

PROMOTING A PANDEMIC RECOVERY: EVIDENCE TO SUPPORT MANAGING THE GROWING DEBT CRISIS PROJECT

AND DEVELOPMENT SWAPS IN NIGERIA



SUPPORT













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The project was led by Fernando Lorenzo (Centro de Investigaciones Económicas, CINVE/Red Sur). The academic direction of the project and the process of elaboration of this document was carried out by Red Sur Regional Technical Coordination team, composed of Andrés López (IIEP-UBA-CONICET/Red Sur), Ramiro Albrieu (Red Sur), Luis Miguel Galindo (Universidad Nacional Autónoma de México, UNAM) and Álvaro Ons (CINVE/Red Sur).

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Number	Title	Authors/Institution
Policy Brief No 1/2022	Policy Proposals for External Debt Management and Sustainability in Developing and Low-Income	Fernando Lorenzo (Centro de Investigaciones Económicas), Luis Miguel Galindo (Universidad Nacional Autónoma de México), Ramiro Albrieu (CIPPEC), Dionisio Borda (Centro de Análisis y Difusión de la Economía Paraguaya), Paul Lakuma (Economic Policy Research Centre), Mma Amara Ekeruche, Alemayehu Geda (Addis Ababa University), and Arjan de Haan (IDRC)
Policy Brief No 2/2023	LAC Policy Brief "Results and Policy Implications in Latin America"	Miguel Galindo (UNAM), Fernando Lorenzo (CINVE/Red Sur) and Ramiro Albrieu (Red Sur)
Policy Brief No 3/2023	Construyendo un futuro sostenible en el Sur Global	Ramiro Albrieu (Red Sur)
Policy Brief No 4/2023	Policy Brief I - Ethiopia: Profile of Ethiopian Debt and its Institutional Challenges: An Exploratory Analysis	Getnet Alemu and Alemayehu Geda (Addis Ababa University/AAU)
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Policy Brief No 6/2023	Policy Brief III - Ethiopia: A Two-Edged Sword: The Impact of Public Debt on Economic Growth—The Case of Ethiopia	Addis Yimer and Alemayehu Geda (Addis Ababa University/AAU)
Working Paper No 1/2023	Background Document 'Fiscal and Financial Challenges of Climate Transition in Latin America'	Luis Miguel Galindo (UNAM) and Fernando Lorenzo (CINVE/Red Sur)
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Working Paper No 7/2023		Dionisio Borda, Juan Cresta, Fernando Masi, Fernando Ovando and Belén Servin (CADEP/Red Sur)				
Working Paper No 8/2023	Effects Of Gender-Inequality During Global Health Emergencies: Evidence from Nigeria	Centre for the Study of the Economies of Africa (CSEA)				
Working Paper No 9/2023	Debt for Climate and Development Swaps in Nigeria	Centre for the Study of the Economies of Africa (CSEA)				
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Working Paper No 11/2023	Sustainable, Inclusive and Environmentally Responsive Debt in Uganda: Implication of COVID 19	Economic Policy Research Centre (EPRC)				
Working Paper No 12/2023	Profile of Ethiopian Debt and Its Institutional Challenges: An Exploratory Analysis	Getnet Alemu and Alemayehu Geda (Addis Ababa University/AAU)				
Working Paper No 13/2023	Fundamental and Proximate Drivers of Public Debt in Ethiopia	Alemayehu Geda and Addis Yimer (Addis Ababa University/AAU)				
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CONTENT

LIST OF TABLES	3
LIST OF FIGURES	4
ABBREVIATIONS AND ACRONYMS	5
1.0 INTRODUCTION	6
2.0 BACKGROUND	8
3.0 DEBT CRISIS RISKS AND THE ASSOCIATION WITH DEVELOPMENT PRIORITIES	11
4.0 VIABILITY OF DEBT-FOR-DEVELOPMENT SWAPS IN NIGERIA	19
5. 0 VIABLE GREEN AND DEVELOPMENT-ORIENTED PROJECTS	27
6.0 CONCLUSION	29
REFERENCES	

List of Tables

Table 1. Outstanding debt eligible for debt swaps				
Table 2. Present value of Nigeria's debt-service savings 2022-2028, baseline scenario	25			
List of Figures				
Figure 1. Budget allocation to debt service, education, health, women affairs and environ percent (%)	ment sectors 10			
Figure 2. Nigeria's debt as share of GDP and real GDP growth	14			
Figure 3. Nigeria's volume of debt disaggregated by creditors	14			
Figure 4. Nigeria's debt disaggregated by creditors	15			
Figure 5. Sub-Saharan Africa's debt disaggregated by creditors	15			
Figure 6. Climate vulnerability and debt risks of African countries	18			
Figure 7. Bid prices of Nigeria's outstanding Eurobonds	21			
Figure 8. Evolution of environmental spending following debt swaps for nature	27			

Abbreviations and Acronyms

AfDB African Development Bank

AMCON Assets Management Corporation of Nigeria

CBN Central Bank of Nigeria

CIRR Commercial Interest Reference Rates

COVID-19 Coronavirus Disease 2019

ERGP Economic Recovery and Growth Programme

FME Federal Ministry of Environment

GDP Gross Domestic Product

GNI Gross National Income

HIPC Heavily-Indebted Poor Countries

IDA International Development Assistance

IMF International Monetary Fund

MDRI Multilateral Debt Relief Initiative

NBET Nigeria Bulk Electricity Trading Plc

NBSAP National Biodiversity Strategy and Action Plan

NCCPRS National Climate Change Policy and Response Strategy

NDCs Nationally Determined Contributions

NREEEP National Renewable Energy and Energy Efficiency Policy

ODA Official Development Assistance

OECD Organisation for Economic Co-operation and Development

PGRT Poverty Reduction and Growth Trust

RAI Resource Allocation Index

UNDP United Nations Development Programme

UNESCO United Nations Educational, Scientific and Cultural Organisation

WRI World Risk Index

I. INTRODUCTION

Over the last decade, there is growing evidence of the adverse effects of climate change on the Nigerian economy (World Bank Group, 2021; Okon, et al., 2021). The changes in climatic conditions manifest in diverse ways including increasing temperatures, rising sea levels and the attendant flooding, as well as extreme weather conditions indicate the country's vulnerability to climate change (World Bank Group, 2021). A clear case is the shrinking of Lake Chad which threatens food and water security as well as broader socio-economic development. On an aggregate scale, estimates show that climate change could result in a 6% to 30% loss of national GDP by 2050, estimated to be between US\$100 billion and US\$460 billion (DFID, 2009). In addition, other development priorities such as education, health and gender equity are deficient. Women's participation in the labour market is declining and there remains a high wage and income gap across gender lines. Worse still, significant disparities exist in educational and health outcomes among women and men. Consequently, in 2022, Nigeria ranks 27th (out of 36 countries) in the Africa-wide ranking of the World Economic Forum's Gender Gap Index (WEF, 2022). These social welfare sectors continue to be largely underfunded, and even in light of the limited budgetary allocation, gender outcomes are not taken into consideration in the implementation of programmes.

The situation requires a growing urgency for action, but at the same time, it presents a dilemma. While significant financing is required to reverse the trends currently being experienced in climate and development outcomes, the impending debt crisis allows only for limited liquidity to be deployed towards financing development priorities. However, financing innovations such as debt for climate and development swaps, that is, exchanging debt service payments with an obligation to channel funds towards climate and nature as well as development outcomes, could create a win-win situation for both the debt, and climate and development crises.

Public debt in Nigeria is increasing rapidly and at an unsustainable rate. Within five years, total debt-inclusive of domestic debt- increased from US\$64.2 billion in 2017 to US\$100 billion in March 2022, representing a 56% rise (DMO, 2017; DMO, 2022). Since the emergence of the COVID-19 pandemic, Nigeria's debt sustainability risks have further heightened, manifesting as higher debt service obligations against dwindling government revenue. At the peak of the pandemic in 2020, interest expenses on federal government debt accounted for 89% of federal government revenue. The risk of a debt crisis is underpinned by high fiscal deficits and low growth prospects which have been exacerbated by the pandemic. More specifically, revenue shortages are occurring against the backdrop of the implementation of a large fiscal stimulus package, meanwhile growth-enhancing sectors have failed to achieve pre-pandemic growth rates. Consequently, even as the country's debt to GDP ratio is still within a relatively safe zone at 37% in 2021 compared to sub-Saharan Africa's average of 57%, it is already on an unsustainable debt path particularly with the current rise in global interest rates and increased borrowing posing additional risks.

As it stands, Nigeria has been accumulating significant debt within the last few years, which is approaching unsustainable territory and the negative effects of overdependence on the fossil fuel industry positions the country to benefit from debt swap. More so, effective implementation of programmes under debt swap entails utilisation of debt commitments in a way that aligns with the development assistance strategies of creditors, in this case, climate mitigation and adaptation programmes. In addition, Nigeria's trade balance and fiscal revenues are excessively reliant on the fossil fuel industry (oil and gas) and reducing this dependency is crucial to Nigeria's future economic growth prospects. With the global transition towards a green economy (AfDB, 2022), there is a need for Nigeria to develop industries that are green oriented and gradually reduce reliance on fossil fuel industry for both export earnings and government revenue. Further, climate issues have become increasingly worrisome because persistent environmental challenges could lead to economic vulnerabilities, which could affect the socioeconomic and environmental development of the nation (NDP, 2021).

This paper makes a case for linking Nigeria's debt finance to climate adaptation and mitigation programmes as well as other development priorities. It further shows the viability of debt-for-development swaps using a scenario analysis. Three scenarios are presented including the baseline scenario covering all ODA-eligible Paris Club debt and worst-performing Eurobonds; the optimistic scenario covering all Paris Club debt, worst performing Eurobonds and all multilateral concessional debt; and the pessimistic scenario covering only ODA-eligible Paris Club debt. The paper finds that as much as US\$3.7 billion can be saved in the baseline scenario. If the entirety of the eligible debt were to be swapped under the baseline scenario, it would create an average of nearly \$300 million of budgetary resources per year between 2022-2028. The paper also traced the experiences of five countries-Poland, Bulgaria, Jamaica, Indonesia, and Philippines - participating in debt-for-nature swaps and found that debt-for-nature swaps increased funding for the environment marginally in three out of the five countries - Poland, Bulgaria, and Jamaica. Spending for the other two countries decreased. With these insights, in Nigeria, projects such as the Deep Decarbonisation Pathways Project, could be funded with savings from the debt swap with active participation of the private sector. Also, the framework for the implementation of the debt swap would include structures and accountability mechanisms to ensure that the government remains committed to climate adaptation and mitigation as contained in both the National Development Planning, 2021 - 2025 and the Updated Nigeria National Determined Conditions (NDC) (NDP, 2021; NDC, 2021).

The remainder of the paper is structured as follows: Section 2 provides a background as it discusses the accumulation of Nigeria's debt and its changing composition. Section 3 discusses debt crisis risks, the association with development priorities, and questions whether there is a need for debt swaps. Section 4 examines the viability of debt-for-development swaps in Nigeria, while section 5 explores viable green and development-oriented projects. Section 6 concludes the paper.

II. BACKGROUND

Rising debt service commitments have limited investment in human development, social welfare, climate and nature programmes

Human development and social welfare sectors including education, health, gender equality and environment sectors have been deprioritized owing to rising debt levels. As such, out of 189 countries on the United Nations Human Development Index, Nigeria ranked 161 in 2019, a decline from a ranking of 158 in 2018 (UNDP, 2019; UNDP, 2020). As shown in Figure 11, budgetary allocation to the education sector averaged 8.8% of the budget between 2009 and 2019 with the highest allocation occurring in 2015 at 10.8% (NGN484 billion; US\$1.17 billion). This is far below the 15 to 20% recommended in the 2015 Incheon Declaration necessary to fund education (UNESCO, 2016). While the Declaration sought to increase allocation to the education sector, the reverse occurred in Nigeria. The budgetary allocation to the education sector reduced from 10.8% in 2015 to 7.1% in 2018, while increasing marginally to 8.4% in 2019. The health sector is also faced with low budgetary allocation. Although Nigeria is signatory to the 2001 Abuja Declaration which stipulates that 15% of the budget is deployed towards the health sector, allocation to the health sector averaged only 4.9% between 2009 and 2019, with the highest occurring in 2012 at 6%. Meanwhile, the allocation to the sector deteriorated to less than 4% in 2018 but increased marginally to 4.2% in 2019, as was the case in the education sector.

Allocation to the female empowerment and environment ministries are also considered as they indicate the importance of gender equity and climate change issues in Nigeria. As shown in Figure 1, less than 1% of the budget was individually allocated to both sectors. Between 2009 and 2019, allocation to the female empowerment ministry averaged 0.08% while the highest allocation was in 2009 at 0.12%. Furthermore, budgetary allocation to the Ministry of Environment, which coordinates climate change related activities,

averaged about 0.4% of the budget between 2009 and 2019. In 2019, 0.36% of the budget was allocated to the sector, a decrease from 0.46% in 2014.

As mentioned earlier, the pandemic was accompanied by a significant decline in revenue which led to revisions in the 2020 budget and limited fiscal space. Allocations to social welfare ministries experienced significant crowding out, for example allocation to the education sector reduced from 6.4% in the pre-pandemic 2020 budget to 5.6% in the revised 2020 budget. Similarly, health allocation declined from 4.2% to 3.8%; environment decreased from 0.29% to 0.26%; and female empowerment decreased from 0.077% to 0.076%. In 2022, there was a marginal increase in budget allocation to female empowerment, whereas other social welfare related Ministries - education, health, and environment experienced a decline in budgetary allocation between 2021 and 2022. Allocation to education decreased from 5.3% in 2021 to 5.1% in 2022. In tandem, health allocation decreased from 4.3% in 2021 to 3.8%; and the environment decreased from 0.32% in 2021 to 0.26% in 2022.

Despite the low allocation to the social welfare related ministries, budgetary allocation to debt service payments has exceeded a fifth of the total budget since 2015. Specifically, debt service as a share of total budget was about 9.4 percent in 2009, and increased gradually to 21.2 percent in 2015, and reached its peak of 27.3% (N2.95 trillion) in 2020. Also, debt service payments exceed the sum of budgetary allocation to the social welfare ministries - education, health, female empowerment, and environment - between 2015 and 2022. For instance, in 2022, total budgetary allocation to social welfare ministries was about 9.2% of the total budget whereas debt service was about 22.7%, suggesting that debt service obligations took up more than three times the budget allocation to social welfare ministries. Presently, allocation to social welfare ministries is far below pre-pandemic levels, except for female empowerment, which further indicates the scarcity of funds available to meet both debt service obligations as well as social welfare.

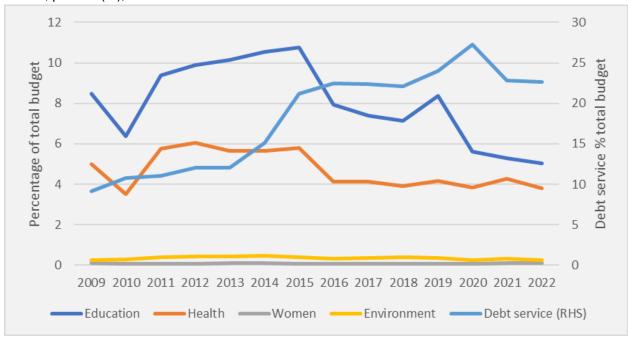


Figure 1. Budget allocation to debt service, education, health, female empowerment and environment sectors, percent (%); 2009-2022

Source: Budget Office of the Federation 2009-2022. Appropriation Act.

The deprioritization of climate and nature programmes in the budget is occurring against the backdrop of high climate and biodiversity vulnerability which requires significant finance

Nigeria is extremely vulnerable to climate change with increasing temperatures, rising sea levels, and extreme weather conditions which threaten food and water security as well as the broader socio-economic development across the country. The World Risk Index for climate and disaster risk developed by the German Development Aid Alliance shows that Nigeria is highly vulnerable to climate risks and lacks coping mechanisms and adaptation capacities, and is moderately exposed to extreme natural events. With a score of 12.66 on the World Risk Index, Nigeria carries the seventh highest disaster risk in the continent coming after Cape Verde (WRI 17.72), Djibouti (WRI 15.48), Comoros (WRI 14.91), Niger (WRI 13.9), Guinea-Bissau (WRI 13.39), and Cameroon (WRI 13.07). In earnest, climate change could result in a 6 to 30% loss of national GDP by 2050, estimated to be between US\$100 and US\$460 billion (DFID, 2009).

The country continues to emit high and increasing amounts of greenhouse gases, reaching 347 million tonnes of CO2 equivalent emissions in 2018 (FGN, 2021). Consequently, it is the third highest producer of greenhouse gases in Africa - following South Africa and Zambia - and is solely responsible for about 1% of greenhouse gas emissions globally (Hansen, 2020). There is a negative outlook for future emissions projection as fossil fuel production continues to expand. Significant finance is required to reverse the trend as stipulated in the recent Nationally Determined Contributions (NDC) submitted in 2021 - which estimates a financing requirement of US\$177 billion from 2021 to 2030, in order to meet the conditional target of cutting current emissions by 50% before 2030 (Climate Action Tracker, 2021). Generally, implementing climate adaptation and mitigation measures as well as social protection measures that will protect people's livelihoods from the impact of climate change requires considerable funding. In the absence of concessional financing or bolstered revenues, financing these measures could lead to higher debt levels.

On biodiversity vulnerability, the Global Environment Facility Benefits Index (2008) ranks Nigeria eleventh in the continent in terms of biodiversity potential. With a score of 6 on the Index, Nigeria comes after Madagascar, South Africa, Congo, Dem. Rep., Tanzania, Cameroon, Kenya, Ethiopia, Angola, Mozambique, and Somalia. The country has over 7,895 plant species and 22,000 animals, giving it a rich and varied biodiversity (CBD, 2001). More so, the country's high biodiversity value could attract private investors, with the most recent estimates showing that the commercial value of biodiversity could exceed the cost of conservation methods by more than US\$3 billion (CBD, 2021). However, animals are being overexploited, and habitats are lost as a result of deforestation and agricultural expansion (CBD, 2021). Furthermore, current trends show that a large number of animal and plant species will be lost in the coming years, with harmful effects on climate change resilience, food security and the economy. Consequently, to deliver the economic benefits of its rich biodiversity, significant investment is required to mainstream biodiversity into national programmes and implement biodiversity conservation.

III. DEBT CRISIS RISKS AND THE ASSOCIATION WITH DEVELOPMENT PRIORITIES - IS THERE A NEED FOR DEBT SWAP?

Debt has increased rapidly since 2015, with multilateral creditors alongside private creditors as Nigeria's key lenders, and yet the recent COVID-19 pandemic is leading to a more precarious debt situation owing to a combination of fiscal deficits and low growth prospects.

Nigeria's debt to GDP ratio has been U-shaped, declining in the aftermath of the 2005/2006 debt relief and then rising due to chronic fiscal and current account deficits combined with weak commodity prices. While the debt to GDP ratio fell from 58.5% to 16.7% between 2004 and 2008, it had increased to 29.2% immediately before the onset of the COVID-19 pandemic in 2019 (see Figure 2). In particular, the country experienced a high and rapid increase in debt from 2015 despite achieving high GDP growth rates following the debt relief initiative. Figure 3 indicates that the combined outstanding public and publicly guaranteed debt in 2020 was US\$2.98 trillion compared to US\$383 billion in 2016, representing a seven-fold increase. Moreover, concessional debt as a share of external debt has declined from 24 percent in 2013 to 12 percent in 2020 owing to the change in the structure of debt - a smaller share of debt is owed to Paris club creditors while private creditors and multilateral creditors account for an increasing share of debt. Whereas multilateral creditors accounted for 13% of total debt in 2005, presently, they account for 48% of total debt as debt owed to multilateral creditors reached US\$1.43 trillion in 2020 - out of which US\$805 billion (56%) is concessional. Similarly, private creditor debt as a share of total debt has increased from 10% in 2005 to 38% in 2020 as the volume of debt owed to private creditors amounted to US\$1.12 trillion in 2020, with bonds being the major source of private debt since 2011. Meanwhile, bilateral debt as a share of total debt has declined significantly from 77% in 2005 to 14% in 2020 (see Figure 4) as bilateral debt accounted for US\$426 billion in 2020 out of which US\$47.7 billion (11%) was concessional.

The trend in Nigeria is similar in several ways to that of other low- and middle-income countries across the continent. Since 2000, sub-Saharan Africa's debt has more than doubled from US\$163.5 billion to US\$454 billion in 2020. More so, private debt as a share of total debt has increased from 17% in 2000 to 43% in 2020 (see Figure 5) with the volume of private debt reaching US\$195 billion in 2020. Similarly, the share of debt owed to bilateral creditors has decreased by half from 50% of total debt in 2000 to 25% in 2020 with debt owed to bilateral creditors reaching US\$115 billion in 2020. Chinese loans have featured prominently in bilateral lending across the continent in general and more particularly in Nigeria. Chinese lending to Nigeria between 2000 and 2019 is estimated at US\$6.7 billion and for Africa at US\$153.4 billion (CARI, 2021). This is despite the hidden debt problem that is common with Chinese loans where lenders impose strict confidentiality clauses. For instance, the Export-Import Bank of China restricts borrowers from sharing loan contract information without the Bank's permission or unless required by law (Gelpern, Horn, Morris, Parks & Trebesch, 2021). Consequently, data showing Chinese lending to the continent could be grossly underestimated. However, unlike the trend in Nigeria, multilateral debt accounts for a lower share of total debt as it decreased from 33.4% to 31.7% between 2000 and 2020 with multilateral debt amounting to US\$144 billion in 2020.

The COVID-19 pandemic has further exacerbated the debt situation in Nigeria and the rest of the continent. Owing to a combination of fiscal deficits and low growth prospects, Nigeria's debt as a share of GDP is estimated to rise to 37% by 2022 from 29.2% in 2019. A cocktail of factors including pandemic-induced lockdowns, falling commodity prices, and capital flight have decimated revenue collection with government revenue as a share of GDP declining from 8.5% to 6.3% between 2018 and 2020 (IMF, 2021).On the other hand, implementation of large fiscal stimulus packages to combat the effect of the pandemic on the macroeconomy and livelihoods has led to an increase in government

expenditure from 12.5% in 2019 to 13.3% in 2021 (IMF, 2021). Put together, the fiscal deficit as a share of GDP has risen from -4.7% in 2019 to -6.1% in 2021 (IMF, 2021). This is occurring against the backdrop of a depreciation in the exchange rate, growth in interest expenses and subdued GDP growth which increases the debt burden and makes it more difficult to meet debt servicing obligations. At the peak of the pandemic in 2020, interest expenses on federal government debt accounted for 89% of federal government revenue. Given that government financing needs are projected to increase - with the AfDB estimating a US\$125 to US\$154 billion increase in Africa's COVID-19 related financing needs in 2020 - the debt situation is likely to be more precarious in the short- to medium-term (AfDB, 2021). More so, the gradual normalisation of the monetary policy in developed countries including the United States and the United Kingdom, as they strive to address rising inflationary pressures would further increase debt service costs.

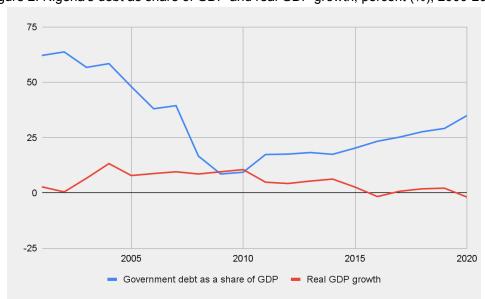
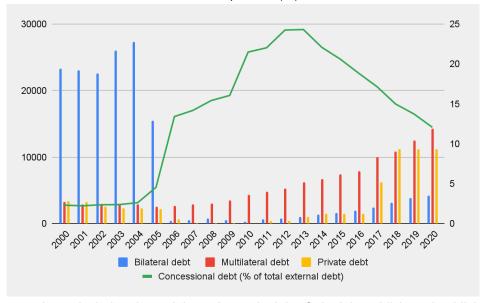


Figure 2. Nigeria's debt as share of GDP and real GDP growth, percent (%); 2000-2020

Source: International Debt Statistics, 2021

Figure 3. Nigeria's volume of debt disaggregated by creditors, US\$ million; concessional debt, percent (%); 2000-2020



Note: The figures do not include private debt or domestic debt. Only debt publicly and publicly guaranteed by the government is covered.

Source: International Debt Statistics, 2021

Figure 4. Nigeria's debt disaggregated by creditors, percent (%); 2000 -2020

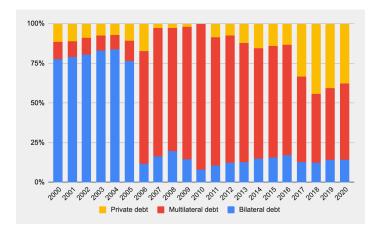
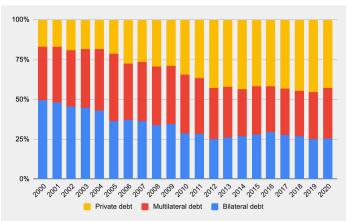


Figure 5. Sub-Saharan Africa's debt disaggregated by creditors, percent (%); 2000 -2020



Source: International Debt Statistics, 2021 Source: International Debt Statistics, 2021

Debt restructuring risks remains high with the risks further heightened when considering contingent and non-guaranteed liabilities

Although lessons learnt from the levels of risk indicators cannot simply be transferred from one country to another, as their situations and contexts differ, it is possible to infer a positive association between the level of the risk indicators recorded for debt-defaulting countries and the probability of sovereign default in other countries. Finger and Mecagni (2007) show that most debt crises occurred at debt to GDP ratios above 39%. Nigeria is fast approaching this threshold as its debt to GDP ratio is estimated at 37% in 2022. In Nigeria most of the debt burden comes from domestic debt - in 2021, domestic debt reached US\$57.4 billion, representing 60% of total debt (DMO, 2021). In 2019, the interest payment on federal government debt as a share of federal revenue was 52.6% while the interest payment on general government debt as a share of government revenue was 20.5%, respectively. However, there has been a significant increase in both indicators since the pandemic with the former increasing to 88.8% in 2020 while the latter increased to 33.5% in the same year.

Box 1. Government contingent fiscal liabilities

According to the Debt Management Office (DMO), the explicit contingent liabilities of the federal government are around NGN2.86 trillion (US\$6.8 billion), representing 2% of GDP in end-2019 (DMO, 2019). In addition, non-guaranteed liabilities of government-owned entities and certain PPPs, for which no data are available, are likely to pose additional risks. According to the Nigerian Ministry of Finance, the largest sources of contingent liabilities are pension arrears to public employees followed by power sector-related commitments including payment to Nigeria Bulk Electricity Trading Plc (NBET). These sources accounted for 99% of contingent liabilities, equivalent to 1.85% of GDP (DMO 2019). Excluded from this estimate is the negative net worth of the Asset Management Corporation of Nigeria (AMCON) - as at February 2021 AMCON carried NGN4.4 trillion (US\$10.5 billion) in debt, most of which represents liabilities of the Central Bank of Nigeria (Akinloye, 2021). Asset recovery by the public asset management company (AMCON) has encountered obstacles, leaving a large financing gap ahead of its planned closure between 2023 and 2024. The collection on large delinquent borrowers has been slow during the pandemic, however, recoveries are set to increase, following an amendment to the AMCON act passed in April 2021 facilitating property foreclosures. Lost seignorage revenues also account for an important source of contingent fiscal risk in Nigeria. By funding various subsidised schemes and investments, the Central Bank of Nigeria (CBN) assumes a development role that reduces the income it would normally generate for the government, thereby circumventing the process associated with oversight of fiscal expenditures by the government and by the national assembly.

During the COVID crisis, government contingent liabilities are likely to have increased due to loan forbearance sanctioned by central banks. In those instances where the loan repayment period was extended, or loans were restructured due to the pandemic, central banks provided leniency to financial intermediaries regarding requirements for loan classification and provisioning - potentially giving rise to contingent costs, in terms of funding required to support loan restructuring. In Nigeria, where the use of debt monetisation predates the pandemic, the outstanding balance on the government's overdraft facility was already equivalent to 6.7% of GDP at end 2019, representing about 30% of the government's debt. In 2020, recourse to this facility expanded considerably providing the government with funding equivalent to another 1.9% of GDP and accounting for more than half of its fiscal deficit of 3.6% of GDP.

Amid the rising debt burden and the decline in concessional finance, there is the need to link debt finance to nature, climate adaptation and mitigation

In the updated Nigeria's National Determined Contribution (NDC), Nigeria recommitted to its unconditional contribution of 20% below business-as-usual by 2030 and a marginal increase in the conditional

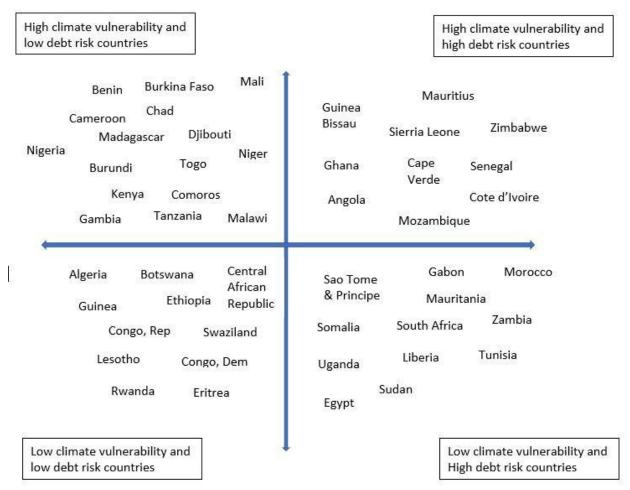
contribution from 45% in the initial NDC to 47% in the updated NDC below the business-as-usual by 2030 (NDC, 202 p. 17). The actualisation of the ambitious goal is estimated to require an investment outlay of about US\$ 177 billion over the next ten years across different sectors of the economy (NDC, 2021 P. 34). The funding for the investments are anticipated to come from both the government and the private sector, with the private sector contributing the most. As stated in the NDC, the investments from the private sector would follow a blended financing modalities which allows for the operationalisation of debt swap. As a result, the private sector would play an active role in converting the existing debt to create additional resources for the execution of climate mitigation and adaptation projects, as well as other developmental initiatives through debt for equity swap. The strategy in an indirect way of incentivising the advanced countries to contribute to the realisation of Nigeria's climate action plan.

Currently, Nigeria is similarly positioned to the pre-debt relief era with external debt at the same level as it was in the period preceding 2005. The sum allocated towards debt servicing has more than tripled in the past 13 years from US\$42.6 billion in 2009 to US\$156 billion in 2020 and is expected to increase to US\$358 billion by 2025 (World Bank, 2022). The high debt servicing poses severe risks for fiscal sustainability even though public debt is deemed to be sustainable. Moreover, with the rapidly shrinking fiscal room, future financing of current and capital spending is bound to become highly dependent on debt financing.

The World Bank's IDA Resource Allocation Index (RAI) - which indicates countries' creditworthiness - has four clusters, namely: economic management, structural policies, policies for social and inclusion/equity, and public sector management and institutions. Given the scope of the study, we focus on the economic management cluster which describes the debt policy and management, fiscal policy, and monetary and exchange rate policies. Under the economic management cluster, in 2021, Nigeria had a score of 3.5, which is slightly the 3.2 average score of IDA borrowers (World Bank, 2021). This suggests that the country's economic management is weak and might experience difficulty in accessing large sums of credit at lower rates. Moreso, Nigeria is not eligible for some of the support provided to low-income countries including the IMF's Poverty Reduction and Growth Trust (PRGT). The narrow funding options imply that the country has limited additional liquidity to support climate resilience measures. Consequently, existing debt finance arrangements should be linked to climate adaptation and mitigation, and nature projects.

Figure 6 shows the climate vulnerability and debt risks for countries in the continent. The analysis is based on five indicators: (1) The World Risk Index for climate and disaster risk, (2) The GEF benefits Index for Biodiversity, (3) External debt as a share of GNI, (4) Debt service payment of public and publicly guaranteed debt, and (5) Economic management cluster of the IDA resource allocation index. Countries like Cape Verde, Ghana and Angola have a high climate vulnerability and high debt risk, while others like Botswana, and Rwanda have a low climate vulnerability and low debt risk. As shown in Figure 6, Nigeria falls in the top left quadrant with a high climate vulnerability and low debt risk. The rising climate vulnerabilities call for higher climate finance, but this is likely to result in increasing the country's debt towards the high risk region given the limited access to concessional finance. In addition, Habibullah et al. (2022) shows that climate change is contributing to biodiversity losses - significant species of amphibians, birds, fishes, mammals, and reptiles are eroding. The latest biodiversity index (2008) shows that Nigeria with a score of 6, which is more than twice the region's median score of 2.4 has considerable biodiversity potential, and needs to be optimised. (World Bank, 2022). Given the high risk of debt distress coupled with the high vulnerability to climate change and biodiversity loss, Nigeria has a strong case to make with creditors to link debt financing with additional spending on inclusive, growth-enhancing climate adaptation and mitigation investments. Simply put, the country's rising debt burdens, high climate and biodiversity vulnerability, and limited access to credit gives a clear picture of where additional support is needed.

Figure 6. Climate vulnerability and debt risks of African countries



A sustainable approach to ensure that the objectives of the debt for climate swap is achieved and the desired impact is attained

Arguments have been made in favour of debt-swap for climate change in Nigeria, considering the plummeting resources channelled to social welfare sectors and the need to ensure economic growth and development amidst the growing fiscal pressures in Nigeria. There are also concerns on the feasibility of debt-swaps making impact in Nigeria, based on the global perceptions on government operations in Nigeria. Nigeria has a -1.03 point in government effectiveness which is ranked 37th in Africa, and a score of 24 out of 100, with a ranking of 154 out of 180 in the corruption perception index by transparency international. Hence, a local financial institution would manage the whole cycle (project identification, appraisal, financing and monitoring via the ministry of finance) based on the terms of the debt- swap (OECD, 2007). The project selection and procurement process will be competitive, as establishing a financial institution to select projects on a competitive basis has numerous benefits such as:

- Facilitates a more efficient use of resources and increases environmental benefits of the swap. In the
 absence of competition under the project-specific swap, suppliers from the creditor country may
 increase their prices, which may render many projects financially non-viable even with a significant
 subsidy.
- II. The establishment of a locally managed institution to administer swapped funds also increases the development benefits of the swap. When properly designed, it might contribute to better

- management of local and global common goods by channelling resources to the right projects and creating the necessary institutional infrastructure in the country.
- III. Having a transparent and credible institution that effectively and efficiently selects and finances environmental projects can attract additional financing from donor countries, international institutions, NGOs, or other financing sources (grants, trilateral debt swaps, loans, etc.). There are numerous examples globally that good governance and effective expenditure management attract public and private finance.

4.0 Viability of debt-for-development swaps in Nigeria

Nigeria's ODA-eligible debt held by Paris Club creditors and underperforming Eurobonds are candidates for debt swaps

A natural starting point in deciding on the viability of debt swaps as a tool to create fiscal space and generate funding for social causes is the extent to which Nigeria's debt is eligible to be swapped. By eligible, the authors mean that there is a historical precedence and/or an economic rationale for the debt to be swapped. In this sense, the most likely source of debt to be swapped is bilateral debt. Bilateral debt swaps have been the most popular type of debt swap of the last two decades (Lazard, 2021). Moreover, all official development assistance (ODA) debt, according to Paris Club rules, is eligible to be swapped (Caliari, 2020). Until now, debt swaps of Paris Club debt have almost always dealt with ODA debt.

Debt swaps involving multilateral debt are less common. Philosophical issues, among other problems, play a limiting factor in multilateral debt swaps. Multilateral lenders, such as the International Monetary Fund, play a de facto role as lender of last resort. Their lending aims to promote sustainable development and financial stability even in contexts where financial risks are quite high. A multilateral debt swap would be, in essence, a tacit admission that the institution had not initially succeeded at its goal, and would thereby undermine its preferred creditor status. Because multilateral lenders tend to meet high risk with low interest rates, their status as preferred creditors remains essential to facilitating the cash flows necessary to carry out their responsibilities, including those of de facto lenders of last resort (Schadler, 2014). Despite these challenges, there have been instances of multilateral reduction, mainly focusing on low-income countries. A clear case is the Multilateral Debt Relief Initiative (MDRI) which provided debt relief on IMF, World Bank, and African Development Fund debt for nations that completed the HIPC Initiative process (Caliari, 2020). In addition, the Inter-American Development Bank offered supplementary debt relief in 2007 to five HIPC countries.

There are also many examples of swaps involving privately held debt. However, swapping private debt tends to involve a third party that executes the swap when the value of the private debt is well below its original value. However, the last 10-15 years have been a time of relatively improved financial conditions for emerging market economies (Archibong, Coulibaly, and Okonjo-lweala, 2021). Inflation, currency risks, debt default risks have all remained more benign as emerging market economies adopted key financial reforms, deepened their financial systems, and accumulated a buffering of foreign exchange reserves (Prasad, 2014). The result has been less extreme debt prices and less of an economic reason for third parties to facilitate debt swaps. Traditionally, these third parties will buy the debt at a bargain, erase it, and compel the debtor countries to set aside funds for development projects. A debt swap is less impactful, however, when it is close to par.

In this context, Nigeria's worst-performing Eurobond need not be a Eurobond in default, but rather a Eurobond whose price is trading well below its original price. Figure 7 plots Nigeria's outstanding Eurobonds (all denominated in dollars) according to their bid price and maturity. The size of the bubble is weighted by the outstanding value of the loan. The pair of bonds with the lowest bid price are highlighted in yellow. No objective criterion exists that suggests a specific price at which underperforming debt would begin to attract third party debt swap servicers. For this reason, this paper focuses on the private debt

most likely to be involved in a swap: two \$1.5 billion bond issuances that mature in 2047. The long maturity date and relatively high interest rate (7.625 percent) associated with these bonds mean that a debt swap would allow Nigeria to tap additional funds for many years.

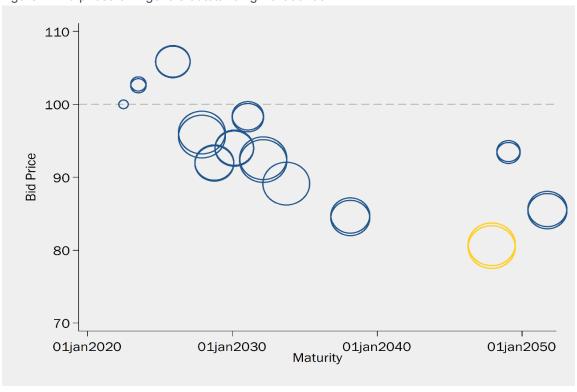


Figure 7. Bid prices of Nigeria's outstanding Eurobonds

<u>Note</u>: Bubble size weighted by amount outstanding. All of Nigeria's bonds are denominated in USD. The bubbles highlighted in yellow have the lowest bid price.

<u>Source</u>: Bloomberg.

To get a sense of how much debt in Nigeria is eligible to be swapped, it is necessary to make further assumptions about what debt is eligible (that is, feasible given history and economic rationale). Table 1 shows the eligible debt levels given three classes of assumptions: a baseline scenario, an optimistic scenario, and a pessimistic scenario. Under the baseline scenario, we assume that all of Nigeria's ODA-eligible Paris Club debt is eligible to be swapped, as well as the worst performing Eurobonds. The baseline scenario would result in eligible debt swaps totalling \$3.7 billion. The optimistic scenario would

imply \$11.8 billion being eligible for debt swaps and augments the baseline by including all multilateral concessional debt and non-ODA Paris Club debt as eligible. Meanwhile, the pessimistic scenario's eligibility is limited only to Paris Club ODA debt, an amount of \$744 million.

Table 1. Outstanding debt eligible for debt swaps

Sources of Lend	ling _	Baseline scenario: 1) All ODA-eligible Paris Club debt 2) Worst-performi ng Eurobonds	Optimistic scenario: 1) All Paris Club debt 2) Worst performing Eurobonds 3) All multilateral concessional debt	Pessimistic scenario: 1) All ODA-eligible Paris Club debt
Bilateral	Eligible	\$744	\$751	\$744
lending (Millions USD)	Not Eligible	\$3,512	\$3,505	\$3,512
(Millions 03D)	Eligible share	17.5%	17.6%	17.5%
Private lending	Eligible	\$3,000	\$3,000	\$0
(Millions USD)	Not Eligible	\$8,168	\$8,168	\$11,168
	Eligible share	26.9%	26.9%	0%
Multilateral	Eligible	\$0	\$8,048	\$0
lending (Millions USD)	Not Eligible	\$14,326	\$6,278	\$14,326
(IVIIIIIOIIS USD)	Eligible share	0%	56.2%	0%
Occasional Lagrands	Eligible	\$3,744	\$11,799	\$744
Overall lending (Millions USD)	Not Eligible	\$26,006	\$17,951	\$29,006
	Eligible share	12.6%	39.7%	2.5%

<u>Note</u>: There are slight discrepancies between the debt reported by the Paris Club and that reported by the World Bank (Paris Club is 1.1% lower). Here, the authors elect to use the Paris Club data for Paris Club debt as it is a primary source. World Bank International Debt Statistics are not necessarily an exhaustive source of debt data.

Source: Bloomberg, International Debt Statistics, Paris Club

However, as always is the case with back-of-the-envelope calculations, caution is warranted. The roughly estimated US\$744 billion of 'available' debt in Table 1 may still not be a good proxy for the amount of debt that is realistically eligible for debt swaps. Three main reasons stand out here.

First, some debtor countries may not be willing to accept relief on their (bilateral) debt titles in order to maintain better relations with their respective creditors (who could be inclined to revise their concessional lending policies) and not to undermine their future prospects of accessing financial markets. These are often cited as important reasons why countries such as Lao PDR, Bhutan and Sri Lanka have opted out of the HIPC initiative (while meeting the technical HIPC eligibility criteria at that time).

Second, on the aggregated level of the creditor community, the Paris Club in particular, there exist certain rules and upper limits (caps) with respect to the share of non-concessional debt that can be swapped. These limits, aimed at preserving comparability of treatment and solidarity among creditors, depend on the income classification of the debtor country involved and have become increasingly generous over time.

Third, the possibility of debt conversion depends on the relevant policy frameworks of each individual creditor. Debt conversion policies differ greatly across bilateral creditors, in terms of both eligible debtor countries and debt titles (as Caliari, 2020 has made clear). Hence, given the size of the anticipated funds through debt swap, a singular bilateral swap might be inadequate. Hence, the different multiple debt swaps might have slightly different terms and structure.

Taking all the foregoing together, we are left with a total amount of debt eligible for swap purposes that is significantly smaller than the earlier-reported US\$744 billion. Due to data constraints, a realistic amount of swappable debt is almost impossible to compute, at least at the aggregated level. Further calculations would have to be done at the debtor country level, by considering the debtor country in question and its stance towards debt relief (and swaps in particular); by examining the Paris Club rules that apply to the debtor country's bilateral debt; by identifying the main creditors of the debtor country; and what the debt swap policy employed by each of these creditors is.

Debt swaps have the potential to expand fiscal space and fund development projects, but they do not guarantee a lower debt burden or attract additional funds to targeted sectors

Cassimon, Prowse, and Essers (2011) outline four ways that debt swaps can be helpful for debtor countries: 1) Increasing resources for the government budget level or beyond; 2) Attracting more resources to the sectors targeted by the debt swaps; 3) Relieving debt burden; and 4) Synergizing with government systems and policies. These ideas serve as a guide in understanding how debt swap might contribute to climate and developmental related projects.

Table 1 contains the authors' estimates for Nigeria's debt that is eligible to be swapped. Yet these sums, if swapped, would not be available for immediate use. Rather, savings accrue gradually over time, and often accrue unevenly (Cassimon and Essers, 2014). Consequently, the resources available for use generated by the debt swap (point number one above) depend on the debt servicing schedules of the cancelled debt. In Table 2, we present the debt-servicing savings by year for Nigeria, assuming that the baseline scenario in Table 1 was realised (i.e., all ODA-eligible Paris Club debt and the worst-performing Eurobonds were swapped). In other words, the estimate in Table 2 is the present value (PV) of the debt-servicing savings, discounted by the most recent OECD's Commercial Interest Reference Rates (CIRR), as a more accurate reflection of savings, since the debtor country could have profited from investments in international markets had it not had the debt forgiven (Cassimon and Essers, 2014). Further, in Table 2, we utilise the debt payment schedules from Bloomberg for the underperforming bonds

and debt servicing schedules from the World Bank for Paris Club creditors. Because the latter schedules are only available from the present to 2028, only debt-servicing savings until that year are shown.

The estimation in Table 2 shows that, if all the debt eligible to be swapped in the baseline scenario was in fact swapped, it would free up an average of nearly \$300 million per year. A large portion of this money would be tied up to funding the projects associated with the debt swap. If these projects have expenditure schedules, then the debt swap could free up additional budgetary resources for the debtor country. If these additional budgetary resources are simply spent on other projects, the debt swap would not lead to a reduction in outstanding debt. If these additional resources are saved, then the debt swap would result in funds saved. Indeed, if Nigeria used the entirety of the additional resources to pay down its debt, its present value of debt savings would be more than \$2 billion dollars (bottom right corner of Table 2).

Table 2. Present value of Nigeria's debt-service savings 2022-2028, baseline scenario (millions USD)

	2022	2023	2024	2025	2026	2027	2028	Total 2022 - 2028
Eligible bilateral debt	61.0	62.4	77.8	89.6	100.5	97.1	118.7	607.2
Eligible private debt	228.8	221.8	215.0	208.4	202.1	195.9	189.9	1,461.8
Total	289.8	284.2	292.8	298.0	302.6	293.0	308.6	2,069.0

Note: Data are in millions of nominal US dollars. Nigeria's debt obligations beyond 2028 are not shown due to data limitations. Present value data are discounted using the OECD's Commercial Interest Reference Rates (CIRR). There are slight discrepancies (Paris Club is 1.1% lower) between the debt reported by the Paris Club and that reported by the World Bank. The debt presented in this table uses the latter and was chosen only because of availability. Because most of Nigeria's eligible debt is denominated in USD, the authors used CIRR for United States Dollars.

Source: Authors calculations using International Debt Statistics, Paris Club, Bloomberg, OECD.

While debt swaps could generate budgetary resources and increase funding for specific projects, it is less clear if using debt swaps for environmental targets will increase overall funding for the environment. It could be that using debt swaps to fund certain projects will raise political awareness for environmental causes. It also could be that administrations that would prioritise debt swaps for the environment would be

more apt to devote money to the environment. In contrast, perhaps policymakers feel that, accounting for the increased funding raised from the debt swaps, they could afford to defund environmental causes broadly speaking and redirect that spending to other sources.

To hypothesise about how Nigeria's environmental expenditure could change, should it succeed in swapping some of its debt, one may consider the experiences of the dozens of countries that have already participated in debt-for-environment swaps. Using environmental expenditure data from the IMF and debt-for-environment case study data from Sheikh (2016), one can trace the path of environmental spending for five countries (Poland, Bulgaria, Jamaica, Indonesia, and Philippines) in the years following the debt swap. Figure 8 illustrates the experience of these five countries. Five years after the debt swap, no country saw more than a 20% increase – or 3.7% per year increase – in environmental expenditure. Most countries' expenditure remained close to where it was the year the debt was swapped. The Philippines, however, saw environmental spending drop by more than 40% after five years (nearly a 10% contraction per year). It is therefore no guarantee that a debt-for-environment swap in Nigeria would generate significantly more funding for the environment overall. This, therefore, suggests the importance of ownership in the articulation and the execution of the Nationally Determined Contribution. This would ensure that all externally realised funding including additional revenue through debt swap complements rather than substitutes for budgetary allocation by the government.

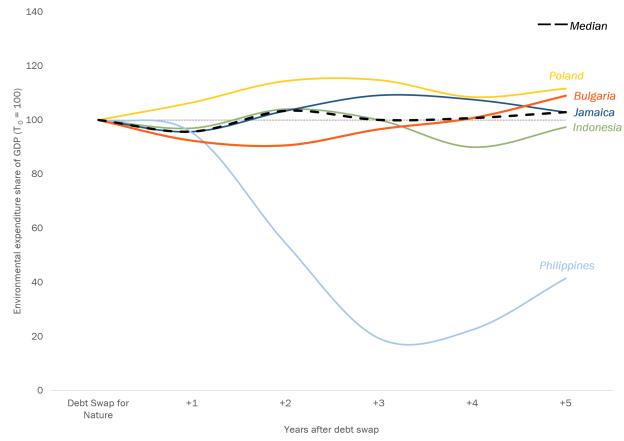


Figure 8. Evolution of environmental spending following debt swaps for nature

<u>Note</u>: The year of the debt swaps for the countries displayed above are 2014 for Indonesia, 2004 for Jamaica, 2013 for the Philippines, 2000 for Poland, and 1995 for Bulgaria. In cases where multiple debt swaps were performed, the latest year was used.

Source: IMF. (2022). Environmental Protection Expenditures. International Monetary Fund. Sheikh, P.

V. VIABLE GREEN AND DEVELOPMENT-ORIENTED PROJECTS

In Nigeria, climate issues have become increasingly worrisome because persistent environmental challenges could lead to economic vulnerabilities, which would affect the socioeconomic and environmental development of the nation. Also, studies show that climate change and gender inequality are linked and some climate change policies and strategies are not gender neutral.

Over the years, to mitigate the climate issues caused by environmental challenges, the Nigerian government has set a number of policies and strategies that are considered "climate-compatible". Some of these policies include but are not limited to; the National Biodiversity Strategy and Action Plan (NBSAP) 2016, the National Climate Change Policy and Response Strategy (NCCPRS) 2012, the National Renewable Energy and Energy Efficiency Policy (NREEEP) 2015 etc. Recent climate change initiatives are also encapsulated in the Economic Recovery and Growth Programme (ERGP), 2017 - 2020. In addition, Nigeria developed its Nationally Determined Contributions (NDCs) in 2015 to ensure the ratification of the Paris Agreement on climate change. The formulated NDCs target the mitigation of greenhouse gas (GHG) emissions and outline Nigeria's climate change priorities for the post-2020 period (FME, 2021).

Under the NDCs, Nigeria aims to unconditionally reduce 20 percent of emissions by 2030. To achieve these objectives, the Federal Ministry of Environment (FME) estimates that \$142 billion would be required in the next decade to implement the country's NDCs. The Nigerian government has issued green bonds as an alternative way of raising climate finance with a target of about \$248 million to support national projects (FME, 2021). In addition, the Deep Decarbonisation Pathways Project was launched in December 2021. This is a research and capacity building project that serves as part of the national strategy towards achieving the country's targets as stipulated in the NDCs, including a net zero emission by 2060.

In addition to the above stated viable project, there are other development-oriented projects that could potentially be considered for debt swap such as; the United Kingdom Nigeria infrastructure advisory facility (UKNIAF) project. The UKNIAF project aims to support the Federal government of Nigeria to advance the delivery and management of Nigerian infrastructure by improving investment in both the public and private sectors. Expected outcomes of the project involve inclusive social and climate-compatible infrastructure, increased job creation, poverty reduction, and socio-economic growth. The funds budgeted for the project is about 89 million pounds and the project runs from 15th May, 2017 to 12th April, 2027. The progress made on the project so far is 49.84%, with 18.37% of the budgeted funds already spent at 16.5 million pounds to date. The UKNIAF project is focused on three major areas of the Nigerian economy which include; power, road, and infrastructure finance (IF). However, the road component of the project ended in March, 2022. Hence, the other components (i.e. power and infrastructure finance) can be considered viable.

The power component of the UKNIAF project provides support and develops the capacity for the power sector by aligning power sector policies and regulations to ensure access to sustainable electricity through the medium- term electricity market. Also, it aims to create an efficient electricity tariff system for the poor, through cross-market subsidies funded by more economically empowered customers. Furthermore, the infrastructure finance component aims to ensure that private funding for Nigeria's infrastructure is accelerated. This will be achieved through the following means; 1) ensuring the delivery

of IF projects includes the increment of technical assistance 2) ensuring the channels of bankable projects improves significantly, etc.

In addition to the UKNIAF project, the national action plan on gender and climate change for Nigeria was initiated in 2020, and it is expected to span through 2025. The action plan was developed to ensure that efforts made towards climate change in Nigeria consider gender mainstreaming. This is to enable the contribution of men, women and other vulnerable groups in climate related issues, thereby, leading to the optimal benefit of these groups in climate change initiatives. The federal government of Nigeria aims to adopt gender mainstreaming into climate change policies and they are working with relevant stakeholders to ensure the development of innovative strategies to enable a gender-sensitive plan for climate change policy implementations.

Furthermore, the action plan aims to focus on effective strategies that could enable the integration of gender into the implementation of international climate change initiatives, including the Paris Agreement and the Nationally determined contributions (NDC). (FME, 2020). The national action plan focuses on five key priority sectors which are indicated in the NDC and the economic recovery and growth plan (ERGP). These include; food security and health; energy and transportation; waste management; agriculture, forestry and land use; and water and sanitation. To implement these action plans, funds will have to be sourced from CSOs, development partners, private sector, global finance agencies, the national and state budgets, etc. (FME, 2020).

VI. CONCLUSION

Africa's largest economy has found itself in an increasingly vulnerable financial position due to several shocks in the past decade. It relied on private creditors to compensate for revenue shortfalls in 2016 and 2017 after the collapse of commodity prices. The COVID-19 pandemic induced more borrowing, this time from multilateral sources. These events have led to the highest external debt levels in Nigeria since 2004. Increased debt levels clogged financing for key SDG outcomes relating to social welfare sectors more broadly and gender equality and the environment in particular.

This paper explored the need for, viability of, and impacts of debt swaps in Nigeria. It focused on two sources of debt that are mostly likely to be involved in a debt swap: Paris Club ODA debt and underperforming private sector debt. These two sources together comprise a sum of more than \$3.7 billion whose exchange could free up resources to fund development priorities for facilitators of the debt swap. If the entirety of the eligible debt were to be swapped, it would create an average of nearly \$300 million of budgetary resources (per year) for the next six years. Beyond funding development projects, remaining funds could decrease the debt burden, provided they do not beget additional borrowing. In the case of Nigeria, the degree of attainable debt relief will be in the details.

The paper also traced the experiences of five countries participating in debt-for-nature swaps and found that debt-for-nature swaps marginally increased funding for the environment with provision of funds for specific environmental projects in three out of the five countries. This paper recommends debt swaps as a viable way to achieve two objectives: 1) Fund needed projects in areas neglected during times of economic downturn, and 2) Expand budgetary resources to alleviate debt burdens or make budgetary expenditures vital to economic recovery.

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