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Diagnostic Study on the Implementation of Environmental Economic Accounting as a Planning Tool for Sustainable Development in Nigeria



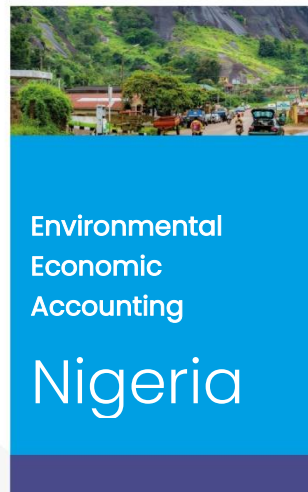
Environmental
Economic
Accounting

Nigeria



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Acronyms

BFG	Action Against Desertification
CBD	Convention on Biological Diversity of United Nations
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CSO	Civil Society Organisation
EGSS	Environmental Goods and Service Sector Accounts
EPEA	Environmental Protection Expenditure Accounts
FAO	Food and Agriculture Organization of the United Nations
FME _{env}	Federal Ministry of Environment
FMFBNP	Federal Ministry of Finance, Budget and National Planning
FMHADMSD	Federal Ministry of Humanitarian Affairs, Disaster Management and Social Development
FRA	Fiscal Responsibility Act
FSP	Fiscal Strategy Paper
GEF	Global Environment Facility
GHG	Green House Gas
GLOBE	Global Legislators Organisation for a Balanced Environment
GoN	Government of Nigeria
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
LFN	Laws of the Federation of Nigeria
LGAs	Local Government Areas
LUA	Land Use Act
MAN	Manufacturers Association of Nigeria
MDAs	Ministries, Departments and Agencies
MEAs	Multilateral Environmental Agreements
MTEF	Medium Term Expenditure Framework
MTFF	Medium-Term Fiscal Framework
NASS	National Assembly
NBS	National Bureau of Statistics
NBSAP	National Biodiversity Strategy Action Plan
NCA	Natural Capital Accounting
NDCs	Nationally Determined Contributions
NFTF	National Forestry Trust Fund
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development

PDF	Public Domestic Finance
PIR	Policy and Institutional Reform
PPP	Public-Private Partnership
REDD+	Reducing Emission from Deforestation and Forest Degradation, Conservation of Existing Carbon Stocks, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks
SDGs	Sustainable Development Goals
SEEA	United Nations System of Environmental-Economic Accounting
SEEA-CF	System of Environmental-Economic Accounting – Central Framework
SFM	Sustainable Forest Management
SLMS	Satellite Land Monitoring System
ToR	Terms of Reference
UN	United Nations
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFI	United Nations Forest Instruments

Words/Terms and Definitions

Words/Terms	Definition
SEEA Implementation Country	A country that compiles any part/module of SEEA-based accounts in physical or monetary terms within the past five years (2016-2020) (regardless of whether or not the account has been published).
Staff	An employee who dedicates some portion (or all) of his time to environmental-economic accounting.
Environmental assets	“Naturally occurring living and non-living components of the Earth, together comprising the bio-physical environment, that may provide benefits to humanity” (SEEA Central Framework 2.17)
Ecosystem extent account	This account serves as a common starting point for ecosystem accounting. It organizes information on the extent of different ecosystem types within a country in terms of area.
Ecosystem condition account	This account measures the overall quality of an ecosystem asset and captures, in a set of key indicators, the state or functioning of the ecosystem in relation to both its naturalness and its potential to supply ecosystem services.
Ecosystem services accounts	This set of ecosystem accounts measures the supply of ecosystem services as well as their corresponding beneficiaries, classified by broad national accounting categories or other groupings of economic units.
Monetary asset account	This account records the monetary value of opening and closing stocks of all ecosystem assets within an ecosystem accounting area and additions and reduction to those stock.
Thematic accounts	This set of accounts, which cover accounts for land, water, carbon and biodiversity, are standalone accounts on topics of their own right and are also of direct relevance in the measurement of ecosystems and in assessing policy response.

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On behalf of GLOBE, I am thankful to the many persons and organizations who have continued to lend their support to ensure the successful implementation of the GLOBE-UNEP-GEF project "GLOBE Legislators Advancing REDD+ and Natural Capital Governance Towards the Delivery of the 2030 Agenda". Without your constant support, our efforts at seeing this important project succeed will be in vain.

Let me first extend my profound appreciation to the Speaker of the House of Representatives, His Excellency Rt. Hon. Femi Gbajabiamila, who launched the project on November 20, 2019. The Honourable Speaker has further gone ahead to provide support for efforts at strengthening our environmental laws. My special gratitude also goes to the Senators and Honourable Members who are part of the GLOBE family, and who have continued to champion the drive for sustainable development and the protection and preservation of our environment.

I commend and appreciate the Minister of State for Budget and National Planning, Prince Clem Agba for providing leadership for the Project's National Steering Committee; the Global Environment Facility (GEF) Focal Point at the Ministry of Environment for his support; the National Bureau of Statistics (NBS) and the Department of Petroleum Resources (DPR) for opening their offices and availing us of relevant information; the many stakeholders who provided support during the process of getting this document ready, especially our international partners such as the United Nations Statistics Division, UNEP, Ruud Jansen of the Gaborone

Declaration for Sustainability in Africa (GDSA), and the GLOBE International Secretariat led by Mr. Rafael Jiménez-Aybar. I must also commend the GLOBE Nigeria Secretariat led by Mr. Nnaemeka Oruh, for their continuous dedication.

Special commendation to Dr. Eugene Itua and his team at Natural Eco Capital and the Capitals Coalition for doing an excellent work.

We owe it as a duty to work together to ensure that the recommendations contained in this study are fully implemented.



Rep. Sam Onuigbo FCIS, FNIM
Member House of Representatives
Vice President (Africa) GLOBE International &
President, GLOBE Nigeria, July 2021

Foreword I

In developing and implementing sustainable development policies, decision-makers are confronted with incomplete indicators for measuring economic wealth and performance, particularly concerning the interactions between economic activities and the environment. Indeed, traditional tools for economic analysis do not allow policymakers to reliably assess the effectiveness of environmental policies implemented, nor the impact of economic policies on the environment. With the frightening impact of Climate Change in our world today, and with experts projecting that we must take ambitious steps to prevent what is a catastrophe-in-waiting, it has also become imperative to pay attention to the nexus between economic activities, and the protection and preservation of our environment. This is the only sustainable way to plan for the future. Recognising that economic and environmental accounting data are indispensable tools for parliamentarians in exercising their legislative, oversight, and budgeting powers for sustainable development, GLOBE International has since called for the implementation of economic and environmental accounting since 2014. This also echoes the calls by the United Nations over the years.

It is this understanding that prompted the United Nations Statistics Division to adopt the inclusion of nature in the framework for measuring economic prosperity and sustainable development. This framework (System of Environmental-Economic Accounting—Ecosystem Accounting --SEEA EA) looks beyond GDP and insists that in measuring actual wealth, attention must be paid to our natural capitals and the ecosystem services they provide.

For years now, human activities (e.g., agricultural expansion and intensification, the burning of fossil fuels, increased urbanization, etc.) have been undermining both climate and ecological systems upon which human well-being and economies depend. And the scary fact is that this path is no longer sustainable, hence the need to pay attention to natural capital and the ecosystem services they provide for us.

But to be able to pay attention to natural capital and ensure that we first preserve them and include them in our calculation of economic growth, demands that sustained and specific efforts are made to ensure the preservation of these natural capitals, ensure that they are equated with financial measurements, and eventually provide appropriate payments for efforts made at preserving them (results-based payments for ecosystem services).

Aware of the urgency of this, the Global Legislators Organization for a Balanced Environment (GLOBE)—a global organization of national Legislators committed to championing the protection and preservation of our environment and sustainable planning by making laws and supporting relevant policies-- is implementing the Global Environment Facility (GEF6) project "GLOBE Legislators Advancing REDD+ and Natural Capital Governance Towards the Delivery of the 2030 Agenda", with support from the United Nations Environment Programme (UNEP). This project, in addition to creating awareness among legislators on the role they have to play in ensuring that Nigeria pays attention to the preservation of her natural capital, also seeks to identify legal and policy gaps that have militated against the implementation of REDD+, the Great Green Wall Initiative, and Natural Capital Accounting. This study was initiated to address the second objective of the project while interrogating the necessity of the former.

This study, which is a result of painstaking research and consultations, done on behalf of GLOBE, is an important policy document. It is important because it identifies gaps in policies, regulations, and laws that are relevant to the mainstreaming of Environmental-Economic Accounting into Nigeria's sustainable national development plans, and in clear terms makes recommendations on what to do in the short and long term to plug these gaps.

I am aware that actions are already being taken by GLOBE Nigeria to bring these gaps to the attention of the National Assembly and to ensure that actions are taken. As a people-centered arm of Government, the National

Assembly will always be committed to addressing these gaps. This is especially so because the future of our people is of paramount importance to us.

I charge all stakeholders to take these recommendations seriously and play their roles so that the recommendations in this very important document are fully implemented. As the Secretary-General of the United Nations, Antonio Guterres warned, “Time is fast running out for us to avert the worst impacts of climate disruption and protect our societies from the inevitable impacts to come.” I dare say that we are out of time. So, let us get to work!



Rep. Benjamin Okezie Kalu
Spokesperson,
House of Representatives
Abuja, June 20, 2021

Foreword II

As the world continues to evolve, more dynamic and efficient ways of tackling the myriad of environmental problems confronting the society are developed to mitigate the impacts. This is so as each decade comes with its own peculiar challenges which can suddenly worsen due to natural forces, or the activities of man. This was the case when the System of National Accounts was adopted in the 1950s, with Gross Domestic Product (GDP) established as a measure of assessing a country's wealth or economic strength.

However, as decades pass and man's economic activities continue to impact on the environment, the reality is that, the ecosystems and natural capital needs to be balanced with its economic activities to ensure preservation and protection of the natural environment. Thus, depleting the natural environment has its own consequences and will not cease to exist.

It is in recognition of this that experts have begun to draw attention to our natural capitals, and the ecosystem services they provide. This *Diagnostic Study on the Implementation of Natural Capital Accounting as a Tool for Sustainable National Development Planning in Nigeria* pays attention to, or recognizes the services rendered by natural capitals to ensure that Nigeria begin to strive to preserve a natural environment, and by extension, preserve natural ecosystems thereby creating a balance. Indeed, no country's wealth can be said to have been properly calculated, if attention is not paid to its natural capitals and the corresponding ecosystem services they provide. This understanding would also help nations plan for their future in a sustainable manner.

Increasingly countries all over the world are beginning to move beyond GDP. Recently the United Nations Statistical Commission in March 2021, adopted the System of Environmental Economic Accounting--Ecosystem Accounting (SEEA EA) which will see natural capital captured in economic reporting. This landmark action effectively set the new criterion for the

calculation of the economic wealth of the nations of the world.

As a progressive nation and a leader in Africa, Nigeria is committed to making this important transition and has begun consultation on mainstreaming Natural Capital Accounts into Nigeria's National Development Plans. This research study is one of the steps taken to provide Nigeria with a guide on how to navigate this path and more importantly, highlights legal implications and policy gaps, to ensure clear recommendations on what should be done by the government. It is therefore an important document that will guide stakeholders on decision making towards integrating systems of environmental economic accounting and Natural Capital Accounting into Nigeria's National Development Agenda.

The Ministry's contribution to the success of this research study is a strong indication of government's commitment to ensuring environmental sustainability practices and it is therefore important that stakeholders take this outcome seriously and play their roles accordingly in ensuring that Natural Capital Accounting is mainstreamed into Nigeria's National Development Plans.



Prince Clem Ikanade Agba
Honourable Minister of State for Budget and National Planning. July 2021.

Executive Summary

The environment is the bedrock of every economy. No economic activity can happen without the environment. This is clearly so since humans must exist in an environment and economic activities are primarily initiated and executed by humans. Even if we are talking about economies built on Artificial Intelligence, they too can only take place if the environment is conducive enough for humans to survive and initiate those activities. It therefore follows that the environment is the bedrock of the economy of any nation.

The recognition of the crucial role the environment plays in the economy of nations should naturally dovetail into an understanding that any discussions about economic accounting and the development plans that follow therefrom must take into consideration the environment. Considering the nexus between the environment and the economy birthed the concept of Environmental-Economic Accounting.

For Nigeria, the quest for sustainable management of her natural resources (natural capital) requires the adoption of a governance approach that accounts for the impact of economic development on natural resources and environmental sustainability, and subsequently integrates such knowledge into policies and decision-making. In other words, to meet the developmental objectives and needs of the country, there is a need to put in place various mechanisms that ensure effective and efficient service delivery with the overall improvement in the quality of life of the citizenry. For a robust system, the mechanism must give recognition to the bedrock, the *environment* and the subset, the economy that depends on it.

To succeed in this requires evidence-based policy development and decision-making informed by integrated information gathering and high-quality statistics. Here, Natural Capital Accounting (NCA) or Environmental-Economic Accounting (EEA) lends itself for use.

NCA is a tool used in measuring the changes in the stock of natural capital at a variety of scales

and to integrate the value of ecosystem services into accounting and reporting systems at international, national and sub-national level. It can enable us to explicitly account for the range of ecosystems and their services and demonstrate in monetary terms the benefits of investing in nature and the sustainable management of resources. NCA tools help public and private actors to gain an understanding of the interaction between the economy and the environment. Through NCA approach, high-quality environment(al) statistics, and their integration with socio-economic statistics and development becomes easy. Natural capital accounting therefore provides a practical framework that can be used in developing and implementing the policies or governance arrangements needed to achieve the Sustainable Development Goals (SDGs), on a country level.

At present Nigeria has not engaged this NCA framework for any processes in the country. For this to happen, there is need for creating awareness and strengthening national capacities in Nigeria to ensure sustained, regular production of priority set of environmental statistics, environmental-economic accounts, based on relevant indicators, in order to measure progress towards sustainable development and national growth. It is against this background that the International Secretariat of Global Legislators Organization for a Balanced Environment (GLOBE), working with the GLOBE Nigeria Secretariat, decided to support Nigeria in this Diagnostic Study on the Implementation of Natural Capital Accounting as a Tool for Sustainable National Development Governance in Nigeria.

The diagnostic study is aimed at providing the foundation for initiating conversation and integrating statistical development towards improving decisions related to natural capital accounting. The study was undertaken through a combination of desk study and field survey using a participatory process, involving a broad range of stakeholders including the Legislature, relevant MDAs and other relevant stakeholders.

At GLOBE Nigeria's "Mainstreaming Natural Capital Accounting into Nigeria's National Development Plans" 2-Day Workshop held September 16-17, 2020, participants agreed to a setting up of Nigeria's Natural Capital Accounting Community of Practice (Nigeria NCA COP) with an initial establishment of a WhatsApp platform. This has been established with members who volunteered to be on it being fed with relevant news and information on a regular basis. However, there is much to be done to make NCA CoP livelier and more impactful. One of the ways to this is through carrying out activities and capacity building for the members.

Nigeria is also actively involved in the international NCA community of practice and fully participated in the 2018 international NCA forum and policy dialogues during the Natural Capital Week in Paris and the 2019 Africa Forum on Natural Capital Workshop. A number of Nigerians are also part of the West Africa Capitals Coalition Hub.

Legislators have a central role to play in getting the country to make the important transition to an economy which recognises the role of biodiversity and ecosystem services through natural capital accounting. With this, the true value of ecosystem services becomes integrated in policymaking procedures across all government actions. This will help in ensuring that our National Development Plans are indeed sustainable as a balance will be struck between economic activities and the preservation of the environment.

A review of the existing policies, laws, strategy action plans and reports tend to speak positively to meeting the objectives of the NCA in Nigeria. In fact, it could simply be said that the existing policy context supports the integration of information from natural capital accounts, including biodiversity and ecosystem values, into policy and decision-making. A number of these regulatory frameworks are outlined in Appendix 4. Although some of the existing laws relating to biodiversity are obsolete, there are enough regulation such as that of the National Environmental Standards and Regulations Enforcement Agency (NESREA); the bill being developed for Climate Change; the new law establishing the National Biosafety Management Agency (NBMA); that tend to support NCA

activities. What is missing is a clear pathway that defines NCA activities. Also, the understanding of how to value the elements of biodiversity as a life support system for millions of Nigerians has not yet received recognition and serious consideration in national policy and legislative action. Thus, it is high time this changed, in line with the integrated approach of the SGD's of the UN 2030 Agenda, which includes environmental targets and sub-targets in all the Goals that depend on the continued flow of ecosystem services, including food and water security, health, economic growth, infrastructure, etc.

For the MDAs, the same low level of awareness was the result as depicted in Appendix 5. The MDAs also agreed that there are pieces of legislations in Nigeria that promote forest protection, conservation, and regeneration. However, coordination is a challenge. What is glaringly obvious is that most of them work in silos.

Based on interaction with relevant stakeholders and especially the experience from the outcome of the first attempt to compile the Environmentally Extended Supply and Use Tables (EE-SUTs), a few challenges have been identified in relation to growing natural capital accounting in Nigeria. These are outlined below:

- Presence of low level of awareness of NCA amongst the citizenry including key policymakers such as the legislators and other government officials (MDAs).
- No account has been fully developed and published based on Nigeria's priorities and then mainstreamed into national development plans.
- Data is not often kept in desirable format by data suppliers. For instance, even though energy data abound in Nigeria, it is always difficult to get data on some energy products as their production are informal and not regulated, closest substitutes are often used (for example biodiesel was used in place of biofuel.)
- Discrepancies exist on the same data collected from different agencies

- Data from the production and utilization of solar and wind energy are not regulated hence, it is difficult to get data in this area.
- Some products like wood, wood waste/biomass are mostly used by households. No good administrative records of consumption of such energy are kept.
- Funding: There is lack of institutionalization and budget for NCA.
- There are no fulltime equivalent staff compiling the NCA accounts whether at the NBS level or elsewhere. While NBS compiles National Accounts, no specific account is dedicated to NCA.
- Despite the involvement of the Nigeria Bureau of Statistics and the Central Bank of Nigeria, natural capital accounting data and indicators are not used in the country's budgetary processes. Nigeria also still lacks functional environmental statistics on continued environmental degradation.
- Natural capital and biodiversity with ecosystem services are mainstreamed poorly. No accounts are developed to capture the full complex interactions between the environment and economy. While timber resources, for example, are accounted for, other resources of forests such as non-timber products, carbon sequestration and air filtration are not taken into substantial consideration. This leads to incomplete information about the consequences of economic activity, performance and wellbeing.
- Poor institutional cohesion, low capacity of States to manage varied biodiversity-related portfolios, the lack of commitment to and investments in the Departments responsible for biodiversity matters characterize the biodiversity conservation policy of most states of Nigeria.

To create the ability of national legislators to exercise their powers of scrutiny, budgeting and law-making towards the advancement of NCA,

there is need to provide the needed capacity for them. This is also required for all the MDAs, especially those in the environment, water and energy sectors. Generally, transformational change is needed to reverse nature loss and ensure nature's health and resilience to support our economies and livelihoods. To achieve the transformational change, it is necessary to frame biodiversity as an asset as part of our natural capital and make the value of nature visible in all decision-making of business, financial institutes and the whole of government.

Government interventions are essential for speeding and scaling up the transition to an economy that considers Environmental-Economic Accounting. There are five levers of change or processes that can lead to this viz: value and embed nature, adopt targets, integrate policies, reform incentives and empower action. By adopting and promoting a natural capital approach, governments will unlock tools and solutions that are needed to mainstream the value of biodiversity into all policies and decision-making by businesses, finance bodies, and government bodies.

The summary of it all is that there is the need to strengthen technical, institutional, financial, and legal frameworks for NCA, especially on the part of the legislators. NCA Implementation is intended to provide information to policy and decision-makers that will support sustainable development and provide a common framework for measuring and tracking overtime, the contribution of ecosystems to social and economic goals.

A key process in attaining this is to support these efforts through identification and sharing of diverse legal and policy pathways for managing natural capital. This study represents a small step towards that goal, focused narrowly on natural capital accounting. Many more are needed.

In Section 4 of the study, we have highlighted several steps that countries have taken to link natural capital accounting with other innovative tools for natural capital management, including: biodiversity offsetting; payment schemes for ecosystem services; protected area designations; and various other measures. These are to serve as guides for the Nigerian process.

Applying natural capital thinking will foster a better understanding of the threats to nature and people's needs by focusing on impacts and dependencies in the context of economic prosperity and human well-being. To this, GLOBE

International is uniquely positioned to facilitate this process, and thereby to help countries around the world unlock pathways for internalizing and preserving their natural capital.

Introduction

1. Background

Nigeria, a West African country, is blessed with enormous natural capital, including forests covering about 3,316,821 hectares of land; fisheries, wildlife, water bodies, etc. While the true value and contributions of natural capital is not known, brazen depletions continue to occur without reflection in Nigeria's system of national accounts.¹ The country's quest for sustainable management of her natural resources (natural capital) thus requires the adoption of a governance approach that accounts for the impact of economic development on natural resources and environmental sustainability and subsequently integrates such knowledge into policies and decision-making. In other words, to meet the developmental objectives and needs of the country, there is a need to put in place various mechanisms that ensure effective and efficient service delivery with the overall improvement of the quality of life of the citizenry. For a robust system, the mechanism must give recognition to the bedrock, the *environment* and the subset, the economy that depends on it.

To succeed in this requires evidence-based policy development and decision-making informed by integrated information gathering and high-quality statistics. Natural Capital Accounting (NCA) or Environmental-Economic Accounting (EEA)) lends itself for use. NCA is a system for measuring the changes in the stock of natural capital at a variety of scales and to integrate the value of ecosystem services into accounting and reporting systems at international, national, and sub-national level. It enables one to explicitly account for the range of ecosystems and their services and demonstrate in monetary terms the benefits of investing in nature and the sustainable management of resources.² NCA tools help public and private actors to gain an understanding of the interaction between the

economy and the environment.³ Through the NCA approach, high-quality environment(al) statistics, and their integration with socio-economic statistics and development become easy. In essence then, Natural Capital Accounting provides a practical framework that can be used in developing and implementing the policies or governance arrangements needed to achieve the Sustainable Development Goals (SDGs), on a country level.⁴

At present Nigeria has not engaged this NCA framework. For this to happen, there is need for creating awareness and strengthening national capacities in Nigeria to ensure sustained and regular production of priority set of environmental statistics, environmental-economic accounts, based on relevant indicators, to measure progress towards sustainable development and national growth.

Clearly, Legislators have a central role to play in ensuring that the country makes the transition to an economy which recognises the role of biodiversity and ecosystem services through natural capital accounting by government. With this, the true value of ecosystem services becomes integrated in policymaking procedures across all government actions.

It is against this background that the International Secretariat of Global Legislators Organization for a Balanced Environment (GLOBE), working with the GLOBE Nigeria Secretariat, decided to support Nigeria in this *Diagnostic Study on the Implementation of Natural Capital Accounting as a Tool for Sustainable National Development Governance in Nigeria*.

GLOBE was established in 1989 with the mission to empower national legislators with the tools that support in the development of appropriate

¹<https://ecastats.uneca.org/ncacop#:~:text=Nigeria%20Takes%20Step%20to%20Mainstream%20Natural%20Capital>

²https://ec.europa.eu/environment/nature/capital_accounting/index_en.htm#:~:text=Natural%20Capital

³ [tps://www.pbl.nl/en/publications/natural-capital-accounting-for-the-sustainable-development-goals#:~:](https://www.pbl.nl/en/publications/natural-capital-accounting-for-the-sustainable-development-goals#:~:)

⁴ [tps://www.pbl.nl/en/publications/natural-capital-accounting-for-the-sustainable-development-goals#:~:text=](https://www.pbl.nl/en/publications/natural-capital-accounting-for-the-sustainable-development-goals#:~:text=)

legislative response to contemporary environmental and sustainable development issues. Members of the Global Legislators Organization for a Balanced Environment (GLOBE) are drawn from the National Assembly. The GLOBE network facilitates the dissemination and replication of best legislative practices at national levels. It provides access to a platform for international exchange among legislative peers, of practical examples of legislating for forests, REDD+ and natural capital governance. Engagement with the platform is meant to enhance knowledge and capacity for the political re-engineering of national issues within the global context subject to national peculiarities.

In Nigeria, the legislative arm of government at the federal level is the National Assembly (NASS)-- comprising of the Senate and the House of Representatives. Leveraging on this platform and opportunity, GLOBE commissioned

Dr. Eugene Itua to carry out this Diagnostic Study on the Implementation of Natural Capital Accounting as a Tool for Sustainable National Development Governance with the aim of contributing to the mainstreaming of Natural Capital Accounting into Nigeria's National Development Plans. This study is part of the GEF6 project '*GLOBE Legislators Advancing REDD+ and Natural Capital Governance Towards the Delivery of the 2030 Agenda*', implemented through the United Nations Environment Program (UNEP). Overall, the project focuses on mainstreaming/integrating biodiversity management into national development processes through the Natural Capital Accounting (NCA) approach. This includes supporting the process of strengthening REDD+ legal frameworks, REDD+ governance structures, policies that ensure progressive environmental governance of the forestry sector, in alignment with the 2030 Sustainable Development Goals (SDGs).

2. Diagnostic Study Objectives

This study aims at providing the foundation for initiating conversation and integrating statistical development towards improving decisions related to natural capital accounting.

The specific objectives for this study include the following:

- To raise awareness among legislators and government officials about the importance of environmental economic accounting as a tool for decision-makers committed to the attainment of sustainable development.
- To provide political momentum for the development and implementation of a National Plan for Advancing Environmental Economic Accounting in Nigeria, and for the institutionalisation of the use of environmental-economic accounting data for policy development and parliamentary scrutiny towards the delivery of the 2030 Agenda.
- Increase awareness and understanding among national legislators of the value and need for opportunities for integrating the Natural Capital Approach in decision-making and the gradual implementation of the System of Environmental Economic Accounts of the UN Statistics Division.
- Enhance the capacity of national decision-makers in the Executive branch (relevant Ministries, Departments and Agencies) to capitalize on the clear links between Natural Capital Approach and the delivery of the Sustainable Development Goals.

Provide a Legislative National Plan for Advancing Environmental-Economic Accounting in Nigeria which will serve as plug for all legal gaps necessary for the complete integration of Natural Capital accounting into Nigeria's national development plans.

3. Methodology

The study was undertaken using a combination of desk study and field survey using a participatory process, involving a broad range of stakeholders including the legislature, relevant

MDAs, and other relevant stakeholders. At the outset of this study, it is important to note that the study team led by GLOBE Nigeria, interfaced with the Federal Ministry of Budget and National

Planning--the coordinator of the country's budgeting process. This Ministry is also saddled with developing Nigeria's Medium-Term Expenditure Framework (MTEF) and the Medium-Term National Development Plans (MTNDF). Both shape the course of the country's finances, economic activities, and the attendant development plans. The interface revealed the huge gap in awareness and understanding of what NCA is. Expectedly this low level of awareness and knowledge certainly will have a concomitant huge impact on mainstreaming NCA into the national development plans (MTNDF and (MTEF) which were being developed and had reached advanced stages.

To ensure that the processes of developing the MTEF and MTNDF benefit from the diagnostic study, GLOBE and the study team agreed to hold

an early training for legislators and the relevant government officials involved in the process.⁵ Thus the first and second training workshops were conducted to empower the participants with relevant NCA information.

The desk study focused on extensive literature review on NCA, relevant governance/policy issues and information in Nigeria and experiences or information from other relevant international publications such as the Environment Statistics: Diagnostic Tool for Strategic Planning of 2016⁶. Rapid field survey, interview of key informants and focal group discussions were undertaken with the relevant stakeholders and the workshops provided a veritable platform to further harvest information from the stakeholders.

4. Organisation of this Report

The study was undertaken using a combination of desk study and field survey using a participatory process, involving a broad range of stakeholders including the legislature, relevant MDAs, and other relevant stakeholders. At the outset of this study, it is important to note that the study team led by GLOBE Nigeria, interfaced with the Federal Ministry of Budget and National Planning--the coordinator of the country's budgeting process. This Ministry is also saddled with developing Nigeria's Medium-Term Expenditure Framework (MTEF) and the Medium-Term National Development Plans (MTNDF). Both shape the course of the country's finances, economic activities, and the attendant development plans. The interface revealed the huge gap in awareness and understanding of what NCA is. Expectedly this low level of awareness and knowledge certainly will have a concomitant huge impact on mainstreaming NCA into the national development plans (MTNDF and (MTEF) which were being developed and had reached advanced stages.

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⁵ See section 4.4.

⁶ This Diagnostic Tool was originally developed by the author to support the SEEA-CF under funding by World Bank WAVES program. It was inspired by the IIED/UNEP/WCMC Mainstreaming Biodiversity Rapid Diagnostic Tool. It was further adapted to support the SEEA-EEA by Michael Vardon. This version integrates the SEEA-CF, SEEA-EEA and FDES.

⁷ See section 4.4.

⁸ This Diagnostic Tool was originally developed by the author to support the SEEA-CF under funding by World Bank WAVES program. It was inspired by the IIED/UNEP/WCMC Mainstreaming Biodiversity Rapid Diagnostic Tool. It was further adapted to support the SEEA-EEA by Michael Vardon. This version integrates the SEEA-CF, SEEA-EEA and FDES.

NCA Framework and Environmental Economic Accounting principles

1. The meaning of NCA

Natural Capital (NC) refers to the stocks of natural assets which include soil, air, water, and all living things. It is from this natural capital that humans derive a wide range of services, often called ecosystem services, which make human life possible. The most obvious ecosystem services include the food we eat, the water we drink and the plant materials we use for fuel, building materials and medicines. There are also many less visible ecosystem services such as the climate regulation and natural flood defences provided by forests, the billions of tonnes of

carbon stored by peatlands, or the pollination of crops by insects. Even less visible are cultural ecosystem services such as the inspiration we take from wildlife and the natural environment.⁹

The 'Natural Capital Approach' is about thinking of nature as an asset or set of assets that benefit people. The ability of natural capital assets to provide goods and services is determined by their quality, quantity, and location. These in turn can be affected by background pressures, management practices and drivers of demand.¹⁰

2. NCA Framework

The discipline of Natural Capital Accounting is dynamic, with a variety of platforms and applications emerging on a regular basis. There are several international guidance documents available on the methodological approaches for measuring Natural Capital and/or ecosystem services.

However, there are two universally accepted frameworks that have evolved and are widely in use. These are:

The SEEA Central Framework as an international statistical standard adopted in 2012 at the 43rd session of UNSD for measuring the environment and its relationship with the economy. The Central Framework covers measurement in three main areas:

1. **Environmental flows.** The flows of natural inputs, products and residuals between the environment and the economy, and within the economy, both in physical and monetary terms. [Click here for a diagram illustrating environmental flows.](#)

2. **Stocks of environmental assets.** The stocks of individual assets, such as water or energy assets, and how they change over an accounting period due to economic activity and natural processes, both in physical and monetary terms.

3. **Economic activity related to the environment.** Monetary flows associated with economic activities related to the environment, including spending on environmental protection and resource management, and the production of 'environmental goods and services'.

4. As a follow-up to the SEEA CF, the UN System of Environmental-Economic Accounting—Ecosystem Accounting (SEEA EA) adopted in March 2021, marked a major step forward that goes beyond the commonly used statistics of Gross Domestic Product (GDP). The SEEA EA is anticipated to ensure that natural capital—forests, wetlands and other ecosystems—are recognized in economic reporting.

⁹ <https://naturalcapitalforum.com/about/>

¹⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/869801/natural-capital-enca-guidance_2_March.pdf

The SEEA provides a standardised approach to developing macro level natural capital accounts which can then be linked to national economic accounts, to aid government policy-making. This framework is commonly used in the public sector and provides the means to organise data on Natural Capital in a consistent and comparable way which enables the economic contribution of Natural Capital and the environmental impacts of economic activities to be captured and analysed.

5. The Natural Capital Protocol (the Protocol) for which Natural Capital Coalition

3. Natural Capital Accounting and Natural Capital Assessment

3.1. Natural Capital Accounting

Compiling consistent, comparable, and regularly produced data using an accounting approach on natural capital and the flow of services generated in physical and monetary terms to show the contribution of the environment to the economy and the impact of the economy on the environment is what is referred to as Natural Capital Accounting. The System of Environmental Economic Accounting (SEEA) is the agreed statistical framework for Natural

(Capitals Coalition) led in its development in 2016 is a standard framework that integrate Natural Capital into business decision making through Natural Capital assessments, focusing on the private sector. This allows corporations and other business entities to develop a means of factoring natural capital into their decision making as appropriate to their individual circumstance and operational context. The framework encourages the use of existing assessment methods but does not mandate any particular approach.

Capital Accounting. The SEEA uses the same accounting principles and structure of the System of National Accounts, which is the basis for GDP as well as other macro-economic indicators including produced assets. This enables countries to better understand how the environment underpins wealth and economic activity and to monitor environmental degradation and its costs.¹¹

3.2. Natural Capital Assessment

This refers to the process of assessing natural capital impacts and dependencies. The scope can be broad, and it is primarily about providing

information that shapes decision-making. The data used can be both accounting data and other types of data and statistics.¹²

4. Environmental Economic Accounting

The SEEA presents information in physical and monetary terms regarding environmental stocks and flows between the environment and the economy as well as economic activity related to the environment. The SEEA provides frameworks for producing accounts in several thematic areas, including:

- a) Agriculture, Forests, and Fisheries Accounts. The System of Environmental-Economic Accounting for Agriculture, Forestry and Fisheries

integrates information on the environment and economic activities of agriculture, forestry and fisheries using the structures and principles laid out in the SEEA Central Framework. These activities depend directly on, as well as have an impact upon, the environment and its resources. Integrating information about agriculture, forestry and fisheries facilitates understanding of the trade-offs and dependencies between these

¹¹<https://capitalscoalition.org/wp-content/uploads/2019/02/GDNC2018-005-WS3-Natural-capital-for-governments-Final-28-02-2019.pdf>-Natural capital for governments: what, why and how -Government Dialogue on Natural Capital 2018

¹²<https://capitalscoalition.org/wp-content/uploads/2019/02/GDNC2018-005-WS3-Natural-capital-for-governments-Final-28-02-2019.pdf>-Natural capital for governments: what, why and how -Government Dialogue on Natural Capital 2018

activities and their related environmental factors.

- b) **Air Emissions Accounts** The air emissions accounts in the SEEA provide information on emissions released to the atmosphere by establishments and households as a result of production, consumption and accumulation processes using the structures and principles laid out in the SEEA Central Framework. The air emissions accounts record the generation of air emissions by resident economic units according to type of gaseous or particulate substance.
- c) **Energy_SEEA** Energy is a multi-purpose conceptual framework for organizing energy-related statistics. It supports analysis of the role of energy within the economy, the state of energy inputs and various energy-related transactions of environmental interest. Energy information is typically presented in physical terms, but the SEEA-Energy also applies monetary valuations to various stocks and flows, based on the SEEA accounting approach
- d) **Environmental Activity Accounts** The environmental activity accounts to provide information on transactions concerning activity undertaken to preserve, protect and manage the environment. These accounts follow a purpose-based approach and use the structures and principles laid out in the SEEA Central Framework. Understanding environmental activity is critical to understanding whether economic resources are being used effectively to reduce pressures on the environment and maintain the capacity of the environment to deliver benefits.
- e) **Ecosystems Accounts** The SEEA Ecosystem Accounting constitutes an integrated statistical framework for organizing biophysical data, measuring ecosystem services, tracking changes in ecosystem assets and linking this information to economic and other human activity. The SEEA Ecosystem Accounting complements the SEEA Central Framework by taking a different

perspective. The Central Framework looks at “individual environmental assets”, such as water resources, energy resources, etc. and how those assets move between the environment and the economy. In contrast, the SEEA Ecosystem Accounting takes the perspective of ecosystems and considers how individual environmental assets interact as part of natural processes within a given spatial area.

- f) **Land Accounts** These accounts provide information on land use and land cover and can enable an assessment of the changing shares of different land uses and land cover within a country. Understanding these characteristics and changes is critical to understanding the impacts of urbanization, the intensity of crop and animal production, afforestation and deforestation, the use of water resources and other direct and indirect uses of land.
- g) **Material Flow Accounts** The SEEA Material Flow Accounts can provide an aggregate overview of material inputs and outputs in terms of inputs from the environment, outputs to the environment, and the physical amounts of imports and exports. Understanding economy-wide material flow is critical to understanding resource use by the economy and eco-efficiency.
- h) **Water SEEA** Water is an integrated approach to water monitoring, bringing together a wide range of water related statistics across sectors into one coherent information system. It serves as a conceptual framework and set of accounts which presents hydrological information alongside economic information in a consistent manner.

For example SEEA EA is built on the core accounts outlined in Fig 1. These accounts are compiled using spatially explicit data and information about the functions of ecosystem

assets and the ecosystem services they produce.¹³

ECOSYSTEM EXTENT accounts record the total area of each ecosystem, classified by type within a specified area (ecosystem accounting area). Ecosystem extent accounts are measured over time in ecosystem accounting areas (e.g., nation, province, river basin, protected area, etc.) by ecosystem type, thus illustrating the changes in extent from one ecosystem type to another over the accounting period.

ECOSYSTEM CONDITION accounts record the condition of ecosystem assets in terms of selected characteristics at specific points in time. Over time, they record the changes to their condition and provide valuable information on the health of ecosystems.

ECOSYSTEM SERVICES flow accounts (physical and monetary) record the supply of ecosystem services by ecosystem assets and the use of those services by economic units, including households.

MONETARY ECOSYSTEM ASSET accounts record information on stocks and changes in stocks (additions and reductions) of ecosystem assets. This includes accounting for ecosystem degradation and enhancement.

Figure 1. Core Account of SEEA EA

¹³<https://seea.un.org/ecosystem-accounting>

5. Assessment of Global Use of Environmental Economic Accounting

To assess the progress in reaching the implementation target, a Global Assessment of Environmental-Economic Accounting was undertaken by the United Nations Statistics Division (UNSD) under the auspices of the United Nations Committee of Experts on Environmental-Economic Accounting (UNCEEAA) in 2020. Earlier, in 2006, 2014 and 2017 such assessments had been carried out.

The assessment aimed to establish the extent of implementation of environmental-economic accounting programmes within countries¹⁴. The assessments provide pictures that support a better understanding of the status and scope of national SEEA implementation, including institutional and funding arrangements, countries' priorities, future plans for implementing accounts and technical assistance received and provided

5.1. Number of SEEA Implementation Country

Based on the UNSC global assessment of 2020, a country that compiles any part/module of SEEA-based accounts in physical or monetary terms within the past five years (2016-2020) (regardless of whether the account has been published) is a SEEA implementing country.

The number of countries with programmes have increased steadily through the years, increasing from 49 countries in 2006 to 89 in 2020 (Fig 2).

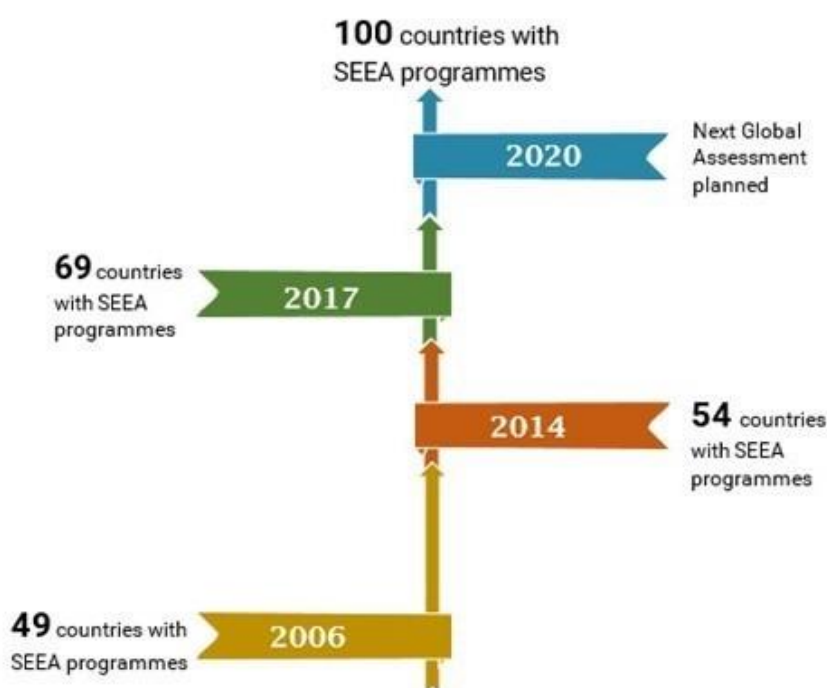


Figure 1. Number of countries with SEEA Programmes¹⁵

¹⁴ Global Assessment of Environmental-Economic Accounting and Supporting Statistics 2020 by [United Nations Committee of Experts on Environmental-Economic Accounting](#), Statistical Commission, Fifty-second session, 1-3 and 5 March 2021.

¹⁵ *United Nations Committee of Experts on Environmental-Economic Accounting, 2021*

5.2. Some countries' experiences

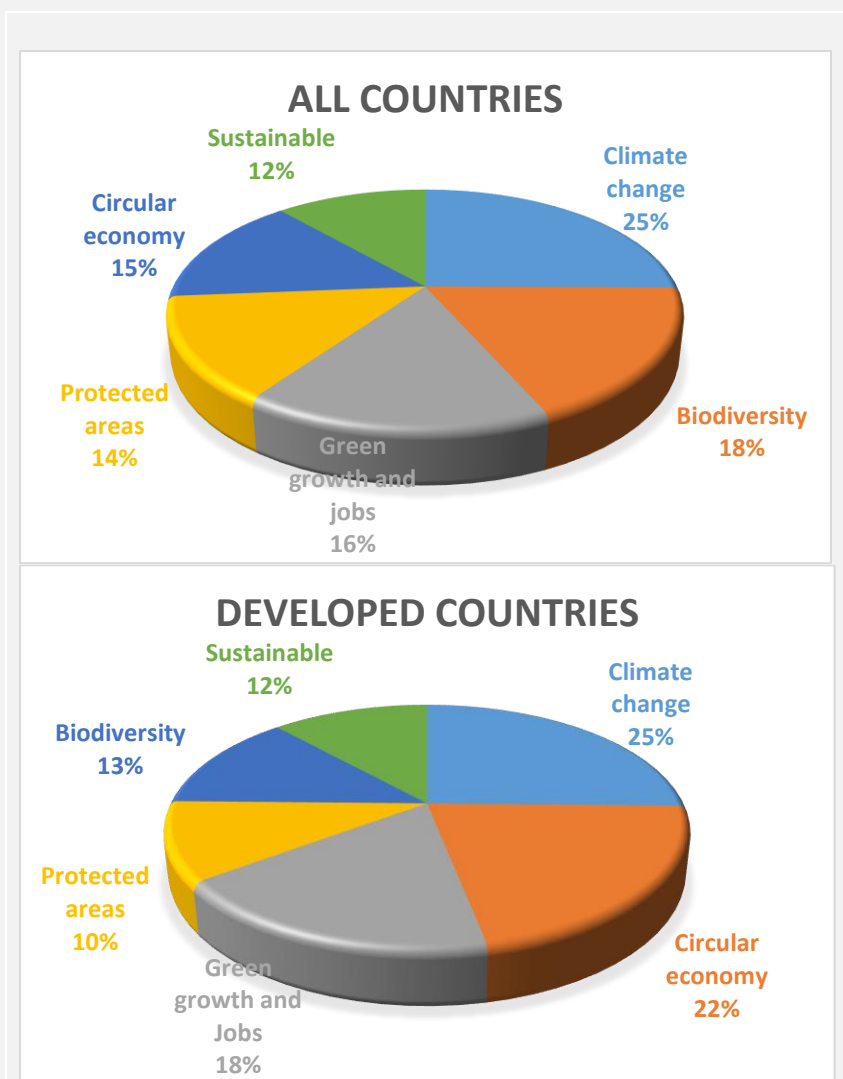
Some of the countries implementing EEA are highlighted in Annex 1

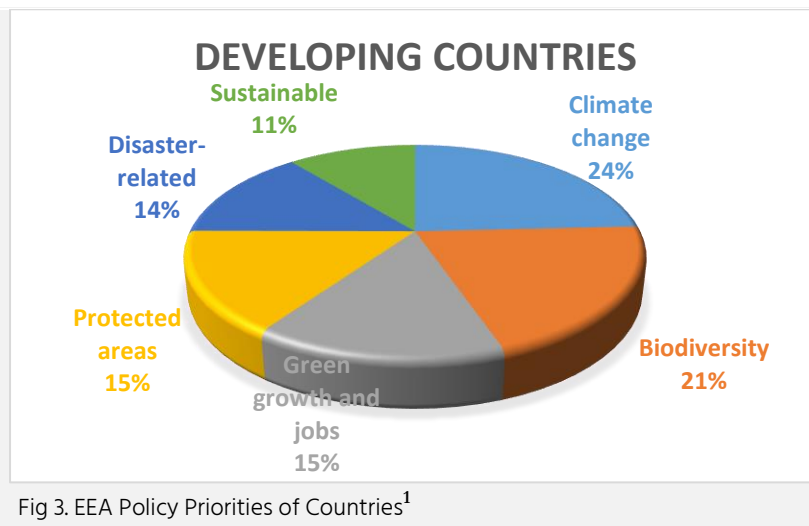
1. Policy Priorities

In terms of priority areas, the outcome of the survey in the countries that have implemented the SEEA stands to provide examples for Nigeria as well. The survey revealed that the most frequently cited policy priority for both developed and developing countries (regardless

of SEEA implementation status) was climate change (fig 3). The second and third mentioned policy priority for developed countries included circular economy and green growth, while for developing countries biodiversity and protected areas were of greater interest.

Global Assessment of Environmental-Economic Accounting and Supporting Statistics 2020
by United Nations Committee of Experts on Environmental-Economic Accounting, Statistical Commission, 52th session, 1-3 and 5 March 2021.





2. Institutional arrangements

Based on the global survey. Organisations that responded show that 44% indicated that parts/modules of the accounts were compiled in another institution/agency within their country.

Fig 4 illustrates this where a single institution is usually responsible to produce the accounts, although developing countries are more likely than developed countries to have compilation split across different institutions.

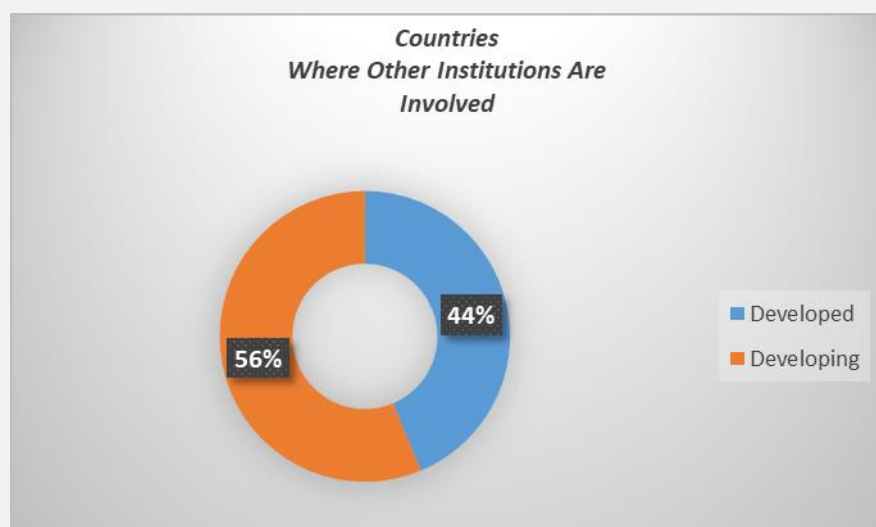


Fig. 4: Countries where more than one institution is involved in the compilation of SEEA accounts

3. Countries with a multi-agency coordination mechanism

Fig. 5 shows countries with established coordination mechanisms among stakeholder

groups, with developing countries having 55% compared to developed countries with 45%).

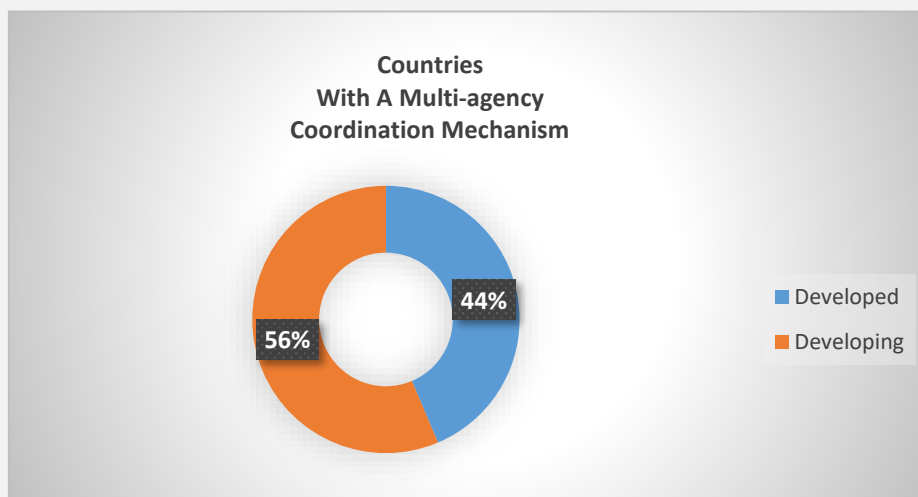


Fig 5: Countries with A Multi-Agency Coordination Mechanism

4. How the countries use the accounts

The Global Assessment showed that accounts are most used for SDG reporting and to inform national policies as depicted in Fig 6

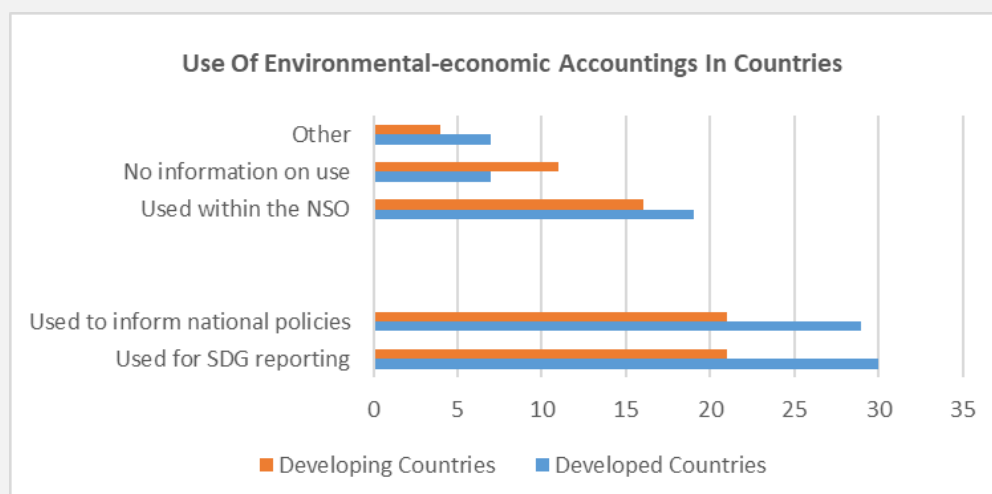


Fig 6: Use of EEA in countries

6. SEEA implementation in Africa

In Africa, the development of natural capital accounts has been ongoing since the late 1980s, with dozens of pilot accounts developed by numerous countries across the region. A 2016

summary report by Conservation International (CI) and the Gaborone Declaration for Sustainability in Africa (GDSA) highlighted the substantial progress in NCA by GDSA countries¹⁶

7. Lessons learned

1. Country experiences have shown that the SEEA can not only play a vital role in responding to today's policy challenges but also effectively contribute towards the evolution and increased uptake of integrated policies which better match the needs of today's policy reality.¹⁷
2. There is the need to ensure good coordination at the national level on NCA while building strong technical capacity (and links to policy-relevant topics) among decision-makers.
3. A range of materials and expertise are available to assist countries with account production.
4. More work needed on promoting account use.
5. High-level support needed to guide account planning, implementation

¹⁶ <http://www.gaboronedeclaration.com>

¹⁶ Global Assessment of Environmental-Economic Accounting and Supporting Statistics 2020 by [United Nations Committee of Experts on Environmental-Economic Accounting](#), Statistical Commission, Fifty-second session, 1-3 and 5 March 2021.

¹⁷ https://seea.un.org/sites/seea.un.org/files/seea_-_overview_-_web_ready.pdf

Implementation of Natural Capital Accounting in Nigeria – Frameworks, Strategies and Standards

In this section, the efforts to develop strategies, frameworks and standards for Natural Capital Accounting are highlighted under four interrelated categories depicted in Fig 7. These include concerted efforts at a national level concerning natural capital accounting, be it legal and policy frameworks for natural capital accounting; broader strategies concerning natural capital management; and other efforts that support the development of natural capital accounting in Nigeria.

However, there is low level of coordination to support national agencies to actualize the implementation of Natural Capital Accounting in Nigeria. The nature of implementation of the SEEA, for instance, is that it is very multi-sectoral and without good coordination and collaboration at the national level it will be challenging to progress. This there highlights the need for a roadmap which will ensure adequate coordination.

Legal and political commitments

- Laws, treaties, declarations, agreements and other international instruments establishing normative and/or programmatic frameworks for Natural Capital Accounting.

Accounting standards

- specified technical criteria, methods and processes intended to harmonize the practice of natural capital accounting.

Capacity building partnerships

- supporting the development of knowledge, expertise and strategies for natural capital accounting at a national level.

Research programs

- organized efforts to produce knowledge and knowledge products relating to natural capital accounting.

Fig 7. Strategies, standards and framework for NCA in Nigeria

1. Legal and political commitments

Nigeria's environmental preservation and biodiversity governance goals are quite clear as encapsulated in several relevant national policies and further demonstrated in the vision of Nigeria signing the Paris Agreement on Climate Change and the Doha Amendment to the Kyoto Protocol, Statement of the President during the 2020 Biodiversity Summit held on the margins of the 75th UN General Assembly on the 30th of September 2020, among many other commitments.

A review of the existing policies, laws, strategy action plans, and reports tend to speak positively to meeting the objectives of the NCA in Nigeria. In fact, it could simply be said that the existing policy context supports the integration of information from natural capital accounts, including biodiversity and ecosystem values, into policy and decision making. A number of these regulatory framework are outlined in Appendix 4. Although some of the existing laws relating to biodiversity are obsolete, there are enough regulation such as that of the National Environmental Standards and Regulations Enforcement Agency (NESREA); the bill being developed for Climate Change; the new law

establishing the National Biosafety Management Agency (NBMA) that tend to support NCA activities.

What is missing is a clear pathway that defines NCA activities. Also, the understanding of how to value the elements of biodiversity as a life support system for millions of Nigerians has not yet received recognition and serious consideration in national policy and legislative action.

It is possible to say that *established features of legal or policy processes that support natural capital accounting activities* are taking place and are supported by a durable legal or policy framework, albeit unknowingly.

However, natural capital benefits people and society and so does not simply belong to one sector (the "environment"). So, the situation is not simply an object of policy, or a constraint on other policies.¹⁸

The specific challenges that hinder the implementation of NCA in Nigeria are summarised in Section 5.

2. Accounting standards

In Nigeria, to align with the international standards, definitions and classifications, if "accounting" is to be a core element of socio-economic decision-making at national and business levels. For many countries, national accounts have been regularly compiled for the last 50 years. National accounts, as we know them today, emerged during the Great Depression of the 1930s. At that time there was no clear measure of overall economic activity, and instead policymakers had to make their choices based on a mixture of information on variables such as foreign trade, manufacturing orders, and employment data. The first international standard for national accounts, the System of National Accounts (SNA), was introduced by the United Nations in 1953. Since

then, the ongoing refinement and development of comparable economic data around the world has underpinned many economic and other related policies, at national and international level.¹⁹

'Standard' is a level of quality that is normal or acceptable for a particular person or in a particular situation. It is also an acknowledged measure of comparison for qualitative or quantitative value criterion. Ordinarily, the word is used as a norm for comparing two or more items or things. But an accounting standard is not a measure of comparison.²⁰

The term 'accounting standard' refers to several technical criteria, methods and processes

¹⁸https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/869801/natural-capital-enca-guidance_2_March.pdf

¹⁹https://ec.europa.eu/environment/nature/capital_accounting/pdf/MAES_INCA_2019_report_FINAL-fpub.pdf

²⁰ Atu, Omimi-Ejoor Osaretin Kingsley; Atu, Oghogho Gina; Atu, Osahenoma Vivian (2014): A Comparative Study of Accounting Standards in Nigeria, United Kingdom and United States of America, IOSR Journal of Economics and Finance (IOSR-JEF) e-ISSN: 2321-5933, p-ISSN: 2321-5925. Volume 3, Issue 2. Ver. I (Mar. - Apr. 2014), PP 01-07 www.iosrjournals.org

intended to harmonize the practice of natural capital accounting. An example of such standard is the new British Standard, named BS 8632: *Natural Capital Accounting for Organisations - Specification*, provides organizations with a deeper understanding of how their operations impact and depend on natural capital assets like geology, soil, water, air and living organisms, to underpin decision making.²¹

- Identify its impacts and dependencies on natural capital assets, and associated risks and opportunities;
- Communicate information and implications within the organization and with external stakeholders;

Such standards do not exist in Nigeria whether at the national level or subnational level. The key international accounting standards used today by most countries is the United Nations Statistical Commission System of Environmental-Economic Accounting—Ecosystem Accounting (SEEA EA) adopted at its 52nd session in March 2021. The SEEA Ecosystem Accounting (SEEA EA) constitutes an integrated and comprehensive statistical framework for organizing data about habitats and landscapes, measuring the ecosystem services, tracking changes in ecosystem assets, and linking this information to economic and other human activity.²³

The existence of this is considered robust enough for Nigeria to leverage without

The standard presents terminology, principles, steps, and outputs for creating a natural capital account to enable a transparent and repeatable practice. This includes the minimum requirements for defining the boundary of an account, material impacts and dependencies, and documenting the data and process used. Creating robust information can help an organization.²²:

- Make more informed business strategies and operational decisions by integrating natural capital accounts with assessment of other capitals; and
- Monitor and evaluate the impacts and effectiveness of internal decisions and changes due to external factors.

developing standards of her own. This UN SEEA-EA includes the contributions of nature when measuring economic prosperity and human well-being, and reshaping decision and policymaking towards sustainable development. This “new framework marks a major step forward that goes beyond the commonly used statistic of Gross Domestic Product (GDP) that has dominated economic reporting since the end of World War II, which Nigeria still uses. This measure would ensure that natural capital—forests, wetlands and other ecosystems—are recognized in economic reporting²⁴ and has already been used to inform policy development in more than 34 countries.²⁵

²¹ www.bsigroup.com/en-GB/about-bsi/media-centre/press-releases/2021-press-releases/june/first-standard-for-natural-capital-accounting/

²² www.bsigroup.com/en-GB/about-bsi/media-centre/press-releases/2021-press-releases/june/first-standard-for-natural-capital-accounting/

²³ <https://seea.un.org/ecosystem-accounting>

²⁴ <https://www.climateaction.org/news/un-adopts-landmark-framework-to-integrate-natural-capital-in-economic-repor>

²⁵ <https://seea.un.org/ecosystem-accounting>

3. Capacity building

The awareness of natural capital accounting is still a low ebb at the policy level and technical levels. This requires the need for technical level training of staff as well as policy-makers who make use of the data for policy making. Thus, as part of Mainstreaming Natural Capital Accounting into Nigeria's National Development Plans, GLOBE held a 2-Day Workshop which was held September 16-17, 2020.²⁶ The audience for this training workshop were staff of the Ministries of

Budget and National Planning, Ministry of Environment, Nigeria's National Bureau of Statistics, Nigeria's REDD+ Agency, and members of the National Assembly. This workshop which had 45 participants in attendance was held as part of the efforts towards raising awareness on natural capital in Nigeria.

The Workshop made the following recommendations, *inter alia*:

- For more understanding and in order to provide frontline leadership adequate, undertake a high-level advocacy retreat with Management of the Federal Ministry of Finance, Budget and National Planning and National Legislators on Natural Capital Accounting (NCA) and its tools operationalized under the UN System of Environmental-Economic Accounting (SEEA).
- Raise awareness about the importance of NCA as a tool for decision-making amongst the Legislative, Executive and other arms of the Government
- Extend the Workshop programme to other MDAs as awareness and capacity strengthening activities.
- Include NCA into Nigeria's Medium-Term National Development Plans (MTNDPs 2021-2025 & 2026-2030) and Nigeria Agenda 2050 which were currently under development



²⁶ <https://ecopital.com/insights/two-day-workshop-on-mainstreaming-natural-capital-accounting-into-nigerias-national-development-plans/>



Plate 1. Participants (Legislators and Officials of MDAs) at the 1st Two-Day Workshop on Mainstreaming Natural Capital Accounting into Nigeria's National Development Plans, September 16-17,2020.

To strengthen and facilitate the incorporation and mainstreaming of natural capital and ecosystem services accounts into the Nigeria's SNA, a 2nd two-day training workshop was organized for technical staff of relevant Ministries, Departments and Agencies (MDAs) from December 2-3, 2020, at Abuja. The training workshop which was organised by REPRC-EfD Nigeria, West Africa Capitals Coalition and GLOBE Nigeria, attracted over 60 participants from the Federal Ministries of Environment;

Finance, Planning and Budget; Mines and Steel Development; Water Resources, and Agriculture and Rural Development, National Bureau of Statistics, and Nigeria REDD+ Secretariat, among others. Speakers and Resource persons were drawn from the Australian National University, University of Nigeria Nsukka, the World Bank, British High Commission, Gaborone Declaration for Sustainability in Africa, GLOBE Nigeria, and Natural Eco Capital.



Plate 2. Participant (Technical Staff) at the 2nd A Two-day Training for Mainstreaming Natural Capital in System of National Accounting, December 2-3, 2020

The outcome of the training was a call for Nigeria to give priority to the treatment of its natural capital as a valuable resource for sustainable development, develop a road map followed by a National Action Plan on Natural Capital Accounting, give legislative backing to Natural Capital Accounting process, and join the Gaborone Declaration for Sustainability in Africa (GDSA), and other global initiatives that are

supporting the valuation and incorporation of natural capital into public and private sector policies and decision making. It is expected that the country would, in the coming months, develop a road map followed by a National Action Plan on Natural Capital Accounting and give legislative backing to the Natural Capital Accounting process (Appendix 3)..

4. Research and programmes

4.1. Natural capital accounts development

In 2018/2019, a technical capacity building process for Nigeria, by the United Nations Economic Commission for Africa (UN-ECA) for a national team under National Bureau of Statistics (NBS) (Energy and Environmental Statistics unit) was conducted on the compilation and use of Environmentally Extended Supply-Use Tables for Energy. This was based on the premise that Energy data was readily available to some extent in the country. For full implementation, a Technical Working Group was set up with members drawn from the Energy Commission of Nigeria (ECN) and NBS.²⁷ The reference year for the Nigerian EE-SUT Energy is 2015 based on the

availability of data from the Energy Commission of Nigeria. The account has not been published.

With support from UNIDO and funded by the GEF, Nigeria conducted economic valuation studies to value marine sectors and marine ecosystem services under the Guinea Current Large Marine Ecosystem (GCLME) in 2009 and in 2020, the GPS/WAVES programme of the World Bank funded the Cost of Coastal and Environmental Degradation (COED) study for three states (Delta, Cross River and Lagos) out of eight coastal states.

²⁸

4.2. Sources of NCA data in Nigeria

Nigeria has many agencies who are involved in primary data collection and production, however the National Bureau of Statistics is responsible for National Data gathering to strengthen the documentation, communication, and dissemination of information on natural capital. There are a number of organizations involved in primary data generation and/or collection/production, that stand to support the country's natural capital accounting. These include the following, *inter alia*:

- Federal Ministry of Environment;
- State Bureau of Statistics;
- Central Bank of Nigeria.

- Nigerian National Petroleum Corporation
- Department of Petroleum Resources
- Federal Ministry of Finance, Budget and National Planning
- Federal Ministry of Power
- Federal Ministry of Water resources
- Raw Materials Research Development Council
- Nigerian Electricity Regulatory Commission
- Transmission Company of Nigeria
- Energy Commission of Nigeria
- Federal Ministry of Solid Minerals, Mines and Steel

²⁷ Status of Natural Capital Account in Nigeria Presented by National Bureau of Statistics @ the Two-day Technical Workshop On "Natural Capital and Ecosystem Services Accounting" December 2-3, 2020 Top Rank Hotel-Abuja

²⁸<https://ecastats.uneca.org/ncacop#:~:text=Nigeria%20Takes%20Step%20to%20Mainstream%20Natural%20Capital%20in,hectares%20of%20land%3B%20fisheries%2C%20rivers%20wildlife%20and%20water.>

- Manufacturers Association of Nigeria
- Nigerian Nuclear Energy Regulatory Commission
- Presidency (SDG)
- Energy Commission
- State Ministries of Environment/Environmental Protection Agency/SEPA
- Rural Electrification Board
- National Centre for Energy Research and Development
- Universities and Research Centers
- The Forestry Research Institute of Nigeria

4.3. NCA and sustainable development

Just as the NCA links natural capital to a country's system of national accounts, it can also be used to monitor progress towards achieving the Sustainable Development Goals (SDGs). The NCA provides a practical framework of valuable lessons learned and practices that can be used in developing and implementing the policies or governance arrangements needed to achieve the SDGs, on a country level.

For instance, a well-developed NCA serves as an important tool to inform a wide range of environmental-economic policies and

measurement of sustainable development. It is a source of information for SDG monitoring, especially for SDGs 6, 7, 8, 12, 13, 14 and 15.²⁹ The use of natural capital approach provides a framework for providing insights into the economic importance of natural capital in wealth creation, employment, livelihoods, and poverty reduction linking them beyond measuring the changes in the stock of natural capital at different scale. At present NCA is not used in the stream of activities regarding the SDGs.

4.4. Communities of practice

At GLOBE's "Mainstreaming of Natural Capital Accounting into Nigeria's National Development Plans" 2-Day Workshop held on September 16-17, 2020, participants agreed to the setting up of Nigeria's Natural Capital Accounting Community of Practice (Nigeria NCA CoP) with an initial establishment of a WhatsApp platform. This has been established with members who volunteered to be on it being fed with relevant news and information on NCA, on a regular basis. However, there is much to be done to make the

CoP livelier. This includes capacity building for the members.

Nigeria is also actively involved in other international NCA Community of Practices and fully participated in the 2018 international NCA forum and policy dialogues during the Natural Capital Week in Paris and the 2019 Africa Forum on Natural Capital Workshop.²⁹

A number of Nigerians are also part of the West Africa Capitals Coalition Hub.³⁰

5. Level of NCA awareness amongst legislators and MDAs

The National Assembly (NASS) in Nigeria, comprising the Senate and the House of

Representatives, is the legislative arm of government in the country. The interaction with

²⁹<https://ecastats.uneca.org/ncacop#:~:text=Nigeria%20Takes%20Step%20to%20Mainstream%20Natural%20Capital%20in,hectares%20of%20land%3B%20fisheries%2C%20rivers%20wildlife%20and%20water.>

³⁰ <https://community.capitalscoalition.org/topics/25232/feed>

the legislators on the level of awareness and knowledge of NCA issues revealed a low outcome (Appendix4). Although all the respondents revealed that there are pieces of legislations in Nigeria that promote forest protection, conservation, and regeneration, the survey revealed a low level of awareness of NCA and its relevance to national development.

For the MDAs, the same low level of awareness was the result as depicted in Appendix 5. The MDAs also agreed that there are pieces of legislations in Nigeria that promote forest protection, conservation, and regeneration. However, coordination is a challenge.

6. Challenges associated with NCA implementation in Nigeria

Based on interaction with relevant stakeholders and especially the experience from the outcome of the first attempt to compile the Environmentally Extended Supply and Use

Tables (EE-SUTs), several challenges have been identified in relation to growing natural capital accounting in Nigeria. These are outlined below:

- Presence of low level of awareness of NCA amongst the citizenry including the legislators and other government officials (MDAs).
- No account has been fully developed and published based on Nigeria's priorities and none has been mainstreamed into Nigeria's national development plans.
- Data are not often kept in desirable format by data suppliers. Even though Energy data abound in Nigeria, it was difficult to get data on some energy products as their production are informal and are not regulated, closest substitutes were used. For example biodiesel was used in place of biofuel.
- Discrepancies exist on the same data collected from different agencies
- Data from the production and utilization of solar and wind energy are not regulated hence, difficult to get.
- Some products like wood, wood waste/biomass are mostly used by households. No good administrative records of consumption of such energy are kept.
- Funding: there is lack of institutionalization and budget for NCA.
- There are no fulltime equivalent staff compiling the NCA accounts whether at the NBS level or elsewhere. While NBS compiles National Accounts, no specific account is directed at NCA.
- Despite the involvement of the Nigeria Bureau of Statistics and the Central Bank of Nigeria, Natural Capital Accounting data and indicators are not used in the country's budgetary processes. Nigeria still lacks functional environmental statistics on continued environmental degradation.
- Natural capital and biodiversity with ecosystem services are mainstreamed poorly. No accounts are developed to capture the full complex interactions between the environment and economy. While timber resources, for example, are accounted for, other resources of forests such as non-timber products, carbon sequestration and air filtration are not taken into substantial consideration. This leads to incomplete information about

the consequences of economic activity, performance and wellbeing³¹.

- Poor institutional cohesion, low capacity of States to manage varied biodiversity related portfolios, the lack of

commitment to and investments in the Departments responsible for biodiversity matters characterize the biodiversity conservation policy of most states in Nigeria.

³¹<https://capitalscoalition.org/casestudy/government-dialogue-best-practice-nigeria-on-forestry-principles-to-address-climate-change-forest-protection>

Advancing NCA implementations in Nigeria

1. Gaps and remedial actions

NCA is intended to provide information to policy and decision-makers that will support sustainable development and provide a common framework for measuring and tracking, over time, the contribution of ecosystems to social and economic goals.

As mentioned earlier there are policies, laws, strategy action plans and reports that tend to speak positively to meeting the objectives of the NCA in Nigeria. In fact, it could simply be said

that the existing policy context supports the integration of information from natural capital accounts, including biodiversity and ecosystem values, into policy and decision making.

However, there are challenges that tend to hinder the mainstreaming of NCA into national development plans in Nigeria. These are summarised in Table 1 with necessary actions to move it forward.

Table 1. Some gaps in the PLRs

S/No	Issue	Observed gap	Action
1	Policy rationale for NCA and existing laws or policies without established focus on natural capital accounting.	Absence of clear-cut or defined policy rationale for natural capital accounting or strategic plans & clear objectives for natural capital accounting.	Design a clear policy/strategic plan that provide NCA as the basis for achieving clear target for integrated decision- making with accompanying multiple goals such as those that focus on economic growth, ecosystems and biodiversity with significant indicators that provide a means to achieve measurable progress towards sustainable development goals, climate change goals, etc.
2	Existing Laws and Policy	Poor awareness that established features of legal or policy processes that support natural capital accounting activities exist in Nigeria.	For quick wins, create awareness on the existing legal or policy framework. Adapt or use existing laws or policies concerning particular sub-components of natural capital, that include: biodiversity conservation; minerals and other sub-soil resources; water & watercourses; oceans & fisheries; agriculture and forestry; etc. Adapt existing laws or policies concerning national economic data and/or environmental statistics.
3	Awareness on legislators of natural capital characteristics, values & benefits	Level of awareness generally low; low level of understanding of the UN System of Environmental Economic Accounting (SEEA) too.	Expand the initial training to other members of GLOBE and then scale up to more members. Leverage the Nigeria's Natural Capital Accounting Community of Practice (Nigeria NCA COP) set up during the initial training.

4	Awareness and technical capacity of Government officials on natural capital characteristics, values & benefits	<p>Level of awareness generally low; also, low level of understanding of the UN System of Environmental Economic Accounting (SEEA).</p> <p>Near absence of technical training and expertise.</p> <p>Lack of financial resources to undertake natural capital accounting.</p>	<p>Build on the trainings this study has established. The FMEnv, NBS with the lead of FMFBNP should deliberate develop a capacity building programme for NCA to support the technical officers in the government agencies. They should reach out to international partners for support and collaboration</p> <p>Leverage the Nigeria's Natural Capital Accounting Community of Practice (Nigeria NCA COP) set up during the initial training.</p>
5	Compilation of accounts	<p>Energy account compiled but yet to be published due to lack of resources.</p> <p>No prioritization of further accounts to be compiled.</p>	<p>Seek the resources needed to publish the account. Prioritize account to include any of the thematic issues of today- Climate change, Biodiversity or Circular economy, Forests; land; water.</p> <p>NBS should create a consolidated database of all-Natural Capital assets</p>
6	Centralized system for warehousing natural capital account	No structure for natural capital accounts and associated information systems	<p>Consolidate accounts hosted and maintained by different agencies through NBS platform/registry. Decentralized accounts hosted and maintained by multiple agencies should be linked to NBS's</p>
7	Institutional coordination	<p>Producers and users of data are not tightly linked and thus no natural capital related data to publish or add to the GDP.</p> <p>Poor information sharing, and stakeholder engagement exists.</p> <p>Loose vertical coordination between national & sub-national levels of government.</p> <p>Loose horizontal & cross-sectoral coordination between different government agencies.</p>	<p>NBS should set up a multi-stakeholder coordination mechanism on NCA</p> <p>There is need to develop and improve inter-agency cooperation in terms of information sharing and planning to enable better management of Natural Capital assets.</p> <p>Develop and adopt a framework that links natural ecosystems and socio-economic systems through the flow of ecosystem services.</p> <p>Leverage the Nigeria's Natural Capital Accounting Community of Practice (Nigeria NCA COP) set up during the initial trainings</p>
8	Policy and institutional Challenges	<p>Poor linkage in sharing data and information about natural capital assets with relevant authorities (such as the NBS, FMFBNP) mandatory.</p> <p>This creates a case where it is practically impossible to even set up an account process as data and information needed for such process is impossible to come by.</p>	<p>Create deliberate policies that recognize NCA dataset based on SEEA framework and policy should mandate and create platform that make sharing data and information about natural capital assets with relevant authorities NBS mandatory.</p>

9	Statistical reporting	<p>How much natural capital contributes to the GDP not reported.</p> <p>Statistical reporting as well as monitoring systems and processes do not capture the larger picture of national natural capital—water, forest, air, land and biodiversity - in terms of total quantity and economic values.</p>	<p>NBS should expound its registry to accommodate NCA dataset harvesting.</p> <p>Set the machinery in motion to measure the extent and condition for assets of NCA for proper datasets.</p> <p>In Gross Domestic Product (GDP) ensure that natural capital—forests, wetlands, and other ecosystems—are recognized in economic reporting.</p> <p>Adopt SEEA framework to organise data on Natural Capital in a consistent and comparable way which enables the economic contribution of Natural Capital and the environmental impacts of economic activities to be captured and analysed.</p>
10	Methodology for natural capital accounting.	<p>No single, widely accepted methodology for natural capital accounting in Nigeria</p> <p>Poor awareness of what methods and standards for natural capital accounting</p>	<p>As a nation, adopt the UN SEEA Approach, which provides a standardised approach to developing macro level natural capital accounts which can then be linked to national economic accounts, to aid government policy-making</p> <p>Build Capacity of relevant government officials in all the MDAs.</p> <p>Leverage the Nigeria's Natural Capital Accounting Community of Practice (Nigeria NCA COP) set up during the initial trainings.</p>
11	Natural Capital and Sovereign account	<p>There is a non-inclusion of Natural Capital in Nigeria's Sovereign account</p>	<p>NBS should adjust or establish add-ons to existing GDP-based.</p> <p>measures – e.g., 'green' GDP.</p>
12	Data and Valuation	<p>Lack of relevant national NCA datasets</p> <p>Where NCA datasets exist not in the form that meets NCA standard and hardly any connections or harmonisation between or with national datasets.</p> <p>Lack of measures of extent and condition for assets/partial/ insufficient spatial resolution to measure actual ecosystem services.</p>	<p>Deliberately initiate NCA dataset harvesting based on NCA approaches, ecosystem mapping</p> <p>Do inventory of NCA data on the stocks of ecosystem assets, ecosystem services and their trends that includes information on spatial and temporal variations in the quantity and condition of the ecosystem assets, such as land and habitat, water, soils and forests.</p> <p>For economic and social data, identify data that provides information about priority sector dependencies such as data on licenses and use rights (e.g. water abstraction) and social data on population change is relevant as this may imply increasing pressure on ecosystem assets within the project area.</p>

2. Role of legislators in the implementation of NCA

With the enshrined role of the National Assembly, it is agreed that they can assist the Federal Government in managing the country's forest resources with legislation.

The legislators have the primary responsibility of oversight to support in bringing about relevant Bills or policy directions to plug the gaps that have been identified. However, the legislators have limited NCA knowledge to inform national decision-making when it comes to natural capital approach-based considerations. This will

however be taken care of through capacity building. It is therefore recommended that lots of trainings for MPs is necessary. Attention must also be paid to the tenurial nature of the seats of MPs, and so this requires that the clerks who are always there and not affected by tenure should also be trained too.

Specifically, the legislators should work with the relevant stakeholders to carry out the followings:

1. All policy and project proposals that influence the country's environment shall undergo economic appraisal that includes the valuation of natural capital and ecosystem services.
2. Make MDAs to incorporate costed explanation of how their policies will enhance natural capital or transform it into other forms of capital so that overall national wealth is increased.
3. Through budgetary support, make MDAs to develop and retain capacity for collection, collation, and analyses, and to conduct public reporting, of Natural Capital Inventories that identify as far as possible all the natural capital assets for which they are responsible, or whose value may be affected (whether adversely or positively) by their Ministries' activities.
4. Moving forward scrutinize Government policy making to ensure upcoming policies reflect natural capital issues.
5. Carry out value-for-money studies of the economy and scrutinise how natural capital approach can effectively raise the bar in government spending as part of their responsibility in examining public expenditure of the government.
6. Develop political support across all MDAs by highlighting the economic and social benefits that exist alongside the environmental objectives of protecting the natural world. They shall endorse and encourage 'Investing in natural capital' through sponsoring and speedy passage of Bills on restoration, conservation or environmental management that is deemed to be capable of achieving mainstreaming of NCA into public policy goals in a timely fashion, such as economic growth, job creation, energy and food security.

Conclusion and recommendations

For Nigeria, the quest for sustainable management of her natural resources (natural capital) requires the adoption of a governance approach that accounts for the impact of economic development on natural resources and environmental sustainability, and subsequently integrates such knowledge into policies and decision making.

In order to create the ability of national legislators to exercise their powers of scrutiny, budgeting and law-making towards the advancement of NCA there is need to provide needed capacity for them. This is also required for all the MDAs, especially those in the environment, water, and energy sectors.

Generally, transformational change is needed to reverse nature loss and ensure nature's health and resilience to support our economies and livelihoods. To achieve the transformational change, it is necessary to frame biodiversity as

an asset as part of our natural capital and make the value of nature visible in all decision-making actions of businesses, financial institutions, and the whole of government.

Applying natural capital thinking will foster a better understanding of the threats to nature and people's needs by focusing on impacts and dependencies in the context of economic prosperity and human well-being.

Government interventions are essential for speeding and scaling up the transition. There are five levers of change or processes viz: value and embed nature, adopt targets, integrate policies, reform incentives, and empower action. By adopting and promoting a natural capital approach, governments will unlock tools and solutions that are needed to mainstream the value of biodiversity into all policies and decision-making by businesses, finance institutions, and government.

Appendix 1. Some Specific Countries Experiences in Environmental Economic Accounting and NCA

Peru | In 2009, Peru amended its 2001 National Environmental Impact Assessment System Law (SEIA) to include a provision that specifies the need for environmental economic impact assessment as content for environmental impact assessments.

This provision creates a demand for the generation of data for environmental economic accounting and ecosystem service valuation, as the law cannot be enforced if the data do not exist. Thus, this amendment introduced a legal basis for work on the economic valuation of natural capital and ecosystem services in Peru. Article 26 of the Implementing Decree of this law contemplates the economic evaluation of the environmental impact of investment projects in the following terms: *'to economically evaluate the environmental impact in environmental studies, the following elements must be taken into account: the environmental damage generated, the cost of mitigation, control, remediation or environmental rehabilitation that may be required, as well as the cost of environmental management and compensation measures that may be required, among other criteria that may be relevant depending on the case.'*

In 2015, Peru's Ministry of the Environment (MINAM) produced a national guide for the economic valuation of natural heritage, which established the basis for implementing environmental accounting at the national level. The guide is based on the UN-SEEA, and includes: pilot physical accounts for land and soil, subsoil resources, forestry, fisheries, water, and biodiversity; pilot accounts for environmental protection expenditures; pilot accounts for environmental protection expenditures; pilot accounts for integrated economic and environmental expenditures; methodologies; information on data gaps for other accounts such as energy and mining; a set of 324 environmental indicators; an action plan for the implementation of environmental satellite accounts.

MINAM and INEI also created an inter-institutional technical commission for environmental statistics and accounting to help with national standardization of studies and their methodologies. Peru's Strategic Planning Entity (CEPLAN) aims to complete the inventory and evaluation of the national natural capital by 2021. This is part of the 'National Plan for Environmental Action'. The inventory will serve as a contribution to decision-making and planning for the rational use and protection of natural resources.

In addition, to show how at local levels ecosystem degradation has created equity issues associated with access to resources, Conservation International has worked with Peruvian authorities on Natural capital accounts to assess the economy-wide local effects of ecosystem degradation (Vardon et.al., 2019). The study also highlighted the impacts of land degradation, the trends of threatened species, and trends, both positive and negative, in the benefits we receive from nature. Indicators from the natural capital accounts can, for example, help to better understand linkages at local level between nature conservation and sustainable water use, allowing for more holistic resources management and policy implementation.

Netherlands | As a supervisor for the Dutch financial system, the Dutch Central bank (DNB) explores how sustainability issues might affect the Dutch financial institutions and the financial system as a whole. In the report *Indebted to nature: Exploring biodiversity risks for the Dutch financial sector* (DNB & PBL, 2020) the central bank has investigated the exposure of the financial sector to different risk channels of biodiversity loss. Biodiversity loss is identified as a potential source of financial risks that threatens the availability of ecosystem services, such as wood, animal pollination and soil fertility, on which economic activities depend. Dutch financial institutions worldwide have EUR 510 billion in exposure to companies with a high or very high dependency on one or more ecosystem services. This comprises 36% of the portfolio examined.

One of these ecosystem services is animal pollination. At a global level, the financial sector's exposure to products that depend on pollination amounts to EUR 28 billion.

Myanmar | On the other side of the planet a comparable example for the mangroves of the Ayeyarwady Delta shows how a natural capital approach helps to estimate the return on investment in environment, social, human and financial capital. This case focused on piloting the 3Returns Framework developed by the Green Growth Knowledge Platform and Global Green Growth Institute. The results of the pilot indicate that improved management of mangroves and green growth alternatives can enhance the well-being of the communities and that even limited investment in mangrove restoration provides high levels of benefits in the long-term. The work has continued with the support of the World Bank WAVES program.

India | Since 2015, the government of Andhra Pradesh state has been implementing the Zero budget Natural Farming (ZBNF) with 58 000 farmers to enhance people's welfare while conserving the environment. Part of TEEB AgriFood initiative (an UNEP programme), ZBNF consists of a set of regenerative agricultural practices that restore natural capital stocks and reduce farms costs. Historically, India faced food insecurity and farmers debts due to high costly chemical input model.

United Kingdom (Scotland) | The government of Scotland is applying a four capitals approach, including natural capital, to build a strong strategy for achieving wellbeing for its citizens. On the basis of this it is developing a robust economic strategy for Scotland that will enable a post-COVID recovery by creating a resilient wellbeing economy: An economy one that generates strong economic growth with the concomitant creation of quality jobs, and that does so with an unequivocal focus on climate change, fair work, diversity, and equality.

Botswana has embraced NCA following the outcome of the Gaborone Declaration of Sustainability in Africa (GDSA) in 2012. Since then, a decision was made at highest policy level to prioritize NCA for water, mineral and energy resources, including compilation of macroeconomic indicators of sustainable development. A scoping exercise to develop ecosystem accounts was carried out in 2014 which prioritized the initial development of SEEA-compliant Tourism Satellite Account. Capacity building and a process to institutionalize the accounts was led by Government, with support from the World Bank through the WAVES Global Partnership programme.

As one of the five piloted WAVES countries to implement NCA in 2012, Botswana has made remarkable progress in terms of natural capital accounts compilation and annual report updates and the dissemination of key policy messages to different stakeholders. Although at different stages of maturity, the NCA data from water and energy accounts have shown great potential to impact significantly in monitoring the implementation of one or two natural capital related SDGs.

Uganda. The government of Uganda is working with the World Bank's Global Program on Sustainability to develop accounts for land, forest and wetlands ecosystems. The aim is to inform economic planning of these wetlands and ensure its ecosystem health and resilience, as well as its continued provision of services for the wellbeing of people, ranging from food production and water supply to tourism services.

Appendix 2. Relevant Policies to the Project

The Minerals and Mining Act of 2007 promotes and supports activities through:

- exclusion of lands constituting National Parks from minerals exploration and exploitation (s. 3).
- prohibition of mineral exploration in sacred areas or injury or damage to sacred/venerated trees (s. 98).
- restoration and reclamation of mined lands (sections 114 & 115).
- carrying out Environmental Impact Assessment (EIA) before the grant of license or permit (s. 119); and
- establishment of Environmental Protection and Rehabilitation Fund (s.121).

Environmental Impact Assessment Act, Cap E12, LFN 2014

The Act supports implementation in the country and valuable in promoting the adherence to:

- REDD+ principles and safeguards in projects touching on the forests, including measures to mitigate impacts of drivers of deforestation and forest degradation in land use sectors.
- The EIA process provides for public display of draft EIA report as well as public review.
- This process strengthens stakeholder participation and public access to information by concerned people and other stakeholders.
- It also provides for the establishment of a public registry for all EIAs to enhance transparency and accountability
- Makes it mandatory the study of impact of development initiatives that either directly or indirectly drives deforestation, forest degradation and land degradation in order to find alternatives that will minimise impact and preserve the country's natural resource base.

The National Park Service (NPS) Act Cap No. 65 LFN of 2004 is responsible for the preservation, enhancement and protection of wild animals and plants and other vegetation in the National Parks. The provision for protected areas for biodiversity management aligns with the objectives of NCA activities insofar as habitat for flora and fauna can be preserved while also reducing the emission of greenhouse gases.

Relevant regulations of the National Environmental Standards and Regulations Enforcement Agency (NESREA) include

- Soil, Erosion and Flood Control of soil which regulates all earth-disturbing activities, practices, or developments for non-agricultural, commercial, industrial and residential purposes.
- (ii) Access to Genetic Resources and Benefit Sharing (S. I. No. 30) of 2009, with the overall purpose of regulating the access to and use of genetic resources and ensure fair and equitable sharing of the benefits from their utilization.
- (iii) Watershed, Mountainous, Hilly and Catchments Areas) Regulation (S. I. No. 27) of 2009, that seeks to protect water catchment areas and ensure the minimization of significant risks and damage to ecological and landscape aspects.

The Endangered Species Act (Control of International Trade and Traffic in Endangered Species), to which Nigeria is a signatory, provides for the conservation and management of country's wildlife and the protection of some of her endangered species in face of extinction as a result of over-exploitation.

Petroleum Act Cap 10, LFN, 2004

There are also several federal statutes regulating oil exploration, prospecting, and mining in Nigeria. The Petroleum Act 1969 is the principal law on the industry with subsidiary legislation enacted under it. Some of the permits/licenses granted under the regulatory framework in the petroleum industry include Oil Pipeline Survey Permit, Oil Pipeline Licence, Oil Prospecting Licence and Oil Mining Lease. These permits/licenses have implications for the ecosystem. The Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN) elaborate on environmental standards and safeguards applicable in the petroleum industry in the country. These are in addition to the provisions in the Environmental Impact Assessment Act for projects in the oil and gas industry. The identified gaps with respect to considerations for ecosystem health and integrity in relevant instruments are:

- a) Inadequate framework for biodiversity considerations in the petroleum industry activities.
- b) Lack of definite provision for offset planting to adequately mitigate the impact of deforestation and forest degradation.
- c) Inadequate safeguard considerations and conservation values at the very early stages of activities.

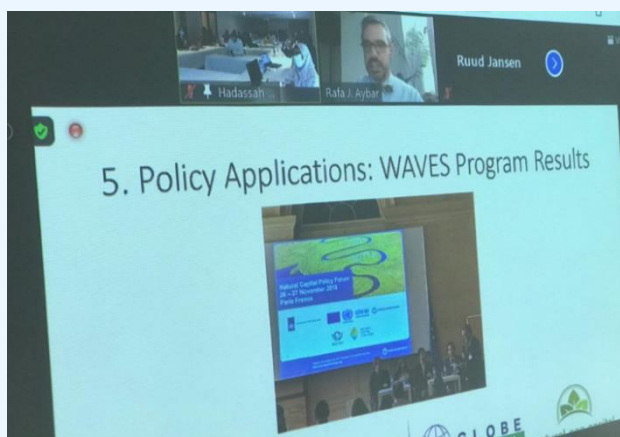
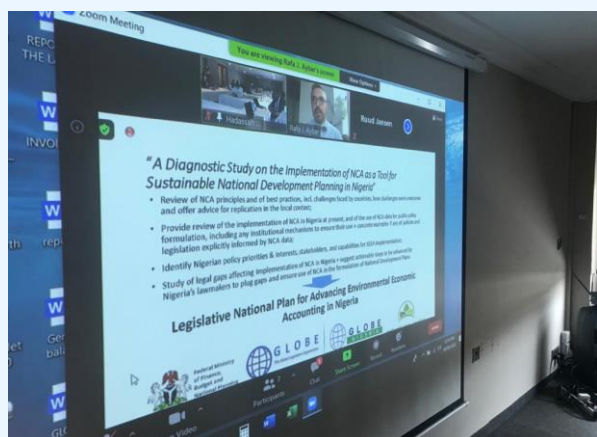
Land Use Act Cap 202 LFN 1990 Cap L5 LFN 2004

The Land Use Act (LUA) is the principal law in Nigeria regulating the use and access to all lands in the country. Section 1 of the LUA provides that "subject to the provisions of this Act, all land comprised in the territory of each state in the Federation are hereby vested in the Governor of that state and such land shall be held in trust and administered for the use and common benefit of all Nigerians in accordance with the provisions of the Act". Therefore, all lands in Nigeria are under the control of the respective State Governors. The Federal Government does not play a major role in land administration other than in relation to federal land acquired before the enactment of LUA and such other lands as may be acquired under the Act or any other enabling legislation. National Parks (NPs) are under the jurisdiction of the Federal Government.

Sector Reform Act, No. 6 of 2005.

The Federal government has overriding jurisdiction over land acquired under these acts. Local Governments are not vested with power of administration of land in the urban areas. They are responsible for the control and management of land in non-urban areas, i.e., LGAs, over which they have the power to grant customary rights of occupancy. The power is exercised subject to the type of use and a limitation on the size of land, above which there is reversion to the Governor of the State. The Governor retains overriding powers over all lands in the state except for those under federal jurisdiction.

Appendix 3. Activities and participants at the first works



L-R: Dr Eugene Itua, CEO, Natural Eco Capital & NCA GLOBE INTERNATIONAL Consultant; Elizabeth Ebosele, Technical Assistant to Hon. Minister of State, Fed. Min. Of Budget and National Planning; Hon Benjamin Kalu, Spokesman of Nigeria's House of Representatives (middle), Abdulrahman Naibi Rajab Special Assistant to Hon. Minister of State, Fed. Min. Of Budget and National Planning and Dr Jubril Adejojo, Green Finance Expert, Natural Eco Capital



A TWO DAY WORKSHOP ON MAINSTREAMING NATURAL CAPITAL ACCOUNTING INTO NATIONAL DEVELOPMENT PLANS OF NIGERIA

Speakers



Hon Sam Onuigbo,
GLOBE Nigeria President



Prince Clem Agba
Hon Minister of State, Federal Ministry of Finance, Budget and National Planning



Marko Javorsek,
Statistician, DESA, United Nations



Hadassah Benson Igbanoi
GLOBE Nigeria



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Temitope O. Sogbanmu, Ph. D
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Natural Eco Capital/UNILAG



Mark Gough
CEO, Capitals Coalition



Sonigitu Asibong Ekpe
Acting Director (Scientific)
Min. of International Dev.
Cooperation,
Cross River State



Ruud Jansen
Executive Secretary GDSA



Rashida Mahmood,
Sustainability Expert
Natural Eco Capital



Fraser Suites, CBD, Abuja, Nigeria







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A Workshop on Mainstreaming Natural Capital Accounting into Nigeria National Development Plans



Hon Benjamin Kalu, Spokesman of Nigeria's House of Representatives and Dr Eugene Itua, CEO, Natural Eco Capital & NCA GLOBE INTERNATIONAL Consultant.



Sitting- L-R: Dr Eugene Itua, CEO, Natural Eco Capital & NCA GLOBE INTERNATIONAL Consultant; Elizabeth Ebosele, Technical Assistant to Hon. Minister of State, Fed. Min. Of Budget and National Planning; Hon. O. A. Afe, MHR; Hon Sam Onuigbo, President, GLOBE Nigeria; Dr Bolatito Obisesan, Director (PRS & GEF Operational Focal Point), FMEnv and Abdulrahman Naibi Rajab Special Assistant to Hon. Minister of State, Fed. Min. Of Budget and National Planning and Standing: Mr Aso Patrick Vakporaye, Ag. Director, Economic Growth, Fed. Min ic Budget and National Planning.

**Appendix 3: Communique Issued at the Two-Day Workshop and Training on
“Incorporating and Mainstreaming Natural Capital and Ecosystem Services
Accounting into Nigeria’s System of National Accounts and National Development
Plans held December 2–3, 2020.**

1. To facilitate the incorporation and mainstreaming of Natural Capital and Ecosystem Services Accounting into Nigeria’s system of national accounts and national development plans, the Resource and Environmental Policy Research Centre (REPRC, Environment for Development (EfD)-Nigeria, University of Nigeria Nsukka (UNN) in collaboration with the West Africa Regional Platform on Natural Capital organised a two-day high-powered training workshop in Abuja between the 2nd and 3rd of December, 2020. The program drew participants and resource persons from the Federal Ministry of Environment, the Federal Ministry of Finance, Budget and National Planning, the Federal Ministry of Mines and Steel Development, National Bureau of Statistics, National Assembly, the Australian National University, University of Nigeria Nsukka, the Gaborone Declaration for Sustainability in Africa, the World Bank, the British High Commission, Capitals Coalition, and many others. The participants commended government effort in producing the Nigeria energy framework and mineral resources pilot account. At the end of the training and workshop, the following resolutions were made:
 1. Nigeria should give priority to the treatment of its Natural Capital as a valuable resource for sustainable development, and thus should be mainstreamed in its accounting system and national development plans.
 2. Government should put in place an effective framework for the coordination of natural capital accounting system in Nigeria.
 3. That Nigeria should develop a road map followed by a National Action Plan on Natural Capital Accounting.
 4. Government should expedite action to provide legislative backing to Nigeria’s REDD+ and Natural Capital Accounting process.
 5. The capacity of stakeholders and relevant Ministries, Departments and Agencies should be further enhanced for effective mainstreaming of Natural Capital Accounting into Nigeria’s System of National Accounts and her sustainable development plans and programs.
 6. Government should upscale the on-going initiative in the National Bureau of Statistics (NBS) by providing an enabling environment, including promoting intersectoral cooperation in data production.
 7. That Nigeria should join the Gaborone Declaration for Sustainability in Africa (GDSA), and other global initiatives that are supporting the valuation and incorporation of Natural capital into public and private policies and decision making.

Appendix 4. Responses of Legislators on the Survey of NCA Awareness.

The following presents topical issues as relates to NCA, which were used to generate questions for the respondents. Answers given are used to produce the analysis graphs that follows.

Familiarity with the term Natural Capital Accounting

As revealed in the table below, most respondents (75.0%) of the entire sample size are familiar with natural capital accounting as a term. The other respondents (25.0%) did not respond to the question.

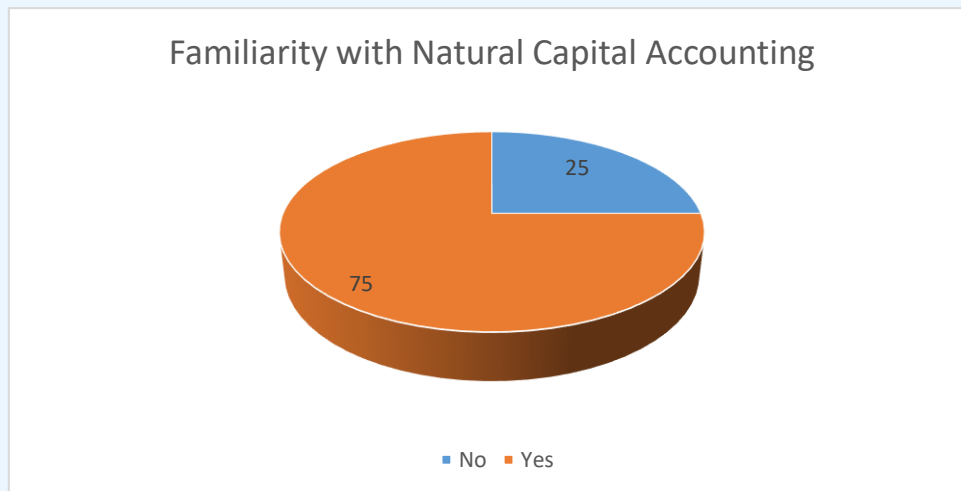


Fig 1: Familiarity with Natural Capital Accounting

Importance of Natural Capital Accounting to GDP

The diagnostic investigation found that the importance of natural capital accounting to GDP was accepted by respondents as most of them (75.0%) agreed that natural capital accounting is important to GDP. It should be noted that (25.0%) were not sure how to respond to the question.

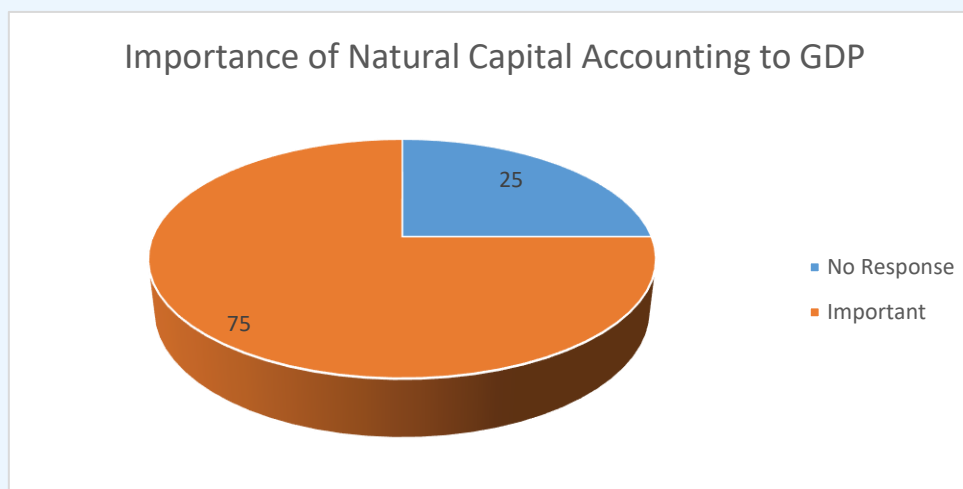


Fig 2: Importance of Natural Capital Accounting to GDP

The urgency of action to protect and enhance Natural Capital in Nigeria

The study also considered the urgency of actions that can protect and enhance Natural Capital in Nigeria and discovered that 2 respondents representing 25.5% did not respond to the question, 3 respondents representing 37.5% saw the urgency in the action while 3 respondents representing 37.5% saw the action to be taken as very urgent.

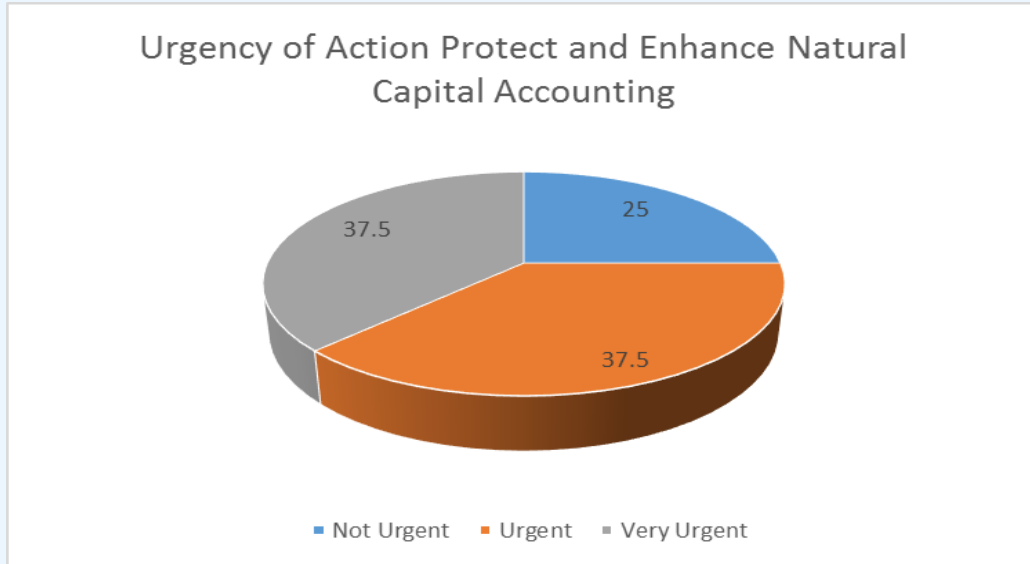


Fig 3: Urgency of Action Protecting and Enhance Natural Capital Accounting

Understanding of relationship with Natural Capital, as it positively impacts business, society and the environment.

It was revealed that a better understanding of our relationship with Natural Capital contributes to better outcomes for business, society and the environment 75% of respondents concurred while the other respondents representing 25.0% did not respond.

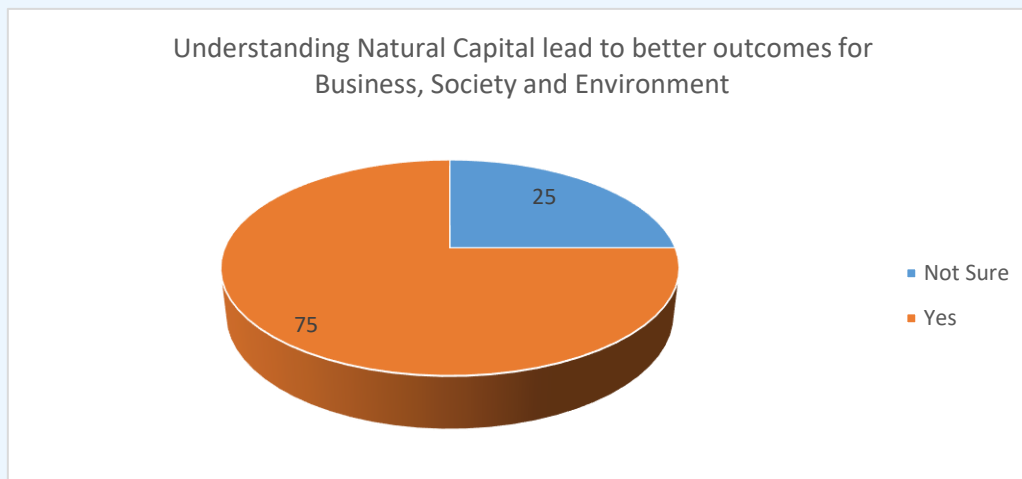


Fig 4: Understanding of relationship with Natural Capital, as it positively impacts business, society and the environment.

Familiarity with the System of Economic Environmental Account (SEEA)

On familiarity with the System of Economic Environmental Account, the graph analysis below suggested that 2 representatives representing 25.0% said they were not familiar with it, 1 representative representing 25.0% was not sure with the familiarity while 3 representatives representing 37.5% said they are familiar with it. It should be noted that 2 representatives out of 8 were not attended to.

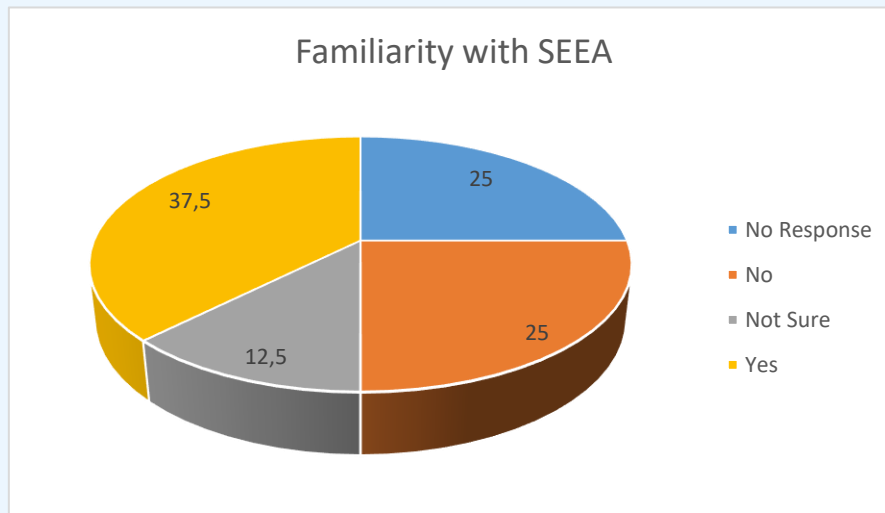


Fig 5: Familiarity with the System of Economic Environmental Account (SEEA)

Ministry/Agency Establishment of Environmental-Economic Accounts for the Implementation of 'System of Environmental-Economic Accounting (SEEA)

The study found that no ministry/agency has been able to use/establish environmental-economic accounts for the implementation of 'System of Environmental-Economic Accounting (SEEA) in this study as 6 representatives representing 75.0% said No while 2 respondents did not respond.

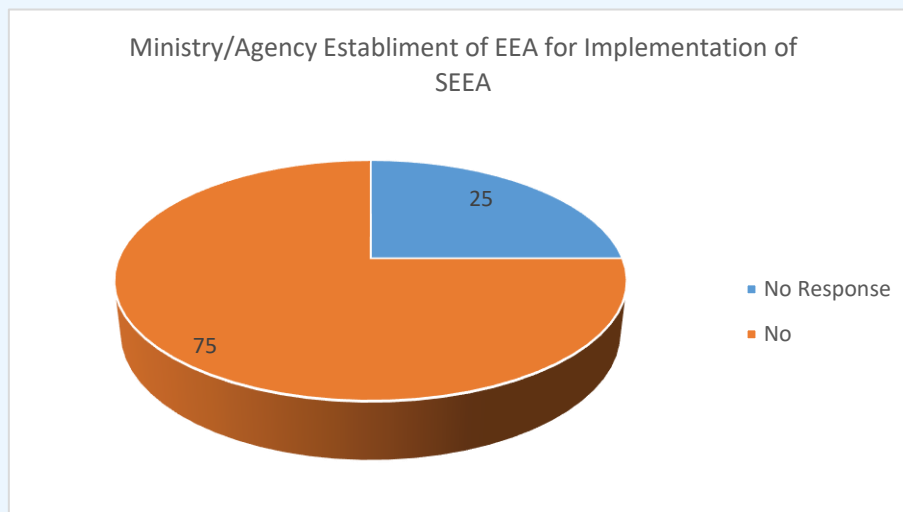


Fig 6: Ministry/Agency Establishment of Environmental-Economic Accounts for the Implementation of 'System of Environmental-Economic Accounting (SEEA)

Policy / Legislations that exists in support of Natural Capital.

As shown in the table below, the list of policies/suggestions that exists in support of natural capital 25.0% respondents did not respond, 12.5% agreed to the existence of environmental regulations standards, 12.5% agreed to the existence of monetary/physical indicators method, 12.5% agreed to the existence of non-applicability, 12.5% agreed to the existence of national policy on the environment, 12.5% agreed to the existence of national policy on environmental conservation while the remaining 12.5% was not aware of the specific laws and policies in Nigeria.

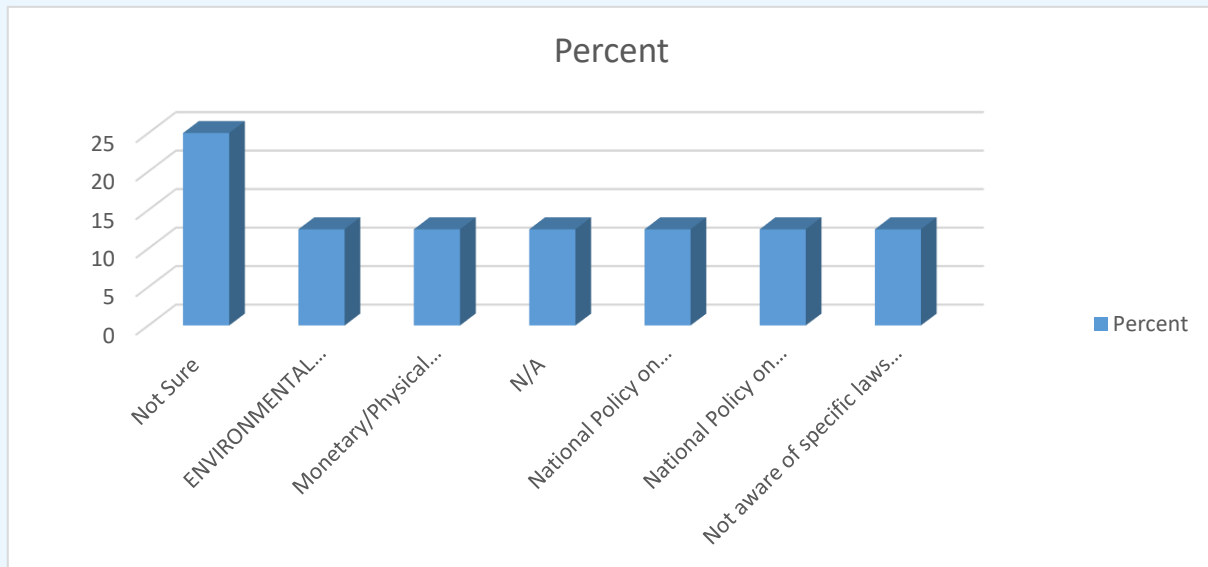


Fig 7: Policy / Legislations that exists in support of Natural Capital.

Institutions' statistical capacity to produce and release relevant statistics.

This study investigated institutions' statistical capacity to produce and release relevant statistics. The study revealed that 37.5% respondents did not respond as 12.5% stated 3, 12.5% stated 5, 12.5% stated 6 while 12.5% stated 9 respectively.

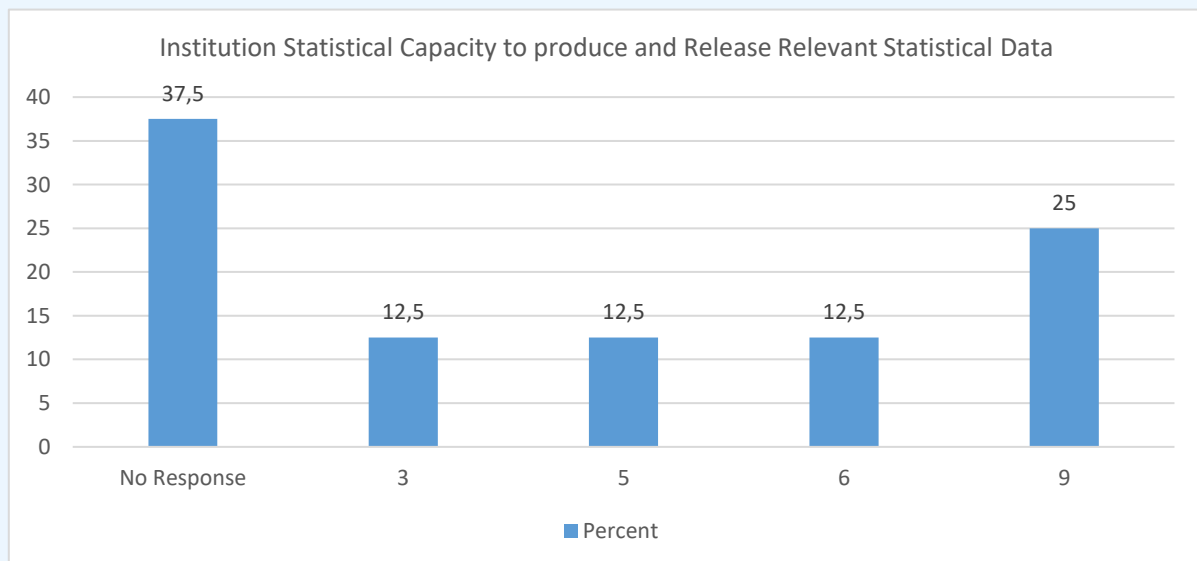


Fig 8: Institutions' statistical capacity to produce and release relevant statistics.

Business data-sharing agreement in place with the National Bureau of Statistics

Results on business data sharing agreement with the national bureau of statistics found that 50% did not respond, 25.5% do not have an agreement with the national bureau of statistics while 25.0% have an agreement with the national bureau of statistics.

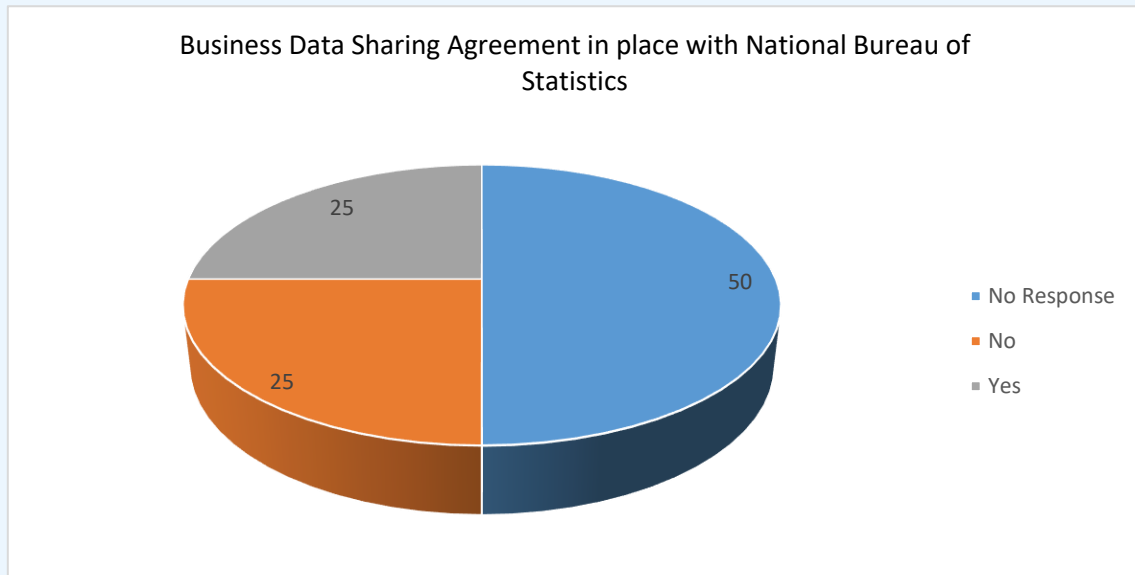


Fig 9: Business data-sharing agreement in place with the National Bureau of Statistics

Rating of the strength of existing data security arrangements with stakeholders

As shown in the table below, the strength of existing data security arrangements with stakeholders revealed that 50% of respondents did not respond, 12.5% shows a strong rate of 4, 12.5% shows a strong rate of 7, 25.0% shows a strong rate of 9 respectively.

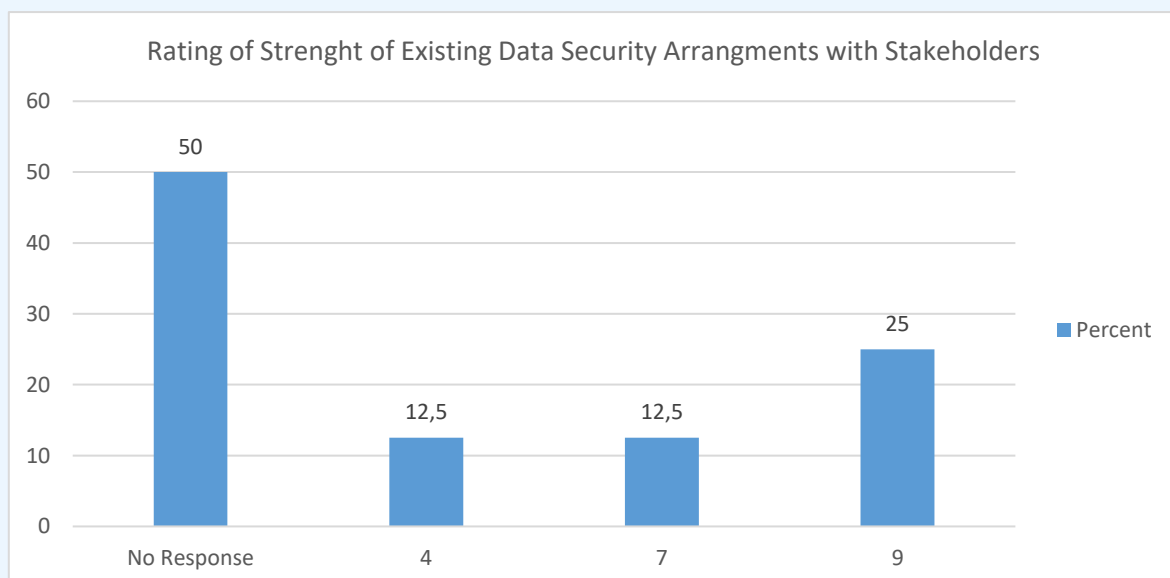


Fig 10: Rating of the strength of existing data security arrangements with stakeholders

Outlined Dissemination Strategy

The study unveils the status of outlined dissemination strategy and found that 37.5% of representatives did not respond as 12.5% was not sure, 50.0% have outlined dissemination strategy.

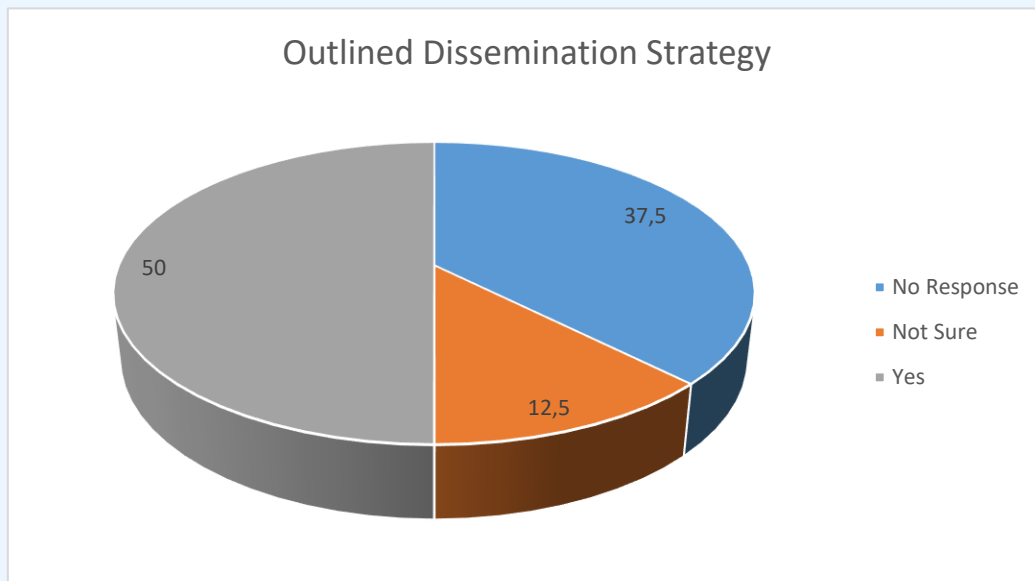


Fig 11: Outlined Dissemination Strategy

Outline Methods

This study enquired data on outline methods and found that 12.5% had correspondences as an outlined method while 12.5% had Meetings and Workshops; Website; Mass-media; Environmental Education and Awareness; Social Media Integration respectively.

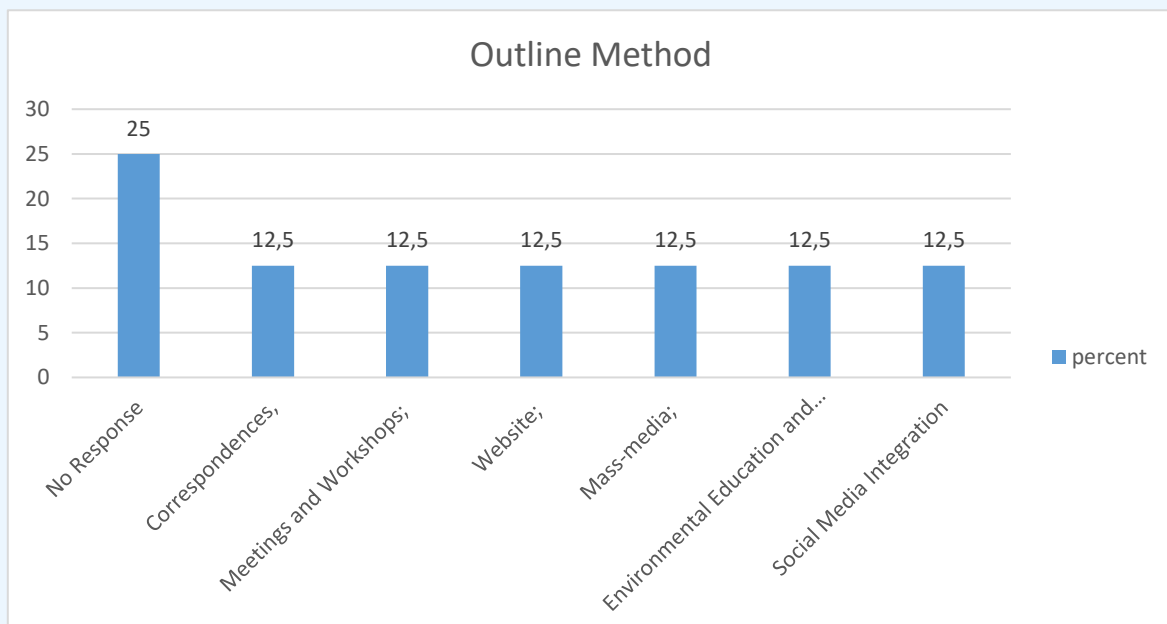


Fig 12: Outline Method

Awareness of the national vision for biodiversity, green economy and ecosystems for Nigeria

As shown in the study, the awareness status of the national vision for biodiversity, green economy, and ecosystems for Nigeria revealed that 12.5% was indirectly aware, 12.5% was under non-applicability, 12.5% said was directly aware (YES), 12.5% was aware because it is part of the agency's mandate.

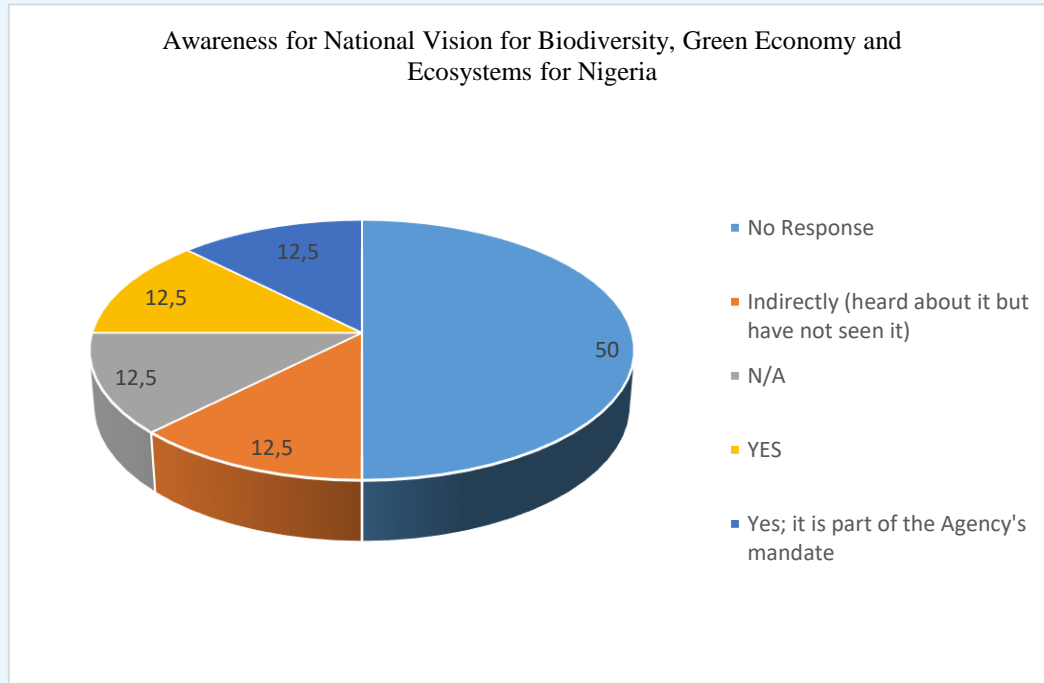


Fig 13: Awareness of the national vision for biodiversity, green economy and ecosystems for Nigeria

Organisation's main environmental concerns

An investigation of organisations' main environmental concerns revealed from 12.5% was Air quality from Nigerian Civil Aviation Authority (NCAA), 12.5% was Air Quality; Water Quality; Biodiversity Conservation; Electrical Electronic Waste control; Hazardous Waste Control, was All-natural resources + tourism while 12.5% was under non-applicability.

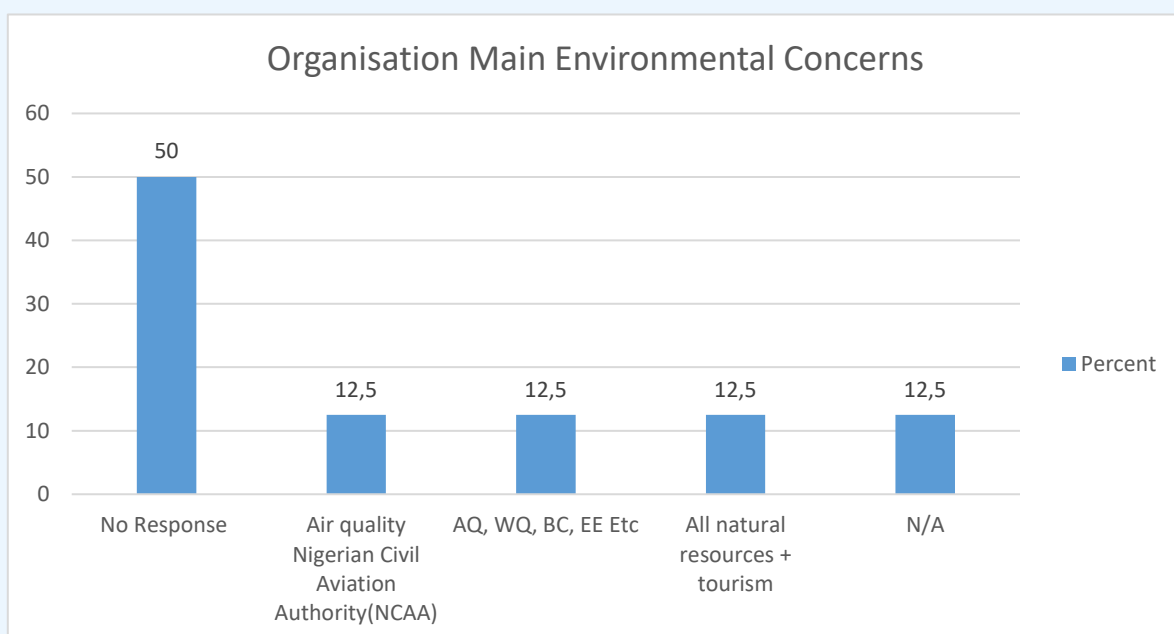


Fig 14: Organisation's main environmental concerns

Ministry/Agency development policy priorities within the scope of National Vision

Results on ministry/Agency development policy priorities within the scope of national vision in the table below revealed that 62.5% of respondents did not respond as 12.5% had a policy priority of Development of Agro-Allied Cargo Terminal and Development of Aerotropolis (Airport City) while 12.5% had an ensuring, cleaner and healthier environment for Nigerians.

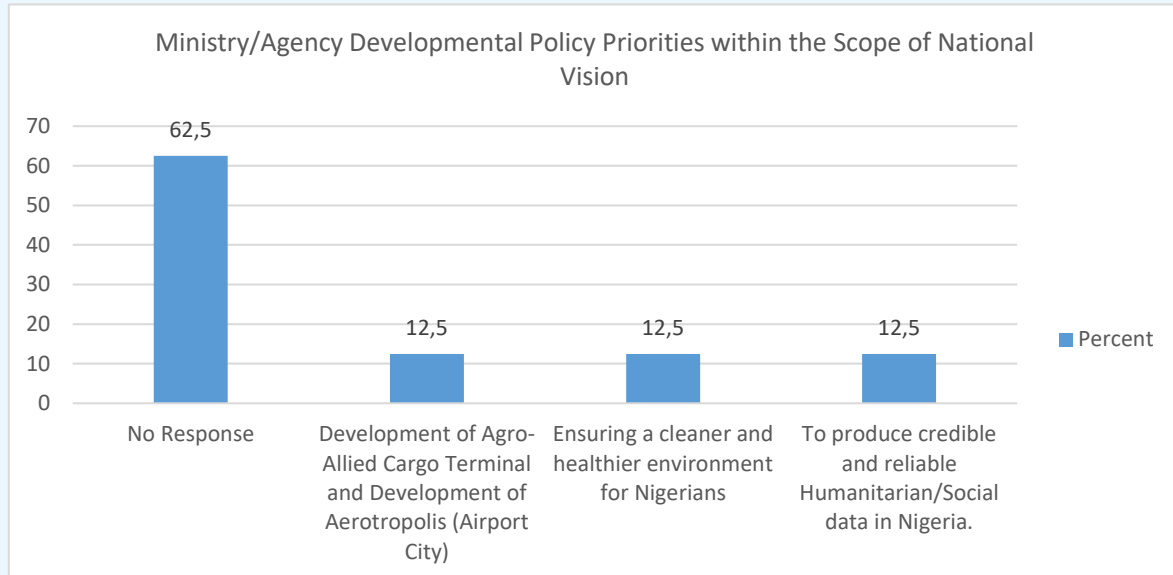


Fig 15: Ministry/Agency development policy priorities within the scope of national vision

Related policy tools in place or planned.

The study on related policy put in place or planned found 12.5% to have Aviation Roadmap, 12.5% had Humanitarian Data Policy, 12.5% had National Environmental Regulations; National Guidelines and standards on some environmental concerns such as UEEE, Importers, etc; National Medium Term Development Plan while the remaining 12.5% have Security, Youth Mobilization and Empowerment, Public education and enlightenment programmes, environmental protection and pollution control and Skills Acquisition programmes for youth. It should be noted that 4 representatives did not respond at all.

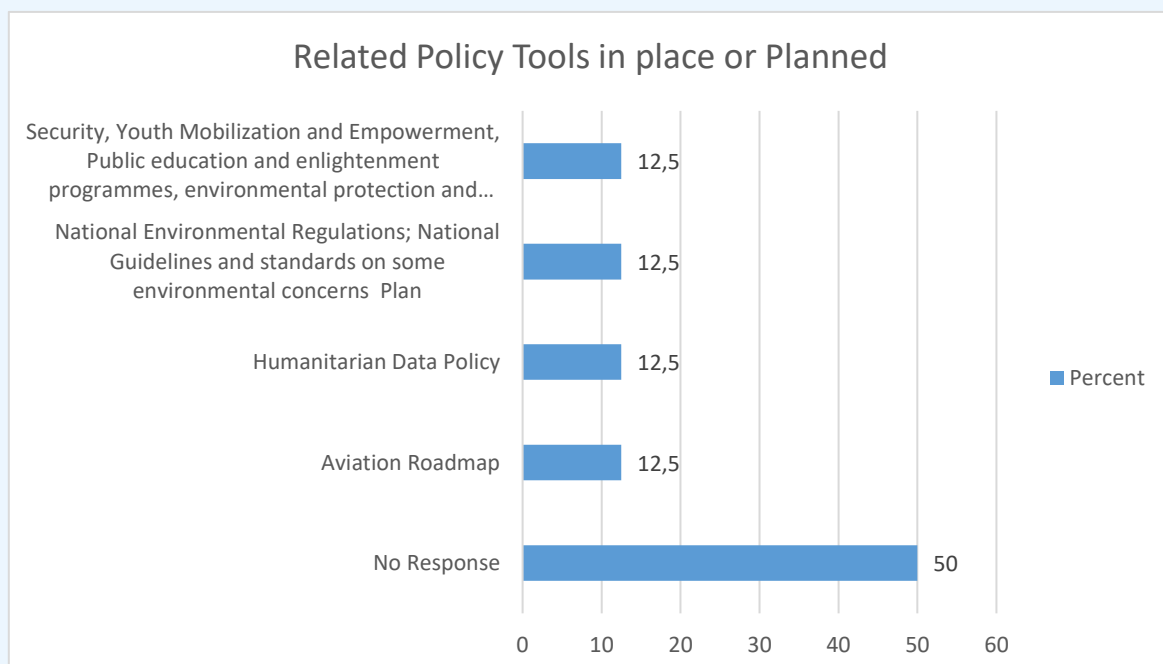


Fig 16: Related policy tools in place or planned.

Ministry/Agencies' established mechanism to determine the policy priorities and decision making on biodiversity, natural resource management, economic development and environmental sustainability.

This investigation found that the ministry/Agency that has an established mechanism to determine the policy priorities and decision making on biodiversity, natural resource management, economic development and environmental sustainability were 25.0% while 12.5% was not sure, hence, maybe. 62.5 % of respondents did not answer.

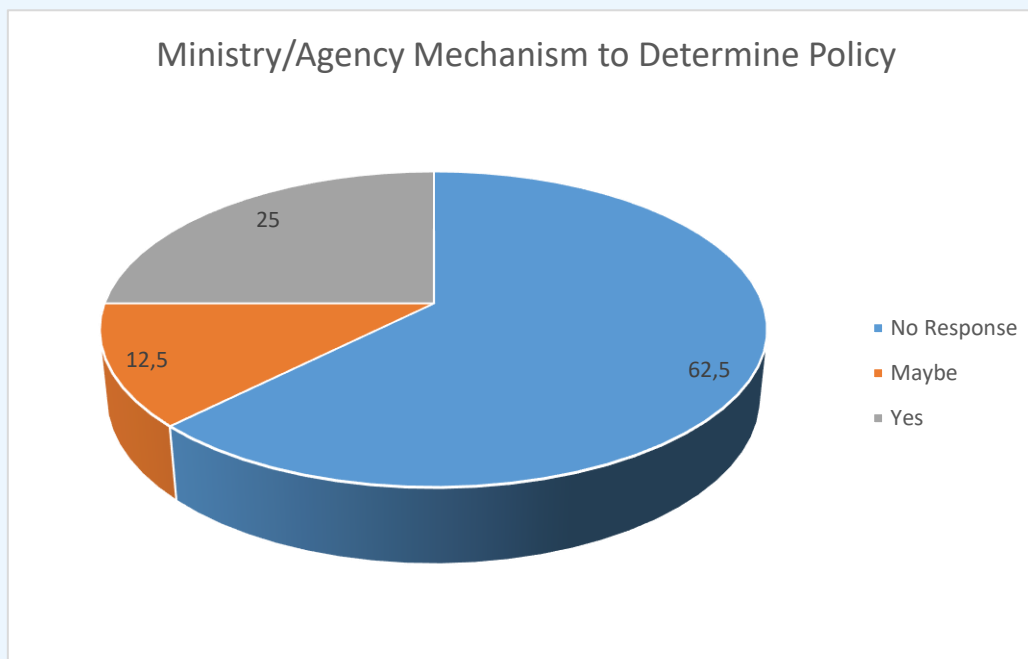


Fig 17: Ministry/Agencies' established mechanism to determine the policy priorities and decision making on biodiversity, natural resource management, economic development and environmental sustainability.

The highlight of approach or process involved in determining policy priorities and decision making.

As shown in the table below, a highlight of approach or process involved in determining policy priorities and decision making was consultative with 12.5% while Critique meetings; Research; Stakeholder's engagement; response to public complaints was (12.5%). 75% had no response.

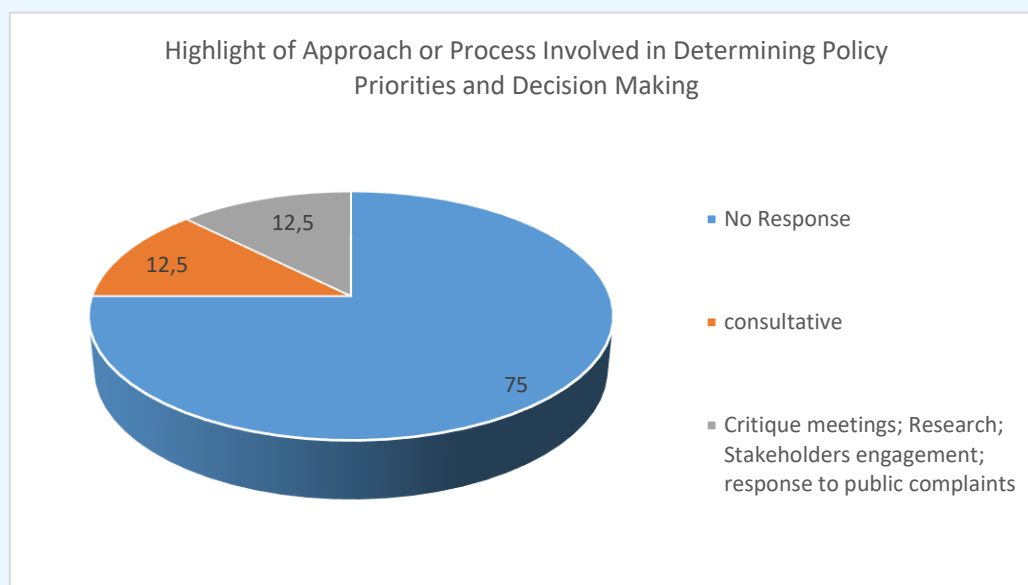


Fig 18: The highlight of approach or process involved in determining policy priorities and decision making.

Results of statistical data on natural resource stock, etc for the determination of policy priorities and decision making.

It was found that relevant statistical data informed the determination of policy priorities and decision making with a not sure status of 12.5% with a somewhat status of 12.5% while with a yes status of 37.5% respectively. 37.5% did not respond.

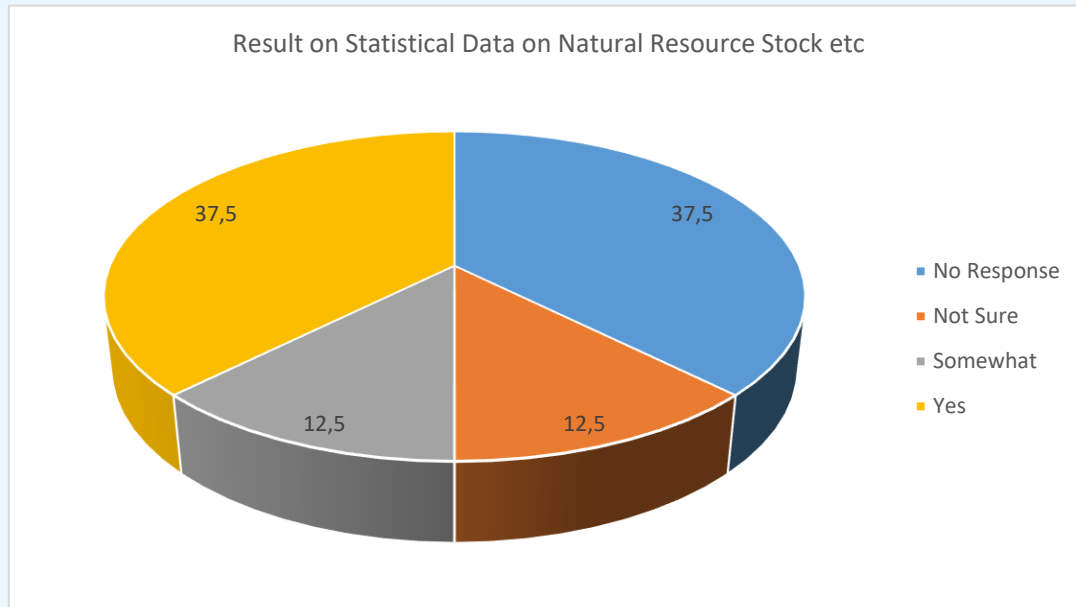


Fig 19: Results of statistical data on natural resource stock, etc for the determination of policy priorities and decision making.



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