been made in the construction of power plants with private capital, the limitations of the power transmission sector for which privatization has failed to progress has meant that maximum power generation is not keeping up with demand. Like the power generation sector, the power distribution sector was also privatized in 2013, but due to significant power losses from theft and a lack of maintenance and management skills, as well as inadequate bill collection as a result of uninstalled or damaged electricity meters, funds have not circulated to the power transmission and generation sectors creating a bottleneck to investment in the sector, including from independent power operators. The shortfall in fee collection in 2019 was 524 billion naira, which amounts to 0.4% of GDP and 11% of federal government revenue (WB, 2020), and the fact that this shortfall is currently covered by subsidies from the government is another factor that is putting pressure on public finances.

Furthermore, after the privatization of power generation and distribution in 2013, the functions of the entire power system became fragmented, with a lack of gas supply upstream (power generation sector) and the failed collection of fees downstream (power distribution sector), and together with the ingrained failures mentioned above (delays in fee collection in the power distribution sector leading to the sluggish circulation of funds to the power sector), both sectors are stuck trying to solve their own problems (making the entire sector dysfunctional). Therefore, promoting greater policy execution and coordination functions in the Federal Ministry of Power to promote sector-wide coordination is also an urgent issue.

The electrification rate nationwide is 53%, and there is regional disparity in access to electricity with about 86% electrification in urban areas and 36% in rural areas (WB, 2020). Therefore, while there has been some progress in rural areas with mini-grids that are independent from the power grid and private electrification projects such as standalone off-grid projects⁵, this progress has been limited due to issues with system design, planning, and project monitoring, etc.

As of 2018, the overall power mix in Nigeria was 82% gas-thermal power and 18% hydro power, and the most renewable energy source connected to the grid was hydro

⁵ "Off-grid" refers to the state of not being connected to an electrical grid or not being dependent on public utilities such as electricity, gas or water as lifelines needed for daily life. "Mini-grid" refers to a power grid that transmits electricity to an area that is more limited than a micro-grid. These are becoming popular as a low-cost method of electrifying areas without access to power.

power. A 2021 JICA survey cited insufficient financial and economic incentives to attract domestic and foreign investors as the issue for introducing renewable energy such as solar power generation, etc. (JICA, 2021)

• **Urban development**

There is a need to promote urban development in a planned manner in line with population growth in the two major cities that serve as the centers of economic and administrative activity (Lagos and Abuja).

The two largest cities, Lagos and Abuja are facing rapid urbanization and population growth, and the failure to implement appropriate urban planning and transportation policies is leading to urban issues such as chronic traffic congestion, the development of slums, and environmental pollution, etc. and since this is placing a burden on economic activity and the lives of residents there is a need for development that is based on urban plans. At the same time, to improve and properly maintain urban living environments it is necessary to strengthen the maintenance and management capacity of urban infrastructure such as water supply and waste management and to strengthen the capacity of the businesses responsible for these things to ensure their sustainable operation. For example, in the case of water supply in Abuja, while a bill was passed in 2017 making the Federal Capital Territory Water Board (FCTWB) which is responsible for the water in the city independent, the current situation of a low fee collection rate (about 30%) and high non-revenue water rate (50-60%) means that independent and self-sustaining business is not possible. In addition, in the case of waste management in Abuja, the various types of waste are collected without separation and are sent to landfill without a plan. Medical waste, which has been on the rise due to the spread of COVID-19, is not classified and is simply incinerated at each medical facility or is collected and disposed of along with general waste, but there is a need to develop a plan to manage and build a system for both general and medical waste.

• **Logistics infrastructure (inter-regional connectivity)**

Infrastructure investment and system development throughout the Country have not kept up with the economic scale and logistics demands, leading to high logistics costs and regional disparities.

Nigeria's Logistics Performance Index⁶ is 110th out of 160 countries (2018), but the ranking has fallen every year since reaching 75th in 2014 and the main reason for

⁶ An index compiled every two years by the World Bank for 160 countries around the world, evaluating (1) the efficiency of customs clearance procedures, (2) infrastructure quality, (3) transportation price competitiveness, (4) logistics service quality, (5) degree to which schedules are met, and (6) package tracking ability.

this is the poor efficiency of customs clearance procedures at the ports. Lagos Port, which handles most of the cargo, ranks 340th out of 351 ports in the 2021 Container Port Performance Index (CPPI), and long demurrage periods for ships in port due to congestion and delays in customs procedures (delays of 3-4 weeks have been reported in 2022), etc. have become serious issues. Also, even after leaving Lagos Port, severe traffic congestion and poor road infrastructure, etc. leads to higher transportation costs, further hindering economic activity. To alleviate these issues, the new Lekki Port is currently under construction in the Lagos area (scheduled for completion in 2022) and Dangote is scheduled to commence operations of the Country's largest oil refinery in 2023 in the Lagos Free Trade Zone in which the Lekki Port is located (JETRO, 2022). There is increasing interest in the development of the Lagos Free Trade Zone from foreign companies, including from Japan, and going forward, along with the above developments, there will be a need for surrounding infrastructure to be strengthened and for systems to be improved. Furthermore, as the largest commercial city in Africa, Lagos is the starting point not only for the domestic economy but also for regional economic networks, and one example of this is in the Abidjan-Lagos Corridor. Developing the economic corridor will not only promote regional economic integration but will also greatly benefit the domestic economy, so further development is expected in the future.

The overall transportation infrastructure in Nigeria is inadequate both in quality and economic scale, and only about 30% of the total road network of 197,000 km is paved (Nigeria Infrastructure Concession Regulatory Commission, 2019). In addition, many of these road networks were constructed in the 1980s to 1990s and a lack of sufficient maintenance have caused them to deteriorate significantly, and security issues etc. have led to delays in repairs so that the existing transport infrastructure is underutilized. Delays in transport infrastructure development have led to increased transportation costs and are another factor in rising prices, which also hinders movement and logistics between urban and rural areas leading to a widening of regional disparities.

Logistics infrastructure development is also needed in a wide range of other areas such as aviation and rail, but poor maintenance and a lack of investment funding are major obstacles. In addition to tangible infrastructure development, there are also issues with roadside security and illegal toll collection on roads, so improvements and investment are needed on multiple fronts.

• **Communications**

The development of communications infrastructure particularly in rural areas is a challenge for improving internet access.

Liberalization of the communications sector began under the administration of President Obasanjo in 2001, and DML (Digital Mobile Licenses) have been issued to private businesses as a result of bidding for communications licenses. In 2022, the Country was also the third country in Africa after South Africa and Kenya to introduce 5G (only around Lagos and Abuja), which is expected to further continue the spread of the internet and the advancement of the use of digital technology. On the other hand, as described above, while there has been an expansion in communications including the internet environment and mobile network, the development of communications infrastructure has not reached rural areas and the percentage of individuals using the internet is 33.6% (WB, 2019). Also, mobile networks are still inadequate with only voice calls being able to be handled by communication conditions in rural area, and there is not yet a communications environment in place to allow the benefits of digital technology nationwide. In addition, “Starlink,” the low orbit satellite broadband service provided by Space X will begin service from around Lagos in August 2022, with plans to gradually expand the target area. After its introduction it is expected that it will be possible to connect to the internet even in rural areas in which communication infrastructure is underdeveloped. On the other hand, connection to “Starlink” requires the purchase of special equipment (US\$500-700) and the payment of a service fee after that (about US\$100 per month), so it is expected that there will be high hurdles for use by people living in rural areas.

2.2.2 Challenge 2 – Promoting social development to “Leave No One Behind”

As of 2020, the population under domestic poverty line in Nigeria (domestic poverty line⁷ US\$381.75/person) was 82.9⁸ million people (40.1% of the population) to be the world’s largest population in poverty, and it is predicted that for 2022 this will rise to 95.7 million (42.9% of the population) due to the impact of COVID-19 and the Ukrainian crisis, etc. (WB, 2020). The poverty rate in urban areas is 18% and in rural areas it is 52.1%, so there are significant interregional disparities (NBS, 2019). Also, while Nigeria’s Human Development Index (HDI) has improved slightly from 0.482 in 2014 to 0.535 in 2021, it has remained mostly flat in recent years, and for 2022 the Country was classified as a low-ranking country with a HDI ranking of 163rd of 191 countries (UNDP, 2022). The reason for the lowering of the ranking is in the **health and medical care** sector, particularly with regard to medical services not sufficiently reaching women and children, vulnerable groups such as refugees, and rural areas, and health, the foundation of people’s lives, is being threatened. Given these circumstances, there is an urgent issue to strengthen health and medical care systems, along with the need

⁷ The domestic poverty line is calculated annually by summing the food poverty line and non-food poverty line and is defined as “the monetary value of food and non-food expenditures required to achieve a minimum level of social living” (NBS, 2019, p3).

⁸ Figures for the state of Borno were not included because random sampling was not possible for security reasons.

to resolve **nutritional** deficiencies and to improve the **water and sanitation** environment, which are closely tied to promoting health. Also, a large number of children in Nigeria are out of school, mainly in the North East region, and there are concerns that not only are these children losing educational opportunities but there will be a shortage of human resources to support economic growth in the future. There is also a risk that young people that have not been educated will find it difficult to obtain a stable job, leading to the perpetuation of poverty cycles and participation in violence. Improving the **educational** environment is an important issue for Nigeria from the perspectives of economic growth, poverty reduction, and peace and stability.

Looking at the size of Nigeria's GDP, while it is the most economically developed country in Africa, social development has not kept up with the speed of economic and population growth, as discussed above, and there are huge disparities and issues within the Country. If social development continues at the current pace, it is considered that it will be difficult to achieve the SDGs by 2030, so there is a need to promote social development along with economic development to "Leave No One Behind." The areas of health, nutrition, water and sanitation, and education will be discussed in more detail below.

(1) Health and medical care:

Infectious diseases and maternal and child health are two major challenges, and the average life expectancy at 54.7 years, which is below the SSA region average of 61.6 years (UNDP, 2020).

▪ Infectious disease

The mortality rate due to infectious diseases is around 51%, which is higher than the SSA region average of 45%, and in addition to the large number of deaths from outbreaks of Lassa fever, cholera, and meningitis, etc., the number of HIV positive people ranks second in the world (51% of the African region). The reduction of preventable deaths from diarrhea in children and delays in treatment resulting in three-quarters of new tuberculosis patients remaining undiagnosed are urgent issues that require improvement. Many patients are unable to receive testing and diagnosis, especially in rural areas, leading to a failure to provide appropriate treatment, and outreach is a challenge. Issues with the accuracy of testing have also been noted. At the start of the COVID-19 pandemic in 2020, the infection actually spread from the densely populated metropolitan areas to rural areas at an early stage, even compared to other parts of the SSA region, and the Country recorded the second highest number of infected people after South Africa, etc., and when infectious diseases spread to rural areas the poor outreach, testing, and diagnosis systems in those areas result in a high risk of the infectious disease becoming uncontrollable.

▪ **Maternal and child health**

Maternal and child health indicators in the Country are low, even in comparison to SSA region averages, with a maternal mortality rate of 917 (per 100,000 live births) (WHO, 2017), which is the 4th worst in the SSA region, and an under-five mortality rate of 119.9 (per 1,000 live births) (UNICEF, 2018), the second worst in the region. Looking at a breakdown of maternal deaths, indirect obstetric deaths where a pre-existing disease is exacerbated by pregnancy, hypertension, and postpartum hemorrhaging account for about 60% of all cases and can be avoided with prenatal and postnatal checkups. Also, the causes of death for children under five are malaria, diarrhea and vaccine-preventable diseases, which also account for 60% of total deaths. While this situation can be expected to improve by strengthening primary medical services, government spending on health in the Country accounts for 4.6% of total spending (WHO, 2017), which is low compared to the average of 5% in low-income countries, and while government health expenditures in the Country as a proportion of ordinary health expenditures grew slightly from 13% in 2016 to 14.86% in 2018, this was still 0.5% lower than the average of 1.9% of GDP in the SSA region, with out-of-pocket payments for ordinary health care expenditures at 77.2%, the fourth highest in the world (highest in the SSA) (WB, 2017). In addition, the proportion of households for which health-related expenses account for 10% or more of household expenditures/income is 15.1%, which is double the African average of 7.3%, and the high rate of out-of-pocket payment by households for health and medical expenses is also a factor that hinders access to the health and medical care necessary for proper disease prevention and early treatment.

▪ **Healthcare system and personnel**

While the number of health care personnel is the highest in Africa and has further increased in recent years⁹, there are issues with the quality of primary health care personnel and the biased allocation of personnel towards metropolitan areas in the South West. A regulatory agency has been established to verify and certify the various levels of qualifications for doctors, nurses, pharmacists, and clinical lab technicians, but this is not functioning properly due to weak supervision over personnel training institutions and health care facilities, and follow-up systems.

Also, due to the nature of the federal system in the Country, the structures of state health departments all differ, and each state has its own health care development plans in addition to the national plan at the federal government level and given that

⁹ The number of clinical medical specialists and general health workers increased by about 31% between 2012 and 2018. The number of nurses and midwives in 2019 had increased from 9.26 per 10,000 people in 2018 to 15.01 per 10,000 people, while the number of doctors per 10,000 people had decreased slightly from 4.49 in 2016 to 3.81 in 2018 (WHO, 2022).

organizational structures and budget allocations are based on this, cooperation appropriate to such an administrative structure is required.

(2) Nutrition:

There are multiple layers to the issues that lead to chronic malnutrition, and multi-sectoral support is required.

According to the 2018 Nigeria Demographic and Health Survey, there was widespread malnutrition in 2018, with 37% stunting, 23% of under-five underweight children (NBS, 2018), and 9% wasting (NBS, 2018), an indication of acute malnutrition, all of which are also factors in the high under-five mortality rate. There are multilayered issues causing malnutrition, including water sanitation, health, food, and knowledge. Regarding food, restrictions on movement due to the spread of COVID-19 resulted in food shortages and rising prices making it difficult to secure sufficient food, and this has also had a negative impact on nutrition. Improved nutrition requires cross-cutting initiatives, and not just initiatives within individual sectors such as nutrition and agriculture, etc. For this reason, the Nigerian government is promoting a multi-sectoral approach and while there are initiatives targeting nutrition in each sector, many of these are implemented vertically. Furthermore, while institutional initiatives have been established at each level of government, these are not functioning properly due to budgetary issues, so there are also issues in improving government coordination functions and securing the budget for nutrition policy.

(3) Water and sanitation:

Access to water and sanitation facilities is limited, and diarrhea is common due to inadequate sanitary conditions and habits.

The rate of access to sanitation facilities (toilets, etc.) and water supply facilities remains at just 9% nationwide (Federal Ministry of Water Resources, 2019), and 46% of all water supply facilities (hand pump wells, etc.) are not functioning and nearly 30% of them break down within one year of construction (WB, 2015). The open defecation rate is also high at 23% (UNICEF, 2021), and the number of people defecating outdoors has increased since October 2020 to be the highest in the world. Also, proper hand washing habits are not well established. These sanitation conditions are said to be the cause of diseases such as diarrhea, etc., and more than 70,000 under-five children die every year from diarrhea, etc. (UNICEF, 2021)

(4) Education:

The number of out-of-school children is the highest in the world, particularly in conflict-affected areas, and there are concerns that this will negatively impact the country's growth in the long term.

Approximately one fifth of the world's out-of-school children are said to be in Nigeria, and in the conflict-affected areas in the North East and North West in particular there are sporadic school destructions and mass kidnappings by Boko Haram and bandit groups. There are more than 2 million children out of school due to poverty. Girls in particular are at high risk of being kidnapped, and the practice of child marriage remains widespread, so more than half of girls are unable to attend school, making girl's education and educational disparity serious issues (UNICEF, 2020). There are regional disparities in the primary education enrollment rate because of these issues with out-of-school children, with the average in urban areas being 99.9% while in rural areas it is just 63.9%. In addition, the gender disparity in the primary education enrollment rate is greater in rural areas (boys 63.9%, girls 56.9%) than urban areas (boys 100.8%, girls 98.9%), and this gender gap becomes more pronounced as the educational level increases (all NBS, 2020).

The need for distance education has increased under COVID-19, but most classes are unable to be held online due to the poor communication environment, and in the case of primary education level such classes are only available on existing information and communication networks such as radio, etc. If the situation remains as it is young people will not be able to receive an adequate education, causing the issue of youth unemployment to become even more serious, further expanding poverty and regional disparities and possibly leading to the deterioration of public order. Future issues include securing a stable environment in which children can be educated with peace of mind and improving the communications environment in rural areas to expand distance education by promoting peace and stability in areas with unstable security and developing basic infrastructure.

In addition, the overall completion rate of basic education in Nigeria remains at 55%, and the reality is that young people who are unable to complete basic education and who fall outside of the framework of public vocational training and education, etc., or who are unable to enroll in secondary or higher education, will be forced to work in unstable conditions in the informal sector, etc. (UNICEF, 2020). Job creation, as well as capacity building through education and vocational training, etc. are essential for realizing decent work (jobs that are rewarding and humane).

2.2.3 Challenge 3 – Peace and stability

Violence is occurring in various parts of the country, led by Islamic extremist organizations in the North East and threatening the safety of citizens across the country. The unstable security situation is not only impeding stable economic activity and social development, but the increasing cost of security measures is putting further pressure on national finances every year and is a major factor impeding the Country's growth.

Terrorism by Boko Haram and ISWAP in the North East, the Niger Delta issue in the South South, and conflicts between herders and farmers in the Middle Belt threaten the safety of citizens in these areas, and these conditions occur particularly in areas with high poverty levels.

While violence by Boko Haram in the North East is decreasing, the scope of activities by ISWAP is expanding, and there is an urgent need for humanitarian assistance for 8.7 million people in the North East (approximately 70% of the population). Approximately US\$1 billion is needed for emergency humanitarian assistance and to rebuild the victim region, but current support only amounts to about half of this (OCHA, 2021). There are currently more than 2 million internally displaced persons (IDPs) in the three North East states, but in some areas, there are also people who are returning home after protracted conflict, and in addition to emergency humanitarian assistance, resettlement support for returnees is also an issue, and, there is also a serious issue with gender-based violence (SGV).

In the Niger Delta region, there are currently two main armed groups (Niger Delta Liberation Front and Niger Delta Avengers) who are demanding compensation for residents for environmental destruction in the South South states due to oil production and the unfair allocation of budget, and there have been major economic losses due to the destruction of oil pipelines and the theft of oil, etc. by these groups. Again, in 2020, there were repeated kidnappings for ransom of students and citizens (in some cases, mass kidnappings) by bandits in the North West, and such activity has not been limited to the North West but have expanded to the state of Niger (in the North Central region), which is adjacent to the capital Abuja (The Guardian, 2020). There are concerns that such armed bandits may pose a threat similar to terrorists. In addition, as desertification expands due to population growth and climate change, causing pastoralists to increasingly flow into farmland and contend with local farmers who hold land use rights, etc., the safety in many parts of Nigeria is being threatened. This unstable security situation hinders stable economic activity and the provision of basic social services such as medical care and education, and in addition to being a major factor inhibiting the growth of the Country, the increase in incidents has forced the central government to increase spending on security measures and recovery, placing

a heavy burden on the Country's finances. In addition, agricultural production continues to be difficult in some areas due to the effect of long-term conflict, with the North East and North West facing a food crisis of Phase 3¹⁰ or higher, affecting about 7.1 million people (WB, 2020), and the Ukraine crisis in 2022 has served a further blow and it is expected that the situation will become even more serious.

In response to the protracted conflict and humanitarian damage, the Nigerian government has established the Federal Ministry of Humanitarian Affairs, Disaster Management and Social Development and the North East Development Commission (NEDC) to coordinate support from ministries and agencies, states, and donors, etc. However, both of these institutions are still new, having only been established for a few years, and the development of personnel within these organizations is a challenge.

2.3 Other (Cross-cutting matters)

(1) Gender

According to the 2022 World Economic Forum Gender Gap Index, the Country is ranked 123rd out of 156 countries, showing an improvement compared to 138th in the previous year (2021), but it still remains one of the countries with the largest gender disparities. Also, sexual and gender-based violence (SGBV) increased during the COVID-19 lockdown, with there being 346 reported incidents of violence in March 2020 before the start of the COVID-19 lockdown, increasing to 764 in April after the start of the lockdown (UN, 2020). The number of female students unable to go to school has also increased due to school closures, and reports suggest that study time has decreased. Thus COVID-19 has also had a negative impact on poverty and gender-based issues.

(2) Governance

The World Bank Country Policy and Institutional Assessment (CPIA) is at 3.2 (WB, 2019), which is around the average level for IDA-eligible countries. While some improvements have been noted in policies for social cohesion and equity and structural policy (improving the business environment), both economic management (macroeconomic management) and structural policy (trade, financial sector) are on downward trends. With regard to corruption, while the current President Buhari has worked on anti-corruption measures since taking office in 2015, Transparency International's 2021 Corruption Perception Index (CPI) scored just 24 points out of a possible 100, ranking 154th out of 180 countries. According to a joint investigation into corruption by the NBS and the United Nations Office on Drugs and Crime (UNODC)

¹⁰ The "Integrated Food Security Phase Classification (IPC) classifies food insecurity into five levels, and Phase 3 is the "Crisis" stage, which refers to a state in which minimal food needs can be met, but most of one's livelihood is consumed or emergency support is required.

in 2020, 30.2% of citizens who had interacted with public servants in the past year had paid a bribe at least once, and the main targets of this were police, registry office staff, and tax office staff. The main reason given was to “speed up administrative procedures,” and such habits of bribery and slow administrative procedures are also factors that hinder entry and investment by foreign countries, including Japan.

(3) Climate change

In Nigeria, the sectors of agriculture and food security, water resources, public health, and residential areas are said to be particularly vulnerable to climate change, with the most vulnerable regions being the coastal areas of the South East that are prone to erosion and the arid/semi-arid parts of the northern region that is susceptible to desertification. Given these circumstances, there is a need to develop social infrastructure that is resilient to the risks of natural disaster associated with climate change.

Nigeria has ratified the Paris Agreement to combat climate change, and in the updated “Nationally Determined Contribution”¹¹ submitted in 2021, has set a target of a 20% reduction by 2030 compared to BAU (business as usual, emissions if current policies were continued) based on 2018 greenhouse gas emissions, and a 47% reduction by 2030, conditional on international support. Also, in November 2021, the “2050 Long-Term Vision for Nigeria – Towards the Development of Nigeria’s Long-Term Low Emissions Development Strategy” was announced, a policy which included raising the energy derived from renewable energy to 50% by 2050, etc., and at COP26 in November 2021 President Buhari declared the goal of achieving zero emissions by 2060, taking measures in line with the international community. At the same time as advancing climate change measures, Nigeria will also need to work on rectifying disparities in energy access (JCIF, 2021).

¹¹ As decided at COP19 in Warsaw in 2013, all countries that were signatories to the United Nations Framework Convention on Climate Change were asked to submit targets for greenhouse gas emission reductions for 2020 and beyond. Furthermore, the Paris Agreement adopted at COP21 in 2015 (effective from November 2016) mandated all signatories to the United Nations Framework Convention on Climate Change to submit/update this NDC every 5 years (JCIF, 2021).

3.1 Significance of cooperation by Japan and JICA

The significance of cooperation with Nigeria is high with respect to (1) contributing to the stability and development of all of SSA, particularly the West Africa region, (2) promoting the entry and investment of Japanese companies and strengthening bilateral business cooperation between Japan and Nigeria, and (3) contributing to the various TICAD initiatives.

Nigeria is a large country with the largest population and total GDP in the SSA region and is recognized by itself and others as a leader within SSA. It has a particularly strong presence within the ECOWAS region, in which member countries have a population of approximately 400 million and a total GDP of about US\$700 billion, and in addition to Nigeria accounting for about 50% of this population and about 60% of the total GDP (WB, 2020), it also makes the largest contribution to ECOWAS (about 40% of the total) and has a role in driving growth in West Africa. In addition, the “Abidjan-Lagos Corridor,” which connects Africa’s largest commercial city Lagos with Abidjan, the capital of the Republic of Côte d’Ivoire forms a core network for regional logistics that is highly anticipated for the future, connecting major ports and cities in West Africa along the corridor. It is expected that cooperation with Nigeria will go beyond just the Country itself and will contribute to strengthening broad regional economic development and resilience.

Also, Islamic extremist organizations such as Boko Haram and ISWAP (Islamic State West Africa Province), etc. are active in the North East region of Nigeria, and this damage has also spread to neighboring countries (Cameroon, Niger, Chad, etc.). Nigeria works with neighboring countries in taking the above organizational measures, and also contributes financial resources and troops to ECOWAS peacekeeping missions. Cooperation in promoting the peace and stability of Nigeria will contribute not only to the Country itself, but also to the peace and stability of the West Africa region.

Nigeria, with the largest population and economy in SSA, is attracting a lot of interest from Japanese companies as a destination for expansion, and the JETRO “Survey on Business Conditions of Japanese Companies in Africa (2021 Survey)” showed that the Country was one of the top 3 countries that companies were focused on for the fifth year in a row, and was recognized as a promising market with more than 40 companies having expanded into the market. It is expected that the relationship of trust and networks used in cooperation with the Country’s government that have been cultivated by JICA will lead to stronger bilateral business cooperation, including the expansion of Japanese companies into the market and the promotion of investment, etc.

There are projects in Nigeria which support five TICAD initiatives and cooperates with (1) Coalition for African Rice Development (CARD), (2) Initiative for Food and Nutrition Security in Africa (IFNA), (3) Smallholder Horticulture Empowerment and Promotion (SHEP) Initiative, (4) Africa Kaizen Initiative (AKI), and (5) Enhanced Private Sector Assistance for Africa (EPSA), and cooperation with the Country will also contribute to these initiatives.

3.2 Direction of development cooperation for Nigeria

3.2.1 Priority areas for cooperation by JICA and cooperation programs to be undertaken

Taking advantage of the growth potential of Nigeria and in light of the cooperation that JICA should undertake to support sustainable economic growth and social development, the following four perspectives have been organized based on the major development challenges discussed in Chapter 2, the significance of cooperation by Japan and JICA confirmed in Chapter 3 section 3.1, and the current Country Development Cooperation Policy (2017).

1) Perspectives of development cooperation in Nigeria (major development issues and contributions to the region)

- Breaking away from a vulnerable economic structure through industrial promotion and diversification, eliminating the bottlenecks that inhibit economic growth
- Promotion of social development and the correction of regional disparities towards the achievement of “Leave No One Behind”
- Promotion of peace and stability
- Role as a driver of development and stability in SSA (especially West Africa)

2) Consistency with Japanese policy

- Consistency with the three pillars of TICAD (economy, society, and peace and stability) and with each initiative
- Consistency with JICA’s priority issues and strategies such as the Global Agenda (JGA)
- Promotion of business cooperation with Japanese companies

3) Use of past cooperation with Nigeria and Japanese assets

- Utilization of Japan’s superior technologies, systems, and know-how
- Utilization of cooperative assets under past development cooperation policy

4) Cooperation development based on the unstable security conditions

- Development of projects centered around urban areas, and the creation of success models

Based on the above perspectives, the three priority areas and five development issues to be addressed by JICA have been organized. These are all consistent with Nigeria's National Development Plan discussed in Chapter 1.

- **Priority Area 1 – Building the foundations of a sustainable and resilient society for economic growth**

- ⇒ **Corresponding development issue: Industrial promotion and diversification**

JICA will support industrial development and diversification for economic growth, leveraging the potential of Nigeria. While continuing to focus on the promotion of the agricultural sector, which has the potential to replace the oil and natural gas industries that have been relied on in the past, JICA will also support the development of Nigeria's MSMEs, promote innovation by supporting startups, and support the improvement of the business investment environment, etc. with the aim of strengthening the diversity and competitiveness of domestic industries.

- ⇒ **Corresponding development issue: Improving power supply**

JICA will aim to improve the entire power supply system in Nigeria through the development of power transmission and transmission infrastructure, the introduction of mini (off) grid transmission, and the strengthening of planning and management capacity over the entire power sector.

- ⇒ **Corresponding development issue: Urban development**

JICA will promote the strengthening of the foundations of economic growth and regional connectivity by developing the cities in Nigeria (especially Abuja/Lagos) and surrounding areas that drive economic growth.

- **Priority Area 2 – Improvement of inclusive and robust health and medical systems**

- ⇒ **Corresponding development issue: Improving health and medical systems**

Under the JICA Health and Medical Care Initiative, JICA will support the enhancement of the entire health and medical system with a focus on strengthening current infectious disease measures, and aim to achieve a strong UHC. Also, given that people living healthy lives is essential to achieving a UHC, JICA will work to improve nutrition and the sanitation environment and develop systems to protect health, which serves as the foundation of people's basic lives.

- **Priority Area 3 – Promotion of peace and stability**

- ⇒ **Corresponding development issue: Humanitarian and reconstruction assistance**

Nigeria, mainly in the North East, is still in a state in which safety is not guaranteed across the Country, so JICA will support conflict prevention and

recovery/reconstruction in affected areas to contribute to the promotion of peace and stability throughout Nigeria.

3.2.2 Strategic program development

(1) Program prioritization

Seven cooperation programs have been prioritized under the three priority areas above for strategic program development. **Top Priority Programs** – Considering the strengths of Japan, the various TICAD/JICA initiatives, the degree of contribution to the wider region, and the priorities and impacts of the challenges, the top priority programs were

set as the “Programme for agricultural development,” to promote agriculture, one of the most important industries employing the largest number of workers, and in furthering the goal of industrial diversification, and the “Programme for improving health and medical systems,” to contribute to the enhancement of the capability to handle infectious diseases which account for 50% of deaths in the Country.

In these top priority programs, JICA will aim to achieve steady effects with technical cooperation and grant aid over the next five years and make efforts to share and establish these effects within Nigeria and abroad. At the same time, leveraging the project implementation infrastructure and assets developed up to now by Japan in this field, JICA will promote the formation of new ODA loan cooperation and expand to respond to even larger scale support needs that have not been responded to so far through cooperation.

Priority Programs – JICA has set as priority programs the “Programme for business environment improvement and innovation promotion” to contribute to industrial diversification and economic growth by leveraging Nigeria’s potential and the “Programme for peace and stability” to contribute to the realization of peace, stability, and human security as an essential element for all development. In comparison to the top priority programs, Japan’s cooperation track record and project scale are smaller for the priority programs, but based on the development needs in that area and the expected impact of development from efforts in that area, with a view to expanding the scale of projects in these areas over the next term, and over the next five years priority will be given to specifying cooperation needs and strengthening the project implementation bases through the dispatch of experts and conducting of surveys etc. to collect and organize information.

Given the importance in the contributions to economic and social development of the programs other than those above, “improving power supply,” “urban development,” and “nutrition and hygiene,” aim to achieve steady progress in cooperation in these areas and to realize development effects.

Table 2 summarizes the priority areas, and development issues and cooperation program structure before revision, and the priority areas, the cooperation programs based on development issues and the positioning of these programs after revision.

Table 2 Changes to Assistance Priority Areas, Development Issues and Cooperation

Program Structure

Before Revision

Priority Area	Development Issue	Cooperation Program
Building a foundation for high quality economic growth	Urban infrastructure	Programme for transportation and traffic
		Programme for water resource management
	Core infrastructure	Programme for electricity environment improvement
	Economic diversification and industrialization	Programme for agriculture, fisheries and food industries
		Programme for enhancing private sectors
Building an inclusive and resilient health and medical care system	Enhancement of health and medical care systems	Programme for improving health and medical systems
Promotion of peace and stability including reconstruction assistance in the North (East) region	Humanitarian and reconstruction support	Programme for supporting and affected people in the North (East) region



After Revision

Priority Area	Development Issue	Cooperation Program
Building a foundation for sustainable economic growth and a resilient society	Industrial promotion and diversification	Programme for agricultural development
		Programme for business environment improvement and innovation promotion
	Improving power supply	Programme for improving power supply
	Urban development	Programme for urban development
Improvement of inclusive and robust health and medical systems	Improvement of health and medical systems	Programme for improving health and medical systems
		Programme for nutrition and hygiene
Promoting peace and stability	Humanitarian and reconstruction assistance	Programme for peace and stability

*Red highlights indicate top priority programs; light blue indicates priority programs

(2) Other

Given the unstable security situation in the Country and the limitations of the scope of activities by JICA, for now JICA will continue developing projects mainly in urban areas such as Abuja and Lagos and surrounding areas, and in other regions JICA will collect information and consider appropriate cooperation needs, while taking security

measures into consideration, with the medium- to long-term aim of developing projects and expanding them into rural areas where there is serious poverty and disparity. JICA will also consider cooperation that can be implemented remotely for areas where travel is prohibited for security reasons. In doing so, consideration will be given to (1) the modeling of successful case studies with a view to regional expansion, (2) creating leveraging effects in cooperation with the counterpart government, other development partners such as international organizations, the private sector (local companies and Japanese companies), and NGOs/NPOs, (3) promoting cooperation that can be implemented remotely using STI/DX, and (4) cooperation with the formation and implementation of individual projects and measures under each agenda based on the JICA issue-specific cooperation strategies introduced in 2021 (Global Agenda, hereinafter “JGA”).

3.3 Overview of cooperation for each program

(1) Programme for agricultural development – ★Top priority program

While rice production volume is the highest in SSA, the Country produces rice only for 50% of domestic consumption and is highly dependent on imports. In addition, there are agricultural and livestock products for which Japanese technologies could be utilized.

Based on the above, improve the productivity and profitability of agricultural and livestock industries to improve farmer incomes by supporting the entire value chain of the above products, connecting everything from production to processing and distribution, thereby contributing to the strengthening of food security by increasing the food self-sufficiency rate.

- There are a lot of development partners cooperating in the agriculture sector, but given Japan’s abundant knowledge, technologies and human resources related to rice, Japan will cooperate with a focus on promoting rice cultivation. Nigeria ranks first in rice production in SSA, but due to the increasing domestic demand and annual consumption of rice due to population growth, domestic production has not caught up with demand and the self-sufficiency rate remains at around 50%. Rice production is also positioned as an important issue by the Federal Ministry of Agriculture and Rural Development (FMARD), and is showing a positive attitude with the formulation of a national rice development strategy as a CARD target country. One of the important issues for increasing rice production is improving the quality of certified seeds used by rice farmers to ensure a stable supply, so efforts will be made to support equipment maintenance for the National Cereals Research Institute and make technology transfers related to seed production, quality control,

- testing and research, and develop the infrastructure such as the seed inspection system of the National Seed Council, etc. to expand the supply of foundation seeds and certified seeds and to contribute to improving the quality of rice seeds.
- Regarding improving farmer incomes, JICA will aim to strengthen the productivity and marketing capabilities of small-scale horticulture farmers, promoting the SHEP approach, keeping in mind the current situation in which about 34% of the population is engaged in agriculture. Also, through support for returned trainees from group and region-focused training, and technical assistance in the form of cost sharing with state governments, JICA will aim to “normalize SHEP” by using the SHEP approach as a continuation of existing dissemination systems after project implementation. While the agricultural employment and poverty rates are high and there is a need for support, given the security situation JICA will actively consider ways in which Japanese officials cannot disseminate and expand into areas such as the North East where it is difficult for them to travel themselves, by working with local master trainers etc. who have been trained under the SHEP approach.
 - In addition, based on lessons learned from past cooperation in the agricultural sector, JICA will actively consider developing infrastructure for existing farming activities, mainly for farm workers, such as agriculture/field/irrigation equipment and agricultural machinery, distribution network development and the promotion of digital transformation, etc. (JICA will also consider cooperation in the form of co-financing with other donors with close attention to the trends of the World Bank and the AfDB who are already cooperating in this sector). Also, along with cooperation with private companies (including startups) and strengthening the functions of farmers’ organizations, etc., JICA will give full consideration to institutional and financial arrangements to ensure that small-scale farmers are not left behind, to ensure self-sustaining development in terms of maintenance and management, and investment, etc.
 - Agriculture is one of the sectors that is most vulnerable to the effects of climate change, and under Nigeria’s NDC if climate change measures are not implemented agricultural production is predicted to decrease by 10-25% by 2080. Therefore, JICA will actively incorporate elements that contribute to climate change measures in each area of cooperation.
 - This program is consistent with 3 cluster (“Smallholder Horticulture Empowerment and Promotion (SHEP),” “Coalition for African Rice Development (CARD),” and “Promoting “One Health” through Strengthening Livestock Hygiene”) project

policies of the JGA for “Agriculture and Rural Development.” In addition, by incorporating the JGA elements of “Improving Nutrition,” “Gender Equality and Women's Empowerment,” and “Climate Change” in the above-mentioned cooperation, JICA will contribute to the promotion of job creation and improved incomes in rural areas (especially for women), and climate change measures, as well as the improvement of food self-sufficiency. Also, in the future, under the JGA “Private Sector Development” initiative and in cooperation with companies cultivated through JICA’s “initiative to support entrepreneurs and to create business innovation (Next Innovation with Japan (NINJA),” JICA could effectively promote the above initiatives more effectively and give consideration to the promotion and dissemination of smart agriculture by promoting digital transformation in the agricultural sector under the “Digital for Development” initiative.

- By cooperating in this program, JICA can directly contribute to SDGs Goal 2 “end hunger, achieve food security,” Goal 8 “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all,” and Goal 13 “take urgent action to combat climate change and its impacts,” and indirectly contribute to Goal 1 “end poverty in all its forms everywhere.”

(2) Programme for business environment improvement and innovation promotion ☆ Priority program

Taking advantage of the unique potential of Nigeria with the largest population and economy in SSA and a huge market and startup ecosystem, support the strengthening of domestic industry diversification and competitiveness, and the promotion of direct foreign investment by promoting innovation by nurturing local entrepreneurs and supporting startups, supporting the improvement of business and investment environments, strengthening governance systems, and developing industrial human resources, thereby contributing to resilient economic growth and job creation in Nigeria .

- Regarding the promotion of innovation, JICA will strengthen joint/self-support and cooperation among relevant parties etc. for accelerator programs targeting local entrepreneurs and startups to develop the entire startup ecosystem in Nigeria and Africa, as part of the activities of Project NINJA (Next Innovation with Japan). Furthermore, given that various development partners are also providing support in this sector, in addition to cooperating with the Nigerian government to strengthen capacity on the promotion of startups as a bilateral aid agency, JICA will work to promote cooperation with other JICA projects and to match with Japanese and overseas companies. In addition, given the current funding gaps for many local

startups and MSMEs (NBS, 2017), JICA will consider the possibility of providing financial support to entrepreneurs and startups.

- Regarding the improvement of the business environment, the Nigerian government has focused on this issue by setting targets to improve the business and investment environment in its next draft national development plan and to “increase foreign direct investment by approximately three times the current level,” etc., and JICA will support the achievement of these goals by supporting investment and industrial policy planning and implementation, etc.
- For Nigeria to achieve economic growth and job creation, the government needs to properly manage its finances and make the necessary public investments appropriately. In addition, due to the lack of transparency in administrative procedures being one of the reasons for the stagnation of foreign direct investment, JICA will work to strengthen governance systems in the Country.
- In order to promote the above initiatives, JICA will support the development of industrial human resources to support economic growth in Nigeria, strategically utilizing training projects, and contributing to the strengthening of business networks between Japan and Nigeria.
- This program aims to ensure sustainable and high-quality growth, by fostering and strengthening the competitiveness of local private companies and promoting innovation, investment, and industrial development, etc., and this is consistent with the JGA of “Private Sector Development.” In addition, in the above-mentioned initiatives, JICA can also contribute to the realization of gender equality by promoting women’s participation in economic activity in cooperation with initiatives under the JGA of “Gender Equality and Women's Empowerment.” Also, in the future, in coordination with the JGA of “Digital for Development,” JICA will consider initiatives to promote industrial development and innovation with the use of digital technologies.
- In addition, the promotion of cooperation through this program will contribute to SDGs Goal 8 “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all,” and Goal 9 “building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation.”

(3) Programme for improving power supply

In addition to the development of infrastructure such as expanding and improving power transmission and distribution facilities, mainly targeting metropolitan areas such as the Federal Capital Territory (FCT) and Lagos, strengthen Nigeria's economic base by supporting capacity building for the planning, operation and maintenance of the entire power system and contributing to the increase and stabilizing of power supply capacity. Also promote the introduction of grids and mini (off) grids in rural areas, improve power access disparities and contribute to the promotion of climate change measures by switching to renewable energy.

- JICA will support the development of power transmission and distribution infrastructure through financial cooperation, mainly in metropolitan areas, and capacity building for planning, operations and maintenance in the power transmission and distribution sector, focusing on strengthening the power transmission and distribution sector which is such a bottleneck in Nigeria.
- In addition, in collaboration with other donors such as the World Bank, JICA will aim to promote collaboration between relevant organizations in the overly distributed and complex power sector and optimize rate setting, while strengthening the functions of various institutions, including regulatory bodies, and normalizing the dysfunction in the sector by improving management.
- JICA will work to improve disparities in access to power through support for planning and system development related to the system and mini (off) grids, and collaboration with private companies. In addition, JICA will also seek the possibility of financial cooperation in the vulnerable power distribution systems in off-grid and rural areas (semi-off-grid), taking into account the trends in institutional reform. The above initiatives will promote the transition from diesel to renewable energy and contribute to climate change measures.
- This program is consistent with the 2 JGA "Energy and Mining" clusters ("strengthening the electricity transmission and distribution network" and "promoting introduction of renewable energy") project policies. In addition, in the future JICA will also consider promoting the introduction of systems and off (mini) grids in cooperation with private companies as initiatives from the perspectives of the JGA "Private Sector Development," and "Mainstreaming and Promoting Climate Change Measures."
- Promoting cooperation under this program will also contribute to SDGs Goal 7 "ensure access to affordable, reliable, sustainable and modern energy for all,"

Goal 9 “build resilient infrastructure,” and Goal 13 “take urgent action to combat climate change and its impacts.”

(4) Programme for urban development¹²

Support the formulation of comprehensive urban development roadmaps starting with the “Abuja Master Plan.” Also, develop the infrastructure in major cities and surrounding areas, promote capacity building for operating entities within these cities, and develop sustainable and resilient social infrastructure. At the same time, build examples of best practice in the development of excellent urban infrastructure and social services to be considered for development as models throughout Nigeria.

- In the FCT of Abuja, JICA will cooperate in developing the infrastructure for economic development by updating the Comprehensive Development Plan for the capital Abuja (commonly known as the Abuja Master Plan), based on the content of the current National Development Plan, including basic plans for each of the transport, power, water and sewage, waste, and information and communications sectors, etc.
- Regarding the urban water supply, given the current situation in which water supply services are not keeping up with demand due to rapid population growth, JICA will work to strengthen the water business management capabilities of water utilities, mainly in Abuja, and will aim to form business entities that can grow by supporting individual profitability and creating a virtuous cycle of improved water supply services, increased collection of fees, and increased investment in facilities. More specifically, JICA will aim to strengthen the foundation for sustainable water supply business operations by reducing non-revenue water and improving the water fee collection rate. JICA will also consider developing and strengthening water resource infrastructure through financial cooperation. In addition, given the high demand for water supply not only in metropolitan areas but also in regional cities, JICA will consider expanding the results of cooperation in Abuja to regional cities and developing infrastructure such as water supply facilities in regional cities in the medium- to long-term.
- In urban areas such as Abuja, the threat to people’s health and issues such as increased environmental burden are becoming serious due to inappropriate waste disposal, including infectious waste, which has increased rapidly because of

¹² The existing transportation and traffic program and water resource management program will be incorporated into the urban development program with a focus on urban areas such as Abuja and Lagos from the perspective of the scope of activities possible by JICA for security reasons.

COVID-19. Given these circumstances, JICA will consider strengthening systems and capabilities related to waste management through technical cooperation and the development of equipment and facilities related to the improvement of waste management through financial cooperation. JICA will also contribute to the dissemination of results, both within Nigeria and across the region, by actively participating in knowledge sharing and dissemination under the “African Clean Cities Platform (ACCP).”

- Also, given that basic infrastructure development is not keeping up with demand in major cities other than Abuja and their surrounding areas, JICA will consider financial cooperation for infrastructure development (including collaboration with other donors) and technical cooperation to improve infrastructure operations and maintenance/management capabilities.
- This program is consistent with the JGA project policies of the “Urban Management and Community Development Cluster” under “Urban and Regional Development,” the “Improvement of Waste Management and Realization of a Recycling-Oriented Society Cluster” under “Environmental Management,” and the “Water Utility Growth Support Cluster” under “Sustainable Water Resources Management and Water Supply.” JICA will also consider introducing initiatives for the JGA “Transportation” after the updating of the Abuja City Master Plan. In addition, JICA will also consider the development of urban plans that are resilient against disasters etc. using digital technologies and promoting the introduction of infrastructure, incorporating the perspectives of the JGA “Digital for Development” and JGA “Disaster Risk Reduction through Pre-disaster Investment and Build Back Better.” This program is consistent with the JGA “Climate Change” over the long term, as improving urban transportation planning can reduce traffic congestion and improving the usage rates of public transportation will lead to a reduction in greenhouse gas emissions, in addition to the effect of climate change risk mitigation that is expected from the non-revenue water measures described above and the promotion of urban development that considers disaster prevention.
- In addition, the promotion of cooperation through this program will contribute directly to the SDGs Goal 6 “ensure availability and sustainable management of water and sanitation for all,” Goal 11 “make cities and human settlements inclusive, safe, resilient and sustainable,” Goal 12 “ensure sustainable consumption and production patterns,” and long-term, to Goal 13 “take urgent action to combat climate change and its impacts.”

(5) Programme for improving health and medical systems ★Top priority program

Under the JICA's Initiative for Global Health and Medicine, contribute to strengthening infectious disease response capabilities in Nigeria and the region, with a focus on the early detection of infectious diseases, and the strengthening of response capabilities including definitive diagnosis through accurate and rapid testing.

- Due to the disease structure in Nigeria based on the fact that infectious diseases account for 51% of deaths and the impact of COVID-19, JICA will focus on strengthening response capabilities, including definitive diagnosis, through the early detection of infectious diseases and accurate and rapid testing. Specifically, within the Nigeria Center for Disease Control (NCDC) system, JICA will develop testing facilities and equipment with a focus on the National Reference Laboratory (NRL), which is the Country's highest level public health laboratory, will train personnel, and will strengthen research capabilities by promoting cooperation with Japanese universities, striving to "Strengthen Research and Vigilance" as advocated by the JICA's Initiative for Global Health and Medicine. Also, given the role of the NCDC as the West African regional base of the African CDC system, in the future JICA will consider cooperation that will contribute to improving measures against infectious diseases throughout the region, including cooperation with the resources that JICA has cultivated in West Africa.
- Nigeria is below the SSA average in many maternal and child health indicators, and support for protecting the health of vulnerable mothers and children against infectious disease and health crises is also an urgent issue. On the other hand, given the remarkable decentralization of the system, with each state having different organizational structures and budget allocations, JICA will need to move forward creatively by implementing cooperation with those states that have the greatest needs and the systems for accepting cooperation. Also, given the work that the Nigerian government is doing to introduce a health insurance system to provide support for the poor, JICA will also pursue the possibility of a development policy loan to assist in this effort. In addition, this will be done in a comprehensive manner through the use of training schemes such as training in Japan and long-term training projects, etc., and through support for health care-related startups under NINJA, etc.
- Also, given the fact that there are many development partners, including WHO and UNICEF, etc., who are carrying out activities in the same sector, it will be necessary to organize the roles of each organization as appropriate when forming and implementing new projects. On the other hand, when expanding cooperation

to regions where it is more difficult for JICA to operate for security reasons, it will be essential to collaborate with organizations already active and implementing in such regions, so JICA will consider the appropriate collaboration methods that make use of JICA's knowledge and resources for synergistic effect.

- This program is consistent with the “Infectious Disease Measure and Testing Base Enhancement Cluster” under the JGA “Health (achieving resilient UHC).” Also, regarding support needs other than infectious disease control, JICA will actively contribute to participation and cooperation on wide-area initiatives in the JGA “Core Hospital Diagnosis and Treatment Enhancement Cluster,” “Cluster for The Enhancement of Continuous Care for Mothers and Children Through the Use of Maternal and Child Health Handbooks, Etc.,” and the “Health Security System Enhancement Cluster.” In addition, in the future it may be possible to build a remote medical system utilizing digital technologies through cooperation in initiatives under the JGA of “Private Sector Development,” and “Digital for Development.”
- In addition, the promotion of cooperation under this program will contribute direction to the SDGs Goal 3 “ensure healthy lives and promote well-being for all at all ages,” and indirectly to Goal 2 “improved nutrition.”

(6) Programme for nutrition and hygiene

Given the current situation of people's health (especially pregnant women and children under 5 years of age) being hindered by malnutrition and poor hygiene, improve the sanitary environment with the installation of sanitary facilities and the improvement of hygiene habits, while working on activities to improve nutrition through the agriculture and food sectors, while also promoting a sensitivity to nutrition (incorporating nutrition elements into projects unrelated to nutrition), thereby contributing to strengthening systems to protect health and to achieve UHC.

- The initiatives of this program are consistent with the “Initiative for Food and Nutrition Security in Africa (IFNA)” under the JGA “Improving Nutrition” from the perspective of nutrition, and the JGA “Sustainable Water Resources Management and Water Supply” from a sanitation perspective. However, improvements in nutrition and the sanitation environment are cross-sectoral, so the realization of the goals of this program will come from the implementation of other programs which incorporate perspectives in these same sectors. In particular, synergies with projects currently being worked on under the JGA “Health (achieving resilient UHC)” and “Agriculture and Rural Development” are important.

- Also, the promotion of cooperation through this program will contribute to SDGs Goal 2 “end hunger,” Goal 3 “ensure healthy lives,” and Goal 6 “ensure availability and sustainable management of water and sanitation for all.”

(7) Programme for peace and stability ☆Priority program

While the number of internally displaced person (IDPs) returnees has been increasing in recent years in the three North East states (Borno, Yobe, and Adamawa) severely affected by Boko Haram and ISWAP, calls for support from a medium- to long-term development perspective and seeking more sustainable efforts are also increasing.

Based on the above situation, improve the capacities of government officials to formulate and implement plans for the reconstruction and development of these regions, and improve the living environments for IDPs and the host communities that receive them, thereby contributing to the realization of sustainable peace and stability in the regions such as the North East where instability, poverty and disparities are increasing.

- In the North East, many international organizations have been carrying out large-scale emergency humanitarian assistance for many years, but recently there have been increasing calls for developmental support from the perspective of the “Humanitarian-Development-Peace (HDP) Nexus.” Given these circumstances, through the formulation of The North-East Stabilization and Development Masterplan (Master Plan) and strengthening capacity for implementation, JICA, as a development agency, will aim to improve the ability to provide inclusive and functional administrative services to meet the needs of residents, and contribute to the building of social systems for refugees (including IDPs) and the host communities to co-exist. In addition, based on the content of the above Master Plan, JICA will promote cooperation in collaboration with international organizations to develop infrastructure to improve the living environments of host communities and to support the improvement of livelihoods through private sector collaboration, etc. At the same time, JICA will consider participation as observers in ongoing projects or promoting participation in Group and Region-Focused Training by the target countries to train core personnel in highly important sectors with the purpose of improving the efficiency of administrative skills of the governments in target regions.
- There is also a good example of JICA and a UNDP utilizing their respective resources in the co-hosted Nigerian Local Governance Workshops which have been running since 2018. In addition to considering similar initiatives in the future, in addition to utilizing training in Japan and long-term training in regions where it

is difficult for JICA to operate due to security concerns, JICA will support development in cooperation with international organizations, etc., and promote cooperation that can be carried out remotely (health, education, industrial human resource development, financial inclusion, etc.) in cooperation with local resources such as local NGOs and startups, etc., and making use of digital technologies.

- Also, in the North East and other regions with unstable security, there are many children (especially girls) out of school, which may lead to the further deterioration of poverty rates and the widening of gender disparities in the future. Education and human resource development are essential for stable reconstruction and the correction of disparities, and JICA will consider cooperation that contributes to these same sectors.
- This program is consistent with the project policies for the 2 clusters “Mainstreaming the Promotion of Peace and Conflict Prevention” and “Strengthening Administrative Capacity in Vulnerable Regions and Forming Resilient Societies and Fostering Trust,” under the JGA “Peacebuilding,” and in the medium term, initiatives will also be introduced which are consistent with the cluster “improving education to leave no one behind” under the JGA “Education.” Also, by engaging in the future in initiatives and linking with the JGA of “Private Sector Development,” “Digital for Development,” “Agriculture and Rural Development,” and “Gender Equality and Women's Empowerment,” it may be possible to comprehensively consider measures to improve the lives of affected areas and residents in the North East through the development and support of private companies and entrepreneurs, the dissemination of remote administrative services (health and medical care, etc.) utilizing digital technologies, and job creation and income improvement etc. for IDPs and host communities (particularly for women) by improving agricultural productivity and profitability in rural areas.
- In addition, the promotion of cooperation in this program will contribute to SDGs Goal 16 “promote peaceful and inclusive societies for sustainable development.”

2.3.4 Other (Common matters)

- **Gender:** JICA will consider initiatives based on an analysis of gender perspectives in cooperation in various sectors and will promote cooperation that contributes to gender equality and women’s empowerment.
- **Climate change measures:** In Nigeria, there are concerns about the negative impact on society and the economy of natural disasters such as floods, sea level rises, and droughts, etc., requiring the consideration of improving resilience to climate change when formulating cooperation projects in various sectors. In addition, by implementing cooperation that contributes to the mitigation of disaster risks associated with climate change through the promotion of disaster prevention

over the long term, and cooperation that contributes to the promotion of agroforestry together with the tree-planting activities promoted by the Nigerian government as climate change mitigation/adaption measures, it may be possible to contribute to poverty reduction through the acquisition of agricultural income and to industrial diversification.

1) Active use of loan assistance and private partnership schemes such as overseas investment and financing

As of the end of 2019, the public debt of the Nigerian government was 29.1% of GDP, and after the impact of COVID-19, in 2020 this was 34% (IMF, 2020), so JICA will actively utilize loan financial cooperation given the restraints of this level of debt and the Country's government plans to implement economic stimulus measures such as securing jobs through the promotion of public works projects. Also, due to the need for private sector development in Nigeria and the high interest of Japanese companies in the market given its size and growth potential, JICA will also actively utilize private sector cooperation schemes such as overseas investment and financing and SDGs research, etc., while strengthening cooperation with the IFC and AfDB. On the other hand, given the sharp rise in fuel prices due to the Ukraine crisis, the financial burden from fuel subsidies is increasing and the economic outlook remains unstable with outstanding debt on the rise. Given these circumstances, in implementing the above cooperation, in addition to the need to closely monitor economic trends, JICA will also consider cooperation that contributes to national fiscal soundness and to improving the Country's debt management capabilities.

2) Security measures

The entire country falls under a Level 2 travel advisory or higher from the Ministry of Foreign Affairs, and especially in the North East, Islamic extremist organization not only has Boko Haram continued to revitalize after the government declared control of the area in 2018, but in recent years the scope of activities by ISWAP has also expanded. Also, Nigeria is a multi-ethnic country with more than 250 ethnic groups, and has experienced coup d'états, conflicts, and military regimes in the past due to ethnic and religious conflict. Therefore, the political situation tends to become unstable around presidential elections, so it is necessary to pay close attention to the situation as public safety tends to deteriorate. It will be necessary to keep this in mind and to take thorough security measures in cooperation projects, constantly collect public safety information, and consider and implement appropriate and flexible project areas and activities.

3) Developing cooperation with consideration for regional balance and decentralization

Nigeria has adopted a federal system to maintain regional balance as a multi-ethnic country, and the federal government, the 36 states, and the Federal Capital Territory have equal legal status. While the federal government has influence as the entity responsible for national policy, each state and the capital territory have their own development plans and the organizational structures and budget allocations based on

these plans. When implementing cooperation, JICA need to take regional balance into account and develop ideas and cooperate in a way that achieves appropriate development effects and ensures their spread and establishment, keeping in mind the relationship between the federation and the states, with business plans and implementation systems that take into account the involvement of the state governments, etc.

4) Contributing to regional economic integration and the development of surrounding regional economies and societies

Nigeria has a leading role in the West African region, centered in ECOWAS, and is positioned as a central country in terms of the economic corridors and infrastructure networks in the West African region, so there are high expectations for contributions not only to the Country's growth but also to regional economic development and integration. When forming projects based on this information, it will also be necessary to actively consider cooperation and collaboration with other donors.

END

References

1. AFD. 2017. *AFDSTRATEGY 2017 – 2021 NIGERIA*
2. BBC. 2021. 『Cryptocurrencies: Why Nigeria is a global leader in Bitcoin trade』 ([Cryptocurrencies: Why Nigeria is a global leader in Bitcoin trade - BBC News](#))
3. Blueprint. 2022. *Vision 2050: Nigeria as a developed nation*. <https://www.blueprint.ng/vision-2050-nigeria-as-a-developed-nation/>
4. Central bank of Nigeria. 2021. 『Daily Crude Oil Price』 ([Central Bank of Nigeria | Daily Crude Oil Price | Up to \(cbn.gov.ng\)](#))
5. FAO. 2021. Nigeria at a glance ([Nigeria at a glance | FAO in Nigeria | Food and Agriculture Organization of the United Nations](#))
6. FCDO. Development Tracker. <https://devtracker.fcdo.gov.uk/>
7. FCDO. 2021. *Manufacturing Africa Nigeria Overview*
8. Federal Ministry of Environment. 2019. *National Climate Change Policy*.
9. Federal Ministry of Water Resources. 2019. *Water, Sanitation, Hygiene National Outcome Routine Mapping*.
10. Federal Ministry of Youth and Sports Development. 2021. *Nigerian Youth Employment Action Plan*
11. FMFBNP. 2021. *National Development Plan (NDP) 2021-2025*
12. GIZ Nigeria & ECOWAS. 2021. *Building stronger bonds - for better partnerships*.
13. Global Nutrition Report. 2020. *Global Nutrition Report: Action and equity to end malnutrition*.
14. Goodluck Obi. 2019. *Rice Industry Review*. ([Rice Industry Review - KPMG Nigeria \(home.kpmg\)](#))
15. IMF. 2022. *ARTICLE IV CONSULTATION*
16. JCIF. 2021. Nigeria Gaiyo Report [Nigeria Overview Report]
17. JETRO. 2019. Shakaikadai wo chansu ni kaeru (Nigeria) [Turning Social Challenges into Opportunities (Nigeria)] (<https://www.jetro.go.jp/biz/areareports/special/2019/0702/b67a6376932644a9.html>)
18. JETRO. 2020. Africa shinshutsu Nikkei kigyō jittai chosa (2020 nendo chosa) [Survey of Japanese Companies in Africa (FY2020 Survey)] ([africa.pdf \(jetro.go.jp\)](#))
19. JETRO. 2021. Yukageraku ni yoru gaikajunbiritsudakagensho to bukkajousho mo nao seichoyoryoku (Nigeria) [Decline in foreign exchange reserves due to low oil prices and rising prices, but still growth potential (Nigeria)] (<https://www.jetro.go.jp/biz/areareports/special/2021/0201/23aee18493b162e1.html>)
20. JETRO. 2021. Nigeria wo torimaku keizaikadai towa [What are the economic challenges facing Nigeria] (<https://www.jetro.go.jp/biz/areareports/2021/e09d30525d710718.html>)

21. JETRO. 2022. Minkanshudo no infuratoshi ya inobe-shon ni kitai (Nigeria) [Expectations for private-sector-led infrastructure investment and innovation (Nigeria)]
(<https://www.jetro.go.jp/biz/areareports/2022/68bf1547a39f3fc1.html><https://www.jetro.go.jp/biz/areareports/2022/68bf1547a39f3fc1.html>)
22. JICA. 2014. The second data collection survey on mass rapid transit in the Federal Republic of Nigeria
23. JICA. 2021. Data Collection Survey on African Regional Health System Final Report
24. JICA.
2021. Data Collection Survey for Examination on Education Cooperation in Post COVID-19 Final Report
25. JICA. 2021.
Data Collection Survey on Promoting Private Investment in Renewable Energy in Africa
26. JICA. 2021. *Feasibility Report for the Two Step Loan Project Formulation in Nigeria Final Report*
27. JICA. 2021. *ECOSYSTEM REPORT: NIGERIA'S STARTUP SCENE*
28. NBS. 2018. *Health and Human Services Statistics*
29. NBS. 2019. *Poverty and Inequality in Nigeria: Executive Summary*
30. NBS. 2017-2021. *Nigerian Gross Domestic Product Report* NBS. 2017. *National Survey of Micro Small & Medium Enterprise (MSMEs) 2017*
31. NBS. 2019. *Poverty and Inequality in Nigeria 2019 : Executive Summary*
32. NBS. 2019. *Corruption in Nigeria: Patterns and Trends Second Survey on Corruption as Experienced by the Population*
33. NBS. 2020. *Labor Force Statistics: Unemployment and Underemployment Report (Q4 2020)*
34. NBS. 2020. *Nigeria Living Standards Survey (2018/2019)*
35. NBS. 2021. *CPI and Inflation Report*
36. NIHSA. 2021. *ANNUAL FLOOD OUTLOOK (AFO)*.
37. OCHA. 2021. *NORTH-EAST NIGERIA: Borno, Adamawa and Yobe states*
38. OEC. 2019. *Nigeria Exports, Imports and Trade Partners*
39. Partech. 2021. *2021 Partech Africa Report* ([2021 Partech Africa Report | Partech \(partechpartners.com\)](https://partechpartners.com))
40. PUNCH. 2022. *Only 10% of Nigerian farmers engage in mechanised farming.* (['Only 10% of Nigerian farmers engage in mechanised farming' \(punchng.com\)](https://punchng.com))
41. PwC. 2020. *Responding to the impact of COVID-19 on food security and agriculture in Nigeria.*
42. PwC. 2018. *Evaluating Agriculture Finance in Nigeria: Toward US\$1 trillion African Food Market by 2030.*

43. SMEDAN.2017. *National Survey on Micro, Small and Medium Enterprises (MSMEs)*
44. Stein Emil Vollset, Emily Goren, Chun-Wei Yuan, Jackie Cao, Amanda E Smith, Thomas Hsiao. 2020. *Fertility, mortality, migration, and population scenarios for 195 countries and territories from 2017 to 2100: a forecasting analysis for the Global Burden of Disease Study*. The Lancet
45. Sustainable Development Solution Network. 2022. *Sustainable Development Report 2022* ([2022-sustainable-development-report.pdf](#))
46. Taiwo Oyaniran . 2020. *AfCFTA Workshop: Current State of Nigeria Agriculture and Agribusiness Sector*.
47. Transparency International. 2022. *Corruption Perceptions Index*.
48. The Gurdian.2020. *Waves of 'bandit' massacres rupture rural life in north-west Nigeria*. (<https://www.theguardian.com/world/2020/jun/03/waves-of-bandit-massacres-rupture-rural-life-in-north-west-nigeria?msckid=3ca0f771b5bf11ecbe14bccd70427163>)
49. UBEC. 2021. *Toward a New Agenda for Open School in Nigeria*
50. United Nations. 2020. *Gender-based violence in Nigeria during the COVID-19 Crisis: The Shadow Pandemic*.
51. USAID.2021. *West Africa Trade & Investment HUB*
52. U.S. Foreign Assistance database (<https://foreignassistance.gov/>)
53. UNICEF.2020. *Country Office Annual Report 2020*
54. UNICEF. 2021. *Water, Sanitation, and Hygiene*. ([Water, Sanitation and Hygiene | UNICEF Nigeria](#))
55. UNDP. 2020. *Human Development Report*
56. WIPO. (2022). *Global Innovation Index 2022*([Global Innovation Index 2022: What is the future of innovation-driven growth? \(wipo.int\)](#))
57. WB. 2019. *Individuals using the Internet (% of population) - Nigeria*
58. WB. 2020. *Nigeria in Times of COVID-19: Laying Population for a Strong Recovery, Nigeria Development Update*
59. WB,2020, *Power Sector Recovery Program*
60. WB. 2021. *Resilience through Reforms*
61. WB. 2021. *Doing Business 2020 Nigeria*
62. WB. 2022. *The Continuing Urgency of Business Unusual*
63. WB Database. ([World Bank Open Data | Data](#))
64. WEO.2022. *World Economic Outlook* ([World Economic Outlook, October 2022: Countering the Cost-of-Living Crisis \(imf.org\)](#))
65. WHO. Database. (<https://www.who.int/data/gho/data/indicators>)
66. Ministry of Agriculture, Forestry and Fisheries. 2020. *Nigerai no nourinsuisangyou gaikyo [Overview of Agriculture, Forestry, and Fisheries in Nigeria]*

67. Lagos State Government. 2021. " LAGOS STATE MACRO-ECONOMIC INDICATORS JANUARY - AUGUST, 2021"([MACRO-ECONS-FLYER-SEPTEMBER-2021-edition.pdf \(lagosstate.gov.ng\)](#))