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# ► Rapid situational analysis of the employment-climate- environment nexus

Identifying just transition policies

► ► ► **Nigeria**

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## ► 1. Introduction

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A “just transition” is about achieving decent work for all and eradicating poverty through growing inclusive economies that can meet the needs of the world’s growing population while also protecting the environment and natural resources on which life on earth depends. The greening of economies, enterprises and jobs must be seen in the context of sustainable development. The Guidelines for a just transition towards environmentally sustainable economies and societies for all adopted by the ILO Governing Body (ILO 2015) provide practical orientation to Governments and social partners on how to formulate, implement and monitor a just transition policy framework in accordance with national circumstances and priorities.

The ILO developed a methodology – the Rapid Situational Analysis – to identify areas for just transition policies at national level. The analysis follows two subsequent steps. First, it examines the link between the economy, employment and nature. Thereby, it provides a detailed picture of the economic structure and labour market at sectoral level in relation to the natural environment and climate change. Second, it investigates the national policy framework in the context of employment promotion, skills and human capital development, social protection and other dimensions of decent work, and identifies key just transition policies. The objective is to identify win-win policies for the environment and employment, which maximise job creation, minimize negative effects and protect the vulnerable.

In the analysis, four key indicators are used – gross domestic product (GDP), decent work, greenhouse gas emissions and vulnerability to climate and environmental change – to identify key sectors of the economy and segments of the labour market where there is a necessity to ensure a transition to environmental sustainability, while addressing simultaneously objectives of economic development and social inclusion. Particular attention is given to the working poor, farmers and rural population, and women. Decent Work is understood as providing equal employment opportunities for men and women, rights at work, social protection and social dialogue.

The selected sectors are further assessed to better understand the sector-specific linkages between the economic, employment, environmental, and policy dimensions. The national policy framework analysis examines the link between national priorities and just transition policies. Potential gaps within the policy framework are detected. Finally, the report presents key just transition policies in selected sectors of the economy.

The structure of the report is as follows. Following the Introduction, Section 2 provides a brief overview of Nigeria followed by a detailed analysis of the structure of the economy and the labour market at sectoral level. The link between economic sectors, the labour market, and climate and environmental change is assessed using the four key indicators mentioned above. Section 3 presents the national policy framework relevant for just transition policies and concludes with a policy-oriented summary.

## ► 2. The employment-environment-climate nexus

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### 2.1 Country overview

Nigeria is a lower middle-income country with a population of 195.88 million (2018), which represents close to half of West Africa's population. It has one of the largest youth populations in the world (70 per cent of the population is under the age of 30). Possessing significant reserves of oil and gas, Nigeria, together with Angola, Algeria and Libya, is among the largest oil producers on the African continent (producing around 2 million barrels a year) and is among the 15 biggest producers globally. It is also the largest economy in Africa. Nigeria's Gross Domestic Product (GDP) was at 397 billion United States dollars in 2018, with an annual growth rate of 1.9 per cent. GDP per capita was of US\$2,028 (World Bank 2018).

The pattern of economic growth is largely influenced by oil price fluctuations. During the resource boom between 2006 and 2015, Nigeria's GDP grew at an average rate of 5.7 per cent per year, as volatile oil prices drove growth to a high of 8 per cent in 2006 and to a low of -1.5 per cent in 2016 after the resource price crash in 2014. Economic growth is expected to hover just above 2 per cent over the medium term.

Oil accounts for more than 95 per cent of exports and foreign exchange earnings, while the manufacturing sector accounts for less than 1 per cent of total exports. Despite high GDP growth in the period 2011–2015, driven by high oil prices, the economy remained largely non-inclusive. The majority of Nigerians remain under the burden of poverty which impacts close to 70 per cent of the population. Inequality, as measured by the Gini coefficient, where 0 stands for full equality and 100 where all income goes to 1 person, stands at 43 (more equal than South Africa's 63, but significantly higher than EU's average of 30).

Underemployment and unemployment rates are very high (over 40 per cent). The country's resource-based economy shows signs of Dutch disease and resource curse, whereby despite having abundant endowments of natural resources, the country performs worse in terms of

economic development, employment and social indicators, than countries with fewer resources. It is affected by precarious social services, including poor health and schooling facilities and lack of road, rail, energy and transport infrastructure, notably in rural areas and with a significant north-south divide. Oil is mostly produced in the Niger Delta in the South, with Lagos, the business centre, exhibiting much higher living standards and public services than the far North.

In terms of governance and politics, Nigeria is a federal republic with 36 states that returned to democratic rule in 1999. After more than 30 years under a military regime, Nigeria gained in political stability and basic freedoms. General Muhammadu Buhari of the All Progressives Congress was re-elected for another four-year term in 2019 and is thus in power since 2015.

### 2.2 Economic structure

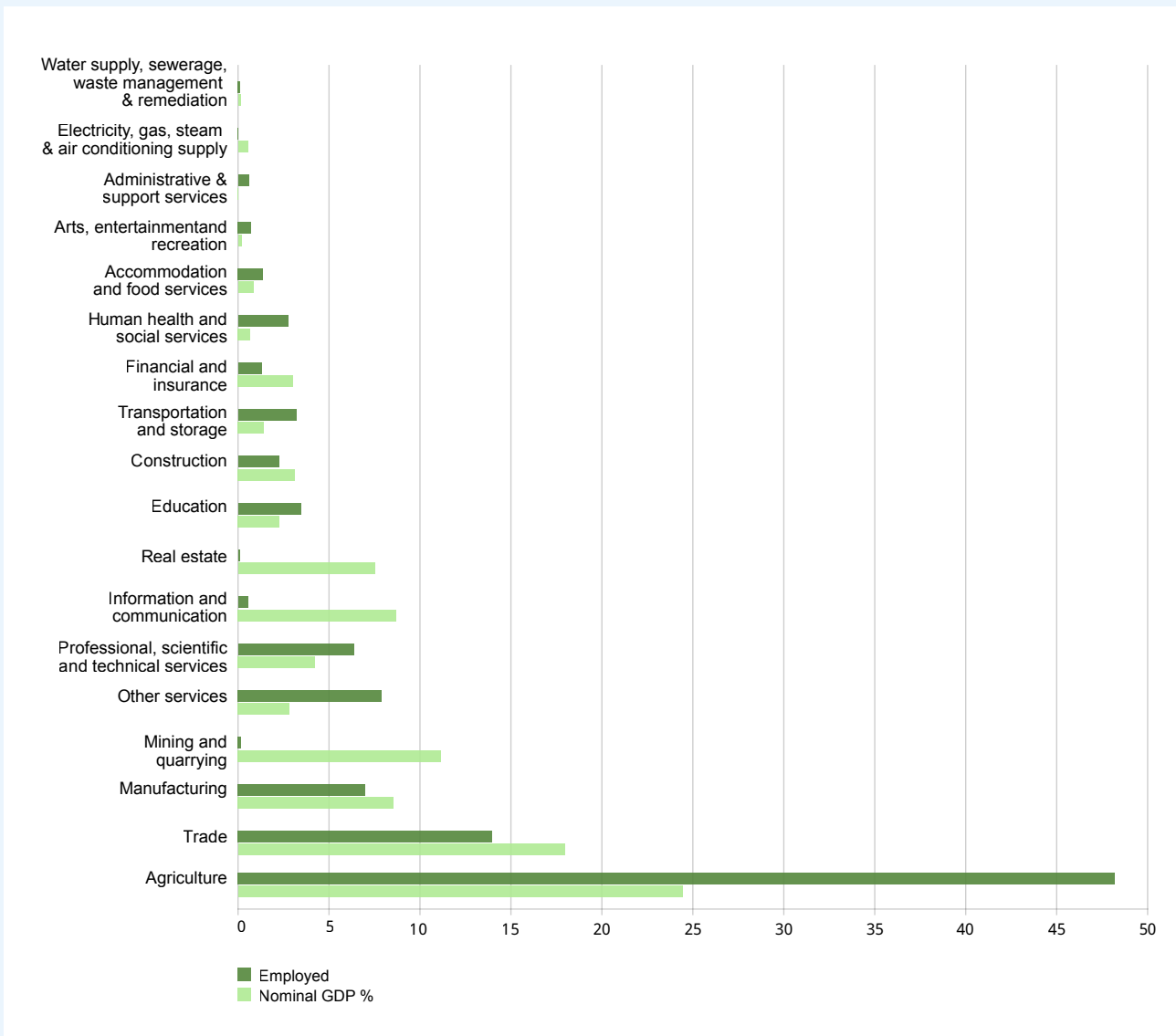
In terms of the structure of the economy, Nigeria can be classified broadly into oil and non-oil sectors. Oil revenues contribute to two thirds of state revenues and 8.6 per cent of GDP. Other major economic sectors in terms of contribution to the GDP are agriculture (24 per cent), trade (18 per cent), mining and quarrying (11 per cent), manufacturing (9 per cent), and information and communication (9 per cent) (NBS 2018).

This stands in stark contrast to the structure of the labour market. Agriculture employs around half of the labour force but contributes less than a quarter of GDP, meaning that labour productivity (GDP per hours worked) is very low. Similarly, informal sector jobs in trade, including street vending, and other low-productivity services employ around 25 per cent of the labour force. Manufacturing jobs account for less than 10 per cent. Education, health and public sector service jobs account for the remaining 15 per cent. Mining, oil and gas provide for less than 1 per cent of jobs, making the sector insignificant as a direct contributor to employment. However, as 10 per cent of GDP is directly produced by oil

and gas, productivity is registered as very high. So any climate policy which impacts the oil and gas industry need to be conscientious of the fact that it is important for the economy and income. In addition, indirect jobs in the supply chain of the oil and gas sector, such as transport, equipment, construction and services tend to support additional employment. Induced jobs, which are

dependent on the spending of well-paid oil and gas workers, make important contributions to sustain domestic demand. Although total labour share is small, jobs tend to be formal and stable with high income sustaining extended families. As such, oil and gas income support jobs in the service and trade sector among other (see figure below for direct employment by sector).

► Figure1. Share of employment and Gross Domestic Product by sector



Source: ILO illustration data from NBS 2018

In terms of status in employment, the majority is self-employed in the about 37 million micro, small, and medium enterprises (MSMEs). They provide about 84 per cent of the total jobs, create the majority of new jobs and contribute 48.5 per cent of Nigeria's GDP. They are clustered in agriculture, trade and agro-processing. Key challenges for MSMEs to grow out of informality is access to finance, technology, technical and business skills. Lack of infrastructure and frequent impacts from climate change exacerbate challenges. Exports are often non-competitive due to the strong currency, partly due to the effects of the Dutch disease. Other challenges are lack of adequate power supply with close to one third of the population having less than four hours of electricity access per day. The annual economic loss due to inadequate power supply is estimated at US\$25 billion, including large enterprises, which accounts for more than 6 per cent of Nigeria's GDP (Power for All 2019).

Regarding the labour market, Nigeria's working age population (15–64 years old) stands at 115.5 million, or 56 per cent out of a total population of 196 million. The labour force, those 15–64 years old willing and available for work (hence not in education or self-chosen homework), stands at 90.5 million. This results in a relatively high labour force participation rate of 78 per cent, with women representing around 50 per cent of the labour force. This labour force is generally low-educated and lacks the needed knowledge, skills and qualifications. Formal jobs represent less than 10 per cent of employment (NEP 2016).

Unemployment rates have been on the rise since the end of the global resource boom in 2014. In 2018, for which latest statistics are available, it stood at 21.1 per cent. This figure is higher for women (26.6 per cent versus 20.3 per cent for men) and youths 30.5 per cent (15-35 years old) It is also significantly higher for the rural labour force (23.9% versus 21.2% for urban) (NBS 2018).

An important additional dimension of the functioning of the labour market, notably in the context of developing economies, is underemployment (working less than 20 hours a week). Combined with unemployment, it stands at 43.3 per cent. For youth, it is even higher – 55.4 per cent. Against the background of high un- and underemployment, poverty remains widespread. The poverty rate in over half of

Nigeria's 36 states is above the national average of 69 per cent.

With respect to other aspects of decent work, 92.3 per cent of Nigeria's employed population is in informal employment, which suggests that most workers lack social protection coverage, receive irregular income and are employed in precarious conditions. Women, in particular, are more exposed to informal employment. In addition, Nigeria is confronted by human trafficking, especially of women and children. The National Bureau of Statistics 2017 Multiple Indicator Cluster Survey (MICS) shows that about 43 per cent of Nigerian children, in the age between 5 and 10, are working and about half of the working children are estimated to be engaged in child labour, Job creation is by and large happening in the informal sector and engages more women than men, with stark differences between the 36 states, and north and south (NBS 2018). Women face particularly adverse working conditions and tend to work without pay or in casual work, more often than men. In addition, even though access to education is increasing for both women and men, the gender gap in education remains high as girls and women face barriers to access primary, secondary and tertiary levels of education.

## 2.3 The link between labour market, economy, and environment and climate

The link between Nigeria's economic structure, labour market, and environment and climate, manifests itself in three ways:

- ▶ First, climate change and environmental degradation trigger negative impacts on economic activities and jobs.
- ▶ Second, economic activities and jobs produce negative environmental impacts through pollution and destruction of nature.
- ▶ Third, policies and regulations to address and restrain climate and environmental impacts have impacts on economic activities and jobs. On the other hand, incentives and support policies may stimulate climate friendly and green sector growth. This third point is addressed in the policy section below.

### 2.3.1 Impacts of climate and environmental change on key sectors and jobs

Nigeria is recognized as being vulnerable to climate change. The Climate Vulnerability Index (CVI) is being proposed to assess climate change vulnerability. The index consists of parameters in the three dimensions of vulnerability defined by the IPCC: Exposure, Sensitivity and Adaptive Capability. Exposure is defined by 'Natural disaster and Climate variability', Sensitivity by 'Health', 'Food', and 'Water' and Adaptive Capability by 'Socio-demographic profile', 'Governance and Institutions', 'Livelihood strategies', and 'Social networks' among other (Chen et al 2015).

A variety of indexes have been developed to measure the vulnerability of countries to environmental risks. For example, the University of Notre Dame proposes an index based on the IPCC criteria and ranks Nigeria 127th among 180 countries assessed. Importantly, the single highest risk category is "Agriculture capacity" and "Projected change of cereal yields" which other studies estimate could be reduced by 25 per cent in the case of rice cultivation (Chen et al 2015).

The total agricultural land, estimated at almost 71 million ha, has an irrigation potential between 1.5 to 3.2 million ha out of which only 1 per cent is irrigated (FAO 2016). While floods will likely become more severe in southern areas, droughts are expected to be more frequent in the savannah north. Desertification is by far the most pressing environmental problem in this region along the border with Niger. Nigeria is presently losing about 351,000 km<sup>2</sup> of its land mass to the desert which is advancing southward at the rate of 0.6 km/year. Under a business-as-usual scenario, agricultural productivity could decline by 10–25 per cent by 2080. The north of the country is most vulnerable to climate change as the decline in yield in rain-fed agriculture could be as much as 50 per cent. Agriculture decline would also affect GDP, reducing it by 4.5 per cent by 2050 (UNFCCC 2015).

The share of the informal sector is 92 per cent, the highest share among all sectors in the country. This reflects a high number of working poverty and workers lacking social protection coverage. The sector also comprises a large share of youth and migrant workers.

The current forest area of 7.22 per cent is under significant pressure from logging, timber export, subsistence agriculture, and notably firewood collection for fuel (used as primary cooking source by approximately 70 per cent of households) and charcoal, other biomass and dirty fuel (approximately 20 per cent) which provide the main source of cooking energy for close to 90 per cent of households (Megbowon et al 2018; IEA 2019). Charcoal and firewood harvesting is an informal activity and statistics on the number of jobs in charcoal/firewood production, transportation and trade are not available. However, a staggering 24 million secondary jobs (accounting for 30 per cent of the labour force) can be assumed to exist in wood collection only, plus a significant high number in charcoal production and trading, due to the fact that it is mostly women from the 70 per cent of households which use firewood, who collect the wood themselves, mostly as a secondary and/or household activity.

Charcoal and firewood activity and jobs are not only a very important contributor to employment, household income (often non-monetized) but also to a high annual deforestation rate of 4.12 per cent. From a mitigation standpoint, avoiding deforestation through alternative cooking fuel and climate-smart agriculture has a great greenhouse gas reduction potential of 74 million tonnes per year by 2030. Land use change and forestry are among the main sources of greenhouse gas emissions, together with the energy sector. In addition to contributing to climate change, deforestation leads to biodiversity loss and threatens the habitat and livelihood of communities, in particular those living in the Cross River State, where over 50 per cent of the country's tropical forests are located.

However, climate change and environmental degradation caused by economic activity are not only likely to alter the rainfall regimes and reduce the predictability of rainfall flow volumes but also increase temperature, humidity and the occurrence of floods that devastate farmlands. It also enhances pest and diseases like endemic malaria, and cause other natural disasters like ocean and storm surges.

These alterations in the ecosystems of the country impact not only half of all jobs in Nigeria by threatening crop and livestock production,



fisheries, forestry and post-harvest activities. It also impacts the livelihoods which depend on them and cause harm to life and property, infrastructure loss, and salinization of surface and coastal aquifers (Idowu et al. 2011).

Floods, temperature rise and desertification not only threaten key economic sectors like agriculture, farming, fisheries and forestry, but consequently affect employment in forward linking supply chains, notably agro-processing and trade. Moreover, temperature rise and increasing pollution areas impose occupational safety and health risks to workers in the aforementioned sectors and also in more urban sectors, such as transport and waste management.

The impacts of environmental challenges on vulnerable groups is particularly high. Indigenous people groups throughout the country are already confronting climate change impacts, in particular those dependent on agriculture and farming (Nzeadibe et al. 2012). Droughts have proven to prompt forced migration of farmers and agriculture workers to other regions in the country or abroad, as exemplified by the migrant

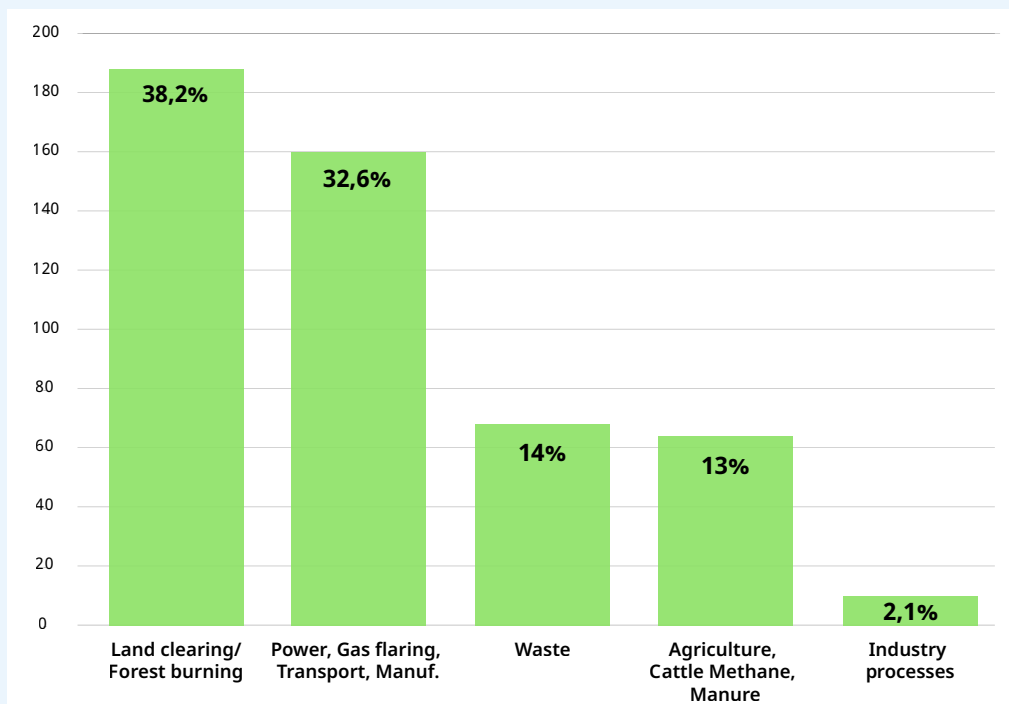
population from the North-Eastern Borno State (IOM 2017).

### 2.3.2 Environmental impact of key sectors and jobs

In terms of climate impacts, Nigeria is not a large emitter of greenhouse gases, contributing less than 1 per cent of global emissions (460 Mt CO<sub>2</sub>eq in 2014). However, it is the second highest emitter among Sub-Saharan countries. And, mainly because of high population growth, a business-as-usual scenario would double the emissions by 2030.

Latest statistics from Nigeria's submission to the UNFCC from 2014 show that 38.2 per cent of GHG emissions came from land use change and the forestry sector, followed by energy, waste, agriculture and the industrial processes sector which contributed 32.6, 14.0, 13.0 and 2.1 per cent respectively. Within the energy sector transport, electricity and fugitive emissions from oil and gas are the most important sources (see figure 2).

► Figure 2. Nigeria GHG Emissions 2014 by sector (Mt CO<sub>2</sub>eq)



Source: ILO illustration data from GHG Inventory Nigeria 2014

Like agriculture, the energy sector requires a profound transition. The sector is central to the economy in terms of GDP accounting for 90 per cent of the country's export and 80 per cent of government revenues.

Limitations in the power provision impose serious constraints to growth. Nigeria has made great strides, successfully electrifying 65 per cent of its population as of 2018. Despite this, 80 per cent of those who have electricity access still use alternative sources of energy due to frequent power outages. Low quality of energy access has taken a toll on Nigeria's economy.

The energy mix is mainly composed of thermal power (85 per cent), while hydropower generation (15 per cent) is an important complementary source of energy. The country is also blessed with other energy sources such as hydro, solar, wind, biomass, and marine energy resources.

In terms of employment, although the sector is not an important source of direct employment (0.01 per cent of total employment by sector), increasing energy access and improving energy efficiency and related services that are highly prioritized in the country's agenda have some potential for job creation.

In 2018, the decentralized renewable energy sector provided 4,000 direct, formal jobs whereas Nigeria's national gas, electricity and air conditioning sector employed about 10,000 workers. The renewable energy sector's employment impact extends beyond direct, formal jobs into the informal sector by creating indirect jobs in the upstream value chain and productive use jobs among end users in rural areas. It also employed about 9,000 informal workers. Furthermore, the newly acquired or enhanced electricity access may have enabled the creation of 15,000 productive use jobs. By 2022-23, it is estimated that the decentralized renewable energy sector will provide more than 52,000 direct, formal jobs and about 24,000 informal jobs (Power for All 2019).

Despite significant employment and future opportunities for jobs in the renewable energy sector, Nigerian economy relies on the oil and gas sector. As the main oil producer and exporter in Africa, around 80 per cent of the country's public revenue originates from oil and gas exploitation.

The energy sector is susceptible to climate change risks, in particular the hydropower generation that frequently suffers from low water in-flow caused by rainfall variability. Therefore, climate risks add more pressure to an already existing context of severe shortages of energy supply due to infrastructure limitations.

Other forms of environmental degradation result from transport, oil and gas production, waste and non-sustainable agriculture. An increasing fleet of vehicles and industrial expansion contribute not only greenhouse gas emissions but also local air pollution. The oil industry, in addition to gas flaring, is an important source of local air pollution as well as soil and water pollution resulting from frequent oil spills. The lack of appropriate infrastructure for the disposal of industrial and urban waste also pose threats to the environment and human health. Conventional agricultural practices are now leading to desertification and soil degradation in many areas of the country (Odock et al. 2016). Logging, timber export, use of wood for fuels and agricultural practices result in the highest rate of deforestation in the world. This has led to a loss of 55.7 per cent of the country's primary forests, exacerbating water stress (FAO 2015).

### 2.3.3 Key sector selection: agriculture and energy

The rapid analysis above outlined the link between the economy, employment, and climate and environmental change. Using the four key indicators of GDP, Decent Work emissions and vulnerability, energy and agriculture appear as the two economic sectors, which require the largest and most profound restructuring to achieve sustainable economic and social development. Those sectors are also in line with the national development priorities as will be discussed in the next section.

Combining the above indicators of GDP (25 per cent), jobs (50 per cent), CO<sub>2</sub>eq (50 per cent) and CVI (very high), agriculture, including forestry and land use change, is the sector with the most pressing need for a just transition. Notably, the climate-job link is very strong as 50 per cent of the labour force is engaged in the sector, which is responsible for 50 per cent of emissions. Consequently, any action to mitigate climate

change in agriculture is likely to have important implications for employment in the sector, making a well-managed transition essential. Moreover, working poverty is very high among the rural workforce and farmers are among the population categories under severe stress from climate change impacts with a very low adaptive capacity.

Energy (including power, transport, oil and gas) is central in the pursuit of a just transition. Indicators in terms of contribution to GDP (10 per cent), significant CO<sub>2</sub> emissions (30 per cent), low employment (less than 1 per cent) and moderate to high vulnerability (notably due to hydroelectricity and energy production disruption due to disasters) point to the need to ensure a crucial balance between economic goals, reduction of environmental impacts and the related social impacts.

## ► 3. Just transition policies – identifying entry points in the national policy framework

This section discusses just transition challenges and opportunities in Nigeria per sector. The section concludes with an analysis of the national policy framework and how it reflects or may reflect just transition measures.

### 3.1 The impact of climate policies on economic activities and jobs

With regard to climate policies, efforts to reduce greenhouse gas emissions (mitigation), if taken in isolation, may negatively affect the energy, forestry and agriculture sectors, which together are responsible for more than 80 per cent of total emissions. However, depending on the type of mitigation policies and accompanying just transition measures, economic growth may be stimulated and job opportunities created. For instance, jobs may be created or transitioned from thermal power jobs to jobs in the off-grid solar sector, in energy efficiency and in grid expansion. Likewise, opportunities for job creation and transformation are likely to emerge through climate-smart agriculture and reforestation, alternative

cooking fuel and agro-processing. This in turn reduces vulnerability and drives sector growth to transition in a just and inclusive way towards an environmental friendly and resilient economy.

### 3.2 Review of the national policy framework

This section briefly summarises the content of the main policy strategies and their relationship to just transition policies. It seeks to identify the extent to which national strategies relevant for a just transition acknowledge environmental challenges, employment costs/opportunities, and the linkages between the two.

#### Nigeria Vision 20:2020 (2009–2020)

Nigeria Vision 20:2020 is a long-term blueprint for the period 2009–2020 to launch Nigeria onto a path of sustained social and economic progress across four dimensions: social, economic, institutional and environmental. With regard to human development, the strategy seeks to build new capacity in technical and vocational education, support small scale and rural farmers, expand and enhance primary health care

► Table 1. Nigeria policy strategies relevant to a just transition

Area	Policy	Year
General development vision and plan	Economic Recovery and Growth Plan (ERGP)	2017–2020
	Nigeria Vision 20:2020	(2009–2020)
Employment and decent work policies	National Employment Policy	2017
Environmental policies	Nationally Determined Contribution	2015
Other relevant policies	Nigeria Industrial Revolution Plan (NIRP)	2012–2017

Source: ILO illustration data from GHG Inventory Nigeria 2014

and access to potable water and basic sanitation. Economic goals of the strategy include diversification of the economy, expansion of investments, increase in employment, improvement of efficiency of MSMEs, decrease in informality. Promoting gender equality and youth employment are also key strategies. It is a roadmap that establishes strategies and priorities, but remains dependent on further plans to effective implementation.

Nigeria Vision 20:2020 recognizes the challenge of climate change and environmental degradation to the economy and develops effective policies to the threats of climate change. Importantly, economic diversification away from oil dependence is recognized as crucial.

### **Economic Recovery and Growth Plan (ERGP) (2017–2020)**

The ERGP articulates the Government's vision for the country for the period 2017-2020, and lays the foundation for long-term growth. The ERGP focuses on three strategic objectives: restoring growth, investing in people, and building a competitive economy. The Plan targets a growth rate of 7 per cent by 2020 driven by strong non-oil sector growth anchored in agriculture and food security, energy, transportation and industrialization. It foresees investment in people by improving access to healthcare and education, promoting social inclusion and creating jobs. To build a competitive economy, it aims at accelerating infrastructure development and improving the ease of doing business.

To achieve the objectives of the ERGP, the key execution priorities are:

- ▶ stabilizing the macroeconomic environment;
- ▶ achieving agricultural transformation and food security;
- ▶ ensuring energy sufficiency (power and petroleum products);
- ▶ improving transportation infrastructure;
- ▶ driving industrialization, focusing on small and medium-sized enterprises.

The targets on employment, business development and energy build on existing sectoral strategies and plans such as the National Industrial Revolution Plan and the Nigeria Integrated Infrastructure Master Plan.

Interventions to create jobs are a prominent aspect of the ERGP, which aims to reduce unemployment and underemployment, especially among youth. It prioritises job creation through the adoption of a jobs and skills programme for Nigeria. It also sets the target of improving the business environment in collaboration with businesses to deepen their investments in various sectors.

The Plan has a particular focus on enhancing opportunities for SMEs in the promotion of industrialization as Nigeria's manufacturing sector has been particularly vulnerable to the stagnant economic conditions.

Even though increasing oil production is one of the main objectives of the ERGP, which would increase the countries' GHG emissions, the ERGP acknowledges that investing in people includes protecting the environment in which they live and work. The Plan does not specify the employment-environment linkages. The policy objectives are the following:

- ▶ Promote sustainable management of natural resources;
- ▶ Address severe land degradation and desertification by implementing projects under the Great Green Wall initiative, supporting climate change adaptation, and promoting forest plantations and eco-tourism;
- ▶ Attract financing for sustainable development projects;
- ▶ Reduce gas flaring by 2 percentage points a year so that it is eliminated by 2020;
- ▶ Install 3,000 MW of solar systems over the period;
- ▶ Increase the number of households transiting from kerosene to cooking gas (LPG) to 20 per cent by 2020;
- ▶ Increase the number of households replacing kerosene lanterns with solar lamps by 20 per cent by 2020.

### **Nigeria Industrial Revolution Plan (2012–2017)**

The Nigeria Industrial Revolution Plan (NIRP) launched in 2012 provides a strategic and integrated roadmap towards industrialization, which continues influencing the strategies of the current government. NIRP provides a plan across three sectors: agro-allied, solid minerals and oil and gas-related industries,

where Nigeria's comparative and competitive advantage are apparent.

The Nigeria Industrial Revolution Plan is a five-year plan to rapidly build up industrial capacity and improve competitiveness in the country. The plan identifies industry groups where it has comparative advantage: agro allied and agro processing, metals and solid minerals processing, oil and gas-related industries, construction, light manufacturing, and services. Building up industrial skills, an adequate infrastructure and business environment are key aspects.

### National Employment Policy (2017)

The National Employment Policy (NEP) results from a revision of the previous policy adopted in 2002. Its goal is to create the enabling environment for productive and employment-intensive growth in Nigeria. Among the objectives of the policy are: full employment, non-discrimination, promotion of skills and competencies in formal and informal sectors, especially in rural areas, formalization, enhanced integration of migrant labour, creation and maintenance of labour market information system, ensuring social protection.

The promotion of environmentally friendly (green) jobs is mentioned as one scope of action of the policy and composes one of the policy targets. Green jobs would be created in the context of climate change adaptation measures, in the renewable energy sector, urban waste recycling and afforestation. Labour-intensive public works are foreseen in the policy. In order to create decent work, in particular for the youth, the policy also emphasizes sector value chains, such as agriculture, , mining and solid mineral extraction, manufacturing in the textile sector, entertainment sector and tourism.

### Intended Nationally Determined Contribution (2015)

Nigeria's Intended Nationally Determined Contribution (INDC) takes an approach that focuses on the delivery of development benefits and sustainable growth of the economy as a response to the constraints to human and economic development arising from poverty, food insecurity, poor access to energy and high unemployment.

While oil exploitation remains a key economic activity, Nigeria's mitigation measures rather focus on improving energy efficiency and access. More specifically, the objectives are to increase energy efficiency by 30 per cent, provide 13 GW of renewable electricity (solar power) in particular to rural off-grid communities, ending gas flaring, improving the electricity grid and efficient gas generators (Ministry of Environment 2014).

The document also recognizes the country's vulnerability to climate change, for instance in the form of droughts. With the objective to promote economic growth of 5 per cent per year, improve the standard of living and establish electricity access for all by 2030, the government is committed to putting in place the following measures:

- ▶ Work towards ending gas flaring by 2030
- ▶ Work towards off-grid solar PV of 13GW (13,000MW)
- ▶ Efficient gas generators
- ▶ 2 per cent per year energy efficiency (30 per cent by 2030)
- ▶ Transport shift from private (cars) to public (buses)
- ▶ Improve coverage and stability of electricity grid
- ▶ Climate smart agriculture and reforestation

Altogether, these measures are expected to reduce emissions by around 45 per cent compared to a business-as-usual scenario, conditional upon international support, and 20 per cent achieved with domestic resources. In the context of mitigation measures, the government sets job creation as an important criterion to guide the prioritization of actions. Fostering innovation in clean technologies and implementing a fiscal reform for mitigation are seen as potential action for job creation.

Adaptation measures are another key component of Nigeria's INDC. The document underlines adaptation strategies for vulnerable groups and for sectors including agriculture, forests, energy, transportation and communications, industry and commerce. Measures to enhance the resilience of communities and protect them from disasters, promote social dialogue for adaptation, and skills development have also been included in the plan.

The measures in the INDC for mitigation and adaptation reflect and build on the Nigeria Climate Change Policy Response and Strategy and the National Adaptation Strategy and Plan of Action for Climate Change Nigeria (NASPA-CCN 2011).

### 3.3 Just transition policies

This section looks at the match between sectors identified as requiring priority attention in the pursuit of a just transition, and national policy strategies. Such analysis allows to consider the extent to which the existing institutional and policy framework may be subject to revision in order to reflect and ensure a just transition.

The key sectors identified in this paper are energy and agriculture. A structural change is required in those sectors to achieve development, which is high-growth but low-carbon with reduced climate risk. Within those sectors deforestation, transport, power, and oil and gas are critical for reducing emissions. Agriculture and agro-processing are key for broad-based and inclusive growth, which is low climate risk.

As the main national development plan, the Economic Growth and Recovery Plan recognizes the importance of the agriculture and energy sectors. However, it may provide a stronger link to climate and just transition policies. At the same time the National Employment Policy reflects key aspects of just transition policies, but does not link them to the climate and environmental context. Finally, sectoral policies in energy and agriculture may benefit from the inclusion of just transition policies by linking the development strategies to employment, social and environmental goals as well.

In terms of just transition policies to enable and drive structural change in the energy and agriculture sectors, skills and enterprises development are considered primary levers of action. Social protection policies, including insurance mechanisms, are critical to ensure reduced vulnerability and climate risk for workers, enterprises and communities engaged in agriculture.

The following section provides a set of entry points for policy, programme and project intervention to promote a just transition in the agriculture and energy sectors. The proposed

entry points are meant to inform the design of projects or programmes, to further the development of policies, building on the existing policy framework, and to complement them where gaps have been identified. The entry points seek to enable the achievement of two policy goals: 1) promoting employment creation by stimulating both labour demand and supply on the one hand, and 2) minimizing and mitigating risks of loss of employment or income.

#### Potential entry points for interventions in agriculture, land use and forestry:

- ▶ Building resilience of agricultural production: promotion of MSMEs, in particular among youth, enhancing the ability to cope with climate change effects on crops and livestock.
- ▶ Skills and enterprise development for climate-smart agriculture in the context of mitigation efforts, including reforestation and halting desertification.
- ▶ Skills and enterprise development for alternative clean cooking solutions, including improved cook stoves, alternative energy sources (LPG), eco-charcoal production from waste, sawmills, and small household-size animal-waste-fed bio digesters.
- ▶ Social protection for agricultural workers: mainstream environmental risks into social protection and insurance systems.
- ▶ Developing models of payment for ecosystem services to alter the opportunity cost of clearing forest areas.

#### Potential entry points for interventions in the energy sector (power, oil and gas, transport):

- ▶ Skills identification and anticipation with a focus on renewables (solar).
- ▶ Skills development targeted at new skill requirements in the traditional energy sector, including technicians required for technology ending gas flaring, double-cycle gas generators and more energy efficiency.
- ▶ Skills development in emerging and renewable energies – solar and wind – notably off-grid solar installers, managers and maintenance service.

- ▶ Mainstreaming employment caveats in energy policy strategies.

Policies related to sustainable enterprise development are regarded as potentially effective in creating new jobs and fostering the demand for jobs. On the other hand, supporting skills development will improve the supply side and human capital to drive clean electric and cooking technologies and climate-smart agricultural practices. Resilient enterprises would be recommended in the agriculture sector. Green public employment programmes are suggested as potentially effective in the rural economy where underemployment is severe. Employment guarantees and working for the environment programmes in India and South Africa have proven very effective in building natural assets, creating jobs while enhancing agricultural productivity and yields through improved soil, water management and irrigation.

### **Potential institutional set-up**

To ensure a just transition for all, policy coordination and coherence are required between sectoral policies (energy, agriculture), economic policies (economic growth plan), environmental/climate policies (nationally determined contributions on climate adaptation and mitigation) and employment and social policies (education and training, enterprise development, social protection).

In addition, social dialogue can allow for stakeholder-wide consultation and coordination. Social dialogue can consist of all types of negotiation, consultation or simply exchange of information between, or among, representatives of governments, employers and workers, on issues of common interest relating to economic and social policy. In practice, government and line ministries as well as employers' and workers' organizations are main stakeholders to engage in continuous dialogue in policy formulation and implementation.

The use of existing institutional set-ups, such as the Inter-Ministerial Committee on Climate Change, and/or existing consultation mechanisms for national development planning and the Revised Economic Growth and Recovery Plan, are well suited to include additional key social partners and stakeholders, and engage in continuous social dialogue.

This will ensure broad-based consensus and support for the policy direction taken, safeguard peace, ensure the inclusion of the disadvantaged and marginal voices, and enable a timely and successful implementation.



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## Annexes

► Table 2. Main country indicators

Indicators	2011	2013	2015	2017	2018
Population (millions)	162.80	171.76	181.14	190.88	195.88
GDPpc (constant \$)	2350.3	2476.8	2563.1	2412.4	2396.3
GDP growth rate (%)	5.3	6.7	2.7	0.8	1.9
<b>GDP sectoral composition (%)</b>					
Agriculture	-	23.33	23.11	25.08	25.13
Industry	-	24.81	23.71	22.25	22.25
Services	-	51.86	53.18	52.67	52.62
<b>Employed persons by sectors and sex (female total share) (%)</b>					
Agriculture	40.1	38.2	37	36.8	36.6
Industry	11.7	11.8	11.7	11.5	11.5
Services	48	49.9	51.2	51.6	51.8
<b>Unemployment rate by sex (female total share) (%)</b>	23.9	-	10.4 (12.3)	18.8 (21.2)	
<b>Education level of the labour force by sex (female total share) (%)</b>					23.1 (26.6)
Less than basic	32.9				
Basic	16.8				
Intermediate	39.7				
Advanced	10.7				
<b>(M)SMEs:</b>					
Contribution to GDP (%)				49.78	
Contribution to employment (% employees)				85	
<b>Youth unemployment rate (%)</b>			13.7	25.5	
<b>Informal employment (%)</b>	-	-	-	92.9	29.7
<b>Trade union density rate (%)</b>	-	-	-	-	-
<b>GHG emissions, total (mt co2 equivalent)</b>	430	460	460	480	-
<b>Renewable energy production (as % of total)</b>	8.1	8	5.9	-	-
<b>Main environmental hazards</b>					

Source: World Development Indicators (WB), National Bureau of Statistics, and ILO Modelled Estimates.

► Table 3. Summary table, policy framework approach

JT policy areas/ GJP area of work	Policy strategy	ERGP	Vision 20:2020	NIRP	NEP	INDC
Employment Considerations	Sustainable Enterprises					
	Resilient Enterprises					
	Green Employment Programme					
	Skills development					
	Social protection					
	OSH					
	Social dialogue					
Environment Considerations	Mitigation strategies					
	Adaptation and resilience strategies					
	Specific mention of 'green jobs' or employment- environment linkages					

**Note:** This table compiles information on the different national policy strategies and shows whether particular just transition policy areas are recognised in each of these strategies, in which case the box appears in blue. Different colour intensities are used to indicate what policy areas received a higher/lower consideration within each policy strategy. This facilitates the identification of just transition policy areas which are well mainstreamed into the national policy framework and highlights potential main gaps.



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