



DEPARTMENT OF
CLIMATE CHANGE
GATEWAY TO NATIONAL
ACTION ON CLIMATE CHANGE



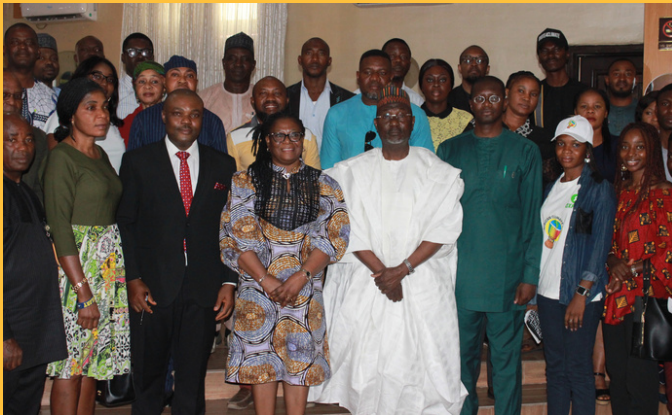
CENTRE FOR CLIMATE
CHANGE & DEVELOPMENT

CLIMATE CHANGE ADAPTATION IN NIGERIA

Strategies, initiatives, and practices

Briefing

2nd Stakeholder/Policy Engagement Meeting



Abuja (Nigeria)
Hybrid-style event
20th January 2023

EVENT

BACKGROUND AND OBJECTIVES

Climate change adaptation in Nigeria is increasingly becoming a serious national issue due to the rise in climate-induced hazards and disasters. To this end, the Federal Government of Nigeria has developed several important frameworks, policies, and strategies aimed at mainstreaming adaptation to reduce inequality and poverty and improve the livelihoods and sustainability of frontline communities. As such, the government is keen to engage with diverse stakeholders to understand the drivers, gaps, barriers, and opportunities of adaptation initiatives in Nigeria and their alignment with Nigeria's Nationally Determined Contributions (NDCs) and other international policies and frameworks.

This stakeholder engagement meeting was organized by the Africa Policy Research Institute (APRI) and the Centre for Climate Change & Development, Alex Ekwueme Federal University Ndufu-Alike Nigeria (CCCD- AEFUNAI), in close collaboration with and the support of the Department of Climate Change (DCC), Federal Ministry of Environment Nigeria.

The meeting was held in the context of the Climate Change Adaptation in Nigeria: Strategies, Initiatives, and Practices Project, which aims to understand the status, challenges, and opportunities of climate change adaptation in Nigeria with a particular emphasis on locally-led adaptation.

The event attracted a diverse audience, including representatives from government agencies and ministries, civil society organisations (CSOs), non-governmental organisations (NGOs), academia, youth, and the private sector.

EVENT

AGENDA

TIME	ACTIVITY	FACILITATOR, PRESENTER
9:30 am - 10:00 am	Arrival of Participants / Registration	All
10:00 am - 10:20 am	Introduction	All
10:20 am - 10:35 am	Welcome Remarks	Director, DCC
10:35 am - 10:45 am	Project Context	Dr. Grace Mbungu
10:45 am - 10:50 am	Looking Ahead	Prof. Chukwumerije Okereke
10:50 am - 11:15 am	Preliminary Findings from Deep-dive Case Studies	Dr. Chukwueloka Okeke
11:15 am - 11:45 am	Discussion/ Questions & Answers	Dr. Chukwueloka Okeke
11:45 am - 11:55 am	Wrap Up	Dr. Grace Mbungu/ Prof. Chukwumerije Okereke
11:55 am - 12:05 pm	Closing Remarks	Director, DCC
12:05 pm - 1:05 pm	Lunch	All

EVENT

SUMMARY OF THE PROCEEDINGS

In her opening remarks, Dr. Iniobong Abiola-Awe, Director of the Department of Climate Change, noted that Nigeria has made stringent efforts toward enhancing its adaptation action plans by developing several national action plans and policy frameworks such as the National Adaptation Framework. These efforts serve “to clarify the country's approach to its national adaptation process and serve as a reference point for bringing together various adaptation planning efforts from different sectors and scales of decision making”. She also underscored the importance of collaborating with APRI and CCCD-AEFUNAI to develop relevant climate change adaptation knowledge, tools, and pathways and thus to enhance Nigeria's development planning process and strategies with all relevant sectors at different levels.

Dr. Grace Mbungu, the Head of the Climate Change Program at APRI noted that the Climate Change Adaptation: Strategies, Initiative, and Practices project is “aimed at understanding the status, challenges, and opportunities of climate change adaptation in Nigeria, with a particular emphasis on locally-led adaptations”. Echoing Dr. Iniobong Abiola-Awe's comments, Dr. Mbungu emphasised the importance of collaboration and the need to work with the government, established local institutions, and in-country researchers to identify and document local adaptation strategies, initiatives, and practices. Only by doing so could it be ensured that these actions are noticed at national and international levels and are supported in being effective, sustainable, and, where appropriate, scaled.

Prof. Chukwumerije Okereke, a Senior Non-resident Fellow at APRI and Director of CCCD-AEFUNAI, underscored the importance of locally-led adaptation actions by noting that numerous Nigerian ethnic groups and indigenous peoples have been taking adaptation actions for centuries, but the scale, extent, and efficiency of their actions have not been fully evaluated. “So, ... what we need to do is to make sure that we are really highlighting those local practices that can help and then attract international funding to scale them up”, Prof. Okereke added.

This fact was picked up in the presentation of deep-dive case studies of locally-led adaptation actions in Anambra, Lagos, and Ogun states by Dr. Chukwueloka Okeke, a Research Fellow at APRI. He illuminated how local communities are at the forefront of climate adaptation actions but that the effectivity and sustainability of their efforts are generally limited by lack of access to funds and relevant information. Speakers emphasised the importance of collaboration in climate change adaptation and the role of locally-led initiatives.

Plenary participants highlighted the importance of developing synergies between all key stakeholders in a way that would enhance delivering and implementing Nigeria's climate adaptation plans in line with its NDCs, its National Adaptation Plan Framework, other national climate action policies and the Sustainable Development Goals (SDGs).

CASE STUDIES: Background

At the event, Prof. Chukwumerije Okereke, a Senior Non-resident Fellow at APRI and Director of CCCD, underscored the importance of the numerous adaptation actions by ethnic groups and indigenous peoples of Nigeria in achieving effective and sustainable climate and development actions. This section provides the background and summary of the key findings of the deep dive into locally-led adaptation actions in Anambra, Lagos, and Ogun states as presented by Dr. Chukwueloka Okeke, the lead researcher of the project.

BACKGROUND

CASE I

Biogas Production for Forest Conservation in Nigeria

This case is about the actions of a farming community in Owode (Ogun State, Nigeria), which is facing massive deforestation and energy poverty. This community is currently in the pilot phase of a project for biogas production using waste from livestock, poultry, and cassava farming and processing.

CASE II

Climate Change Adaptation Strategies in the Fish Farming and Aquaculture Sector

This case spotlights the fish farming community in Abesan and Shagari Estates, in Lagos. Fish farmers are experiencing a complex range of climate impacts such as warmer temperatures and increasing water acidity, which have influenced water quality, the health of their fish, and the quality and quantity of fish production.

CASE III

Adaptive Practices of Rural Communities to Land Degradation in South-Eastern Nigeria

This case study is from Abatete, a community in Anambra State, Nigeria. The community has been experiencing flooding, leaving large gullies from eroded soil. These gullies affect not only community members' ability to farm and access the roads to their farms and markets, with disruptions to lives and livelihood activities, but also the community's general daily life

CASE STUDIES: Research results

1

BIOGASS PRODUCTION FOR FOREST CONSERVATION IN NIGERIA



Owode Community



Ogun State



ADAPTIVE PATH

Forest depletion

Alternative energy

Forest conservation



MOTIVATIONS

- Sustain their means of livelihood
- Avert increasing incidence of climate impacts (e.g. flooding and urban heat islands)
- Improve negative health outcomes from constant fuelwood use

PRACTICES AND STRATEGIES

- Burning of charcoal briquettes from agricultural waste to produce energy
- Production of biogas from agricultural waste (pilot phase)
- Use of by-products from biogas production for soil amendment (pilot phase)

CHALLENGES

- Urban heat islands
- Exposure to weather-related hazards
- Increase in land degradation hotspots
- Reduced crop yields and food insecurity

LIMITATIONS

- No access to international forest conservation frameworks, e.g. REDD+
- Limited supporting policy and environmental governance
- Lack of awareness of climate change risk and vulnerability

CASE STUDIES: Research results

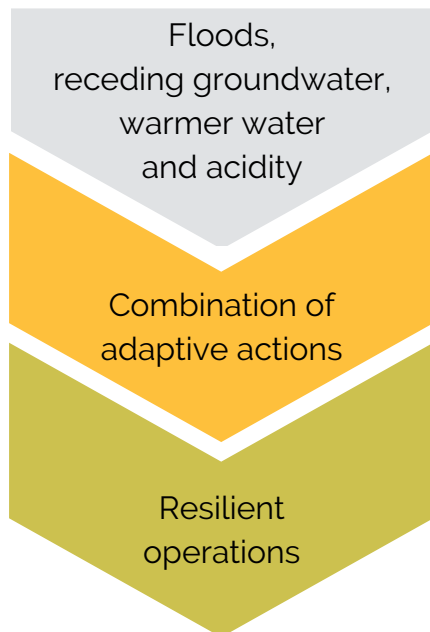
2 CLIMATE CHANGE ADAPTATION STRATEGIES IN THE FISH FARMING AND AQUACULTURE SECTOR



Abesan & Shagari Estates



Alimosho, Lagos state



MOTIVATIONS

- Sustain their means of livelihood and reduce cost of production, subsistence for smallholder fish farmers
- Lack of government/policy support, sense of community
- Associated co-benefits, e.g. access to clean water

PRACTICES AND STRATEGIES

- Use of enclosed tanks with limited use of earthen ponds and drilling of deeper boreholes
- Use of white/black sheets and storage of groundwater in extra tanks for temperature control and installation of water treatment plants
- Use of local chemical bases to neutralise groundwater acidity before supply to fish tanks and use of natural antibiotics e.g. bitter leaf
- Raising brood stock in-house to avoid buying sub-standard stock and crossbreeding species when preferred ones exhibit stunted growth

CHALLENGES

- pH drop (from 6.5 to 4.0) and water table drop
- Low level of dissolved oxygen in the groundwater
- Floodwater inundations and contamination of fish ponds
- Slow maturing brood stock and fingerlings

LIMITATIONS

- Limited access to financial services and poor government/policy support
- Absence of technical know-how to provide functional and standard solutions
- Need for more investment in waste management

CASE STUDIES: Research results

3 ADAPTIVE CAPACITIES OF RURAL COMMUNITIES TO LAND DEGRADATION IN SOUTH-EASTERN NIGERIA



Abatete Community



Anambra State



MOTIVATIONS

- Sustain their means of livelihood
- Fear of losing homes, farms, and access roads to soil/gully erosion
- Associated co-benefits with the women farmers cooperative society

PRACTICES AND STRATEGIES

- Placing of sandbags at active gully hotspots
- Planting of erosion-resistant trees at erosion sites
- Building of high ridges/mounds around vegetable beds to control soil erosion
- Placing of wood logs and twigs in developing gullies to control erosion
- Use of periwinkle and palm kernel shells in place of sand

CHALLENGES

- Eroded farm roads → no access
- Eroded farmlands → food insecurity
- Arable crops occasionally submerged or washed away
- Reduced crop yield due to loss of soil nutrients

LIMITATIONS

- Lack of government support
- Zero access to financial services such as insurance and credit facilities
- Lack of the scientific knowledge needed to mitigate deep-seated gullies
- Current solutions are not very complex and, if not well applied, are not very effective

Floods,
storm surges,
soil/gully erosion

Combination of
adaptive actions

Resilient
operations

ADAPTIVE PATH



MAIN MESSAGES FROM THE EVENT

1

Climate change is a **shared problem**, but **climate action** is also action towards **shared prosperity**.

2

Nigerian **communities** are **actively participating** in **adaptation actions** to support lives and livelihoods, as demonstrated in the three presented case studies.

3

There is **value** in **working** with and in **support** from the **government** and other relevant **stakeholders** to ensure relevance and sustainability of proposed actions.

4

Climate **adaptation** action is **relevant** for **all sectors** of the **economy** and **all aspects** of social and cultural **life** in Nigeria.

5

There is an **urgent need** to identify, document, improve, sustain, and share **local climate adaptation knowledge, strategies, and initiatives** in Nigeria.

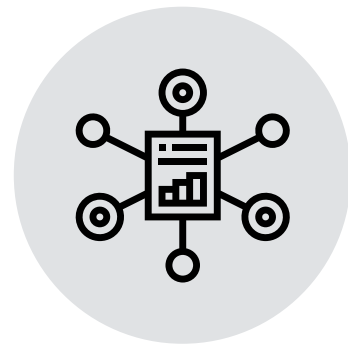
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Although **many Nigerians** are **actively participating** in **adaptation actions** to support lives and livelihoods, **most are not even aware** that they are participating in climate action.

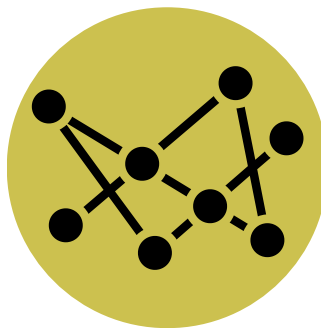
IDENTIFIED CHALLENGES AND GAPS



Need to **domesticate** adaptation policies and actions



Need for a **national framework** on adaptation actions



Need for holistic action on climate change and sustainable development actions. For example, support for agriculture should involve infrastructure development, water management, etc.



Limited environmental **governance** at regional/state and local levels



Limited empowerment of **local communities** to take action (financial, knowledge, human capacity...)

ACTION POINTS AND OPPORTUNITIES

NATIONAL CLIMATE CHANGE ACTION

Study what actions Nigeria is taking with respect to climate change, identifying backable projects, actions, strategies, and initiatives in order to do more and better.

FINANCE

Look inward for financing, from national and private sources, to support climate action.

INDIGENOUS KNOWLEDGE

Optimize local, indigenous/homegrown knowledge and solutions to support climate adaptation and sustainable development. For example, identify, document, and share African indigenous knowledge, actions, and initiatives to support their effectiveness and be able to scale those efforts.

LOCAL ACTORS

Strengthen capacity at the local level and empower local and state governments to support and implement climate action.

HOLISTIC APPROACH AND COLLABORATION

Implement a synergistic and holistic approach to climate change and sustainable development action, as well as collaboration among actors working on climate change action.

CLIMATE CHANGE EDUCATION AND LITERACY

Double up on climate change education and literacy within schools and beyond. For example, UNICEF is providing support for such programmes for children.

PROACTIVE MEASURES

Adopt proactive rather than preventive measures on climate change.

ACTION POINTS AND OPPORTUNITIES

ADAPTATION AND SUSTAINABLE DEVELOPMENT

Given the dual purpose of adaptation (climate action and sustainable development), align actions and interventions to fight climate change with efforts to address sustainable development challenges such as unemployment and poverty. Identify and support climate actions that are also relevant for development, lives, and livelihood support.

ECONOMIC INCENTIVES

Focus on economic incentives to promote climate change action, such as livelihood support and opportunities.

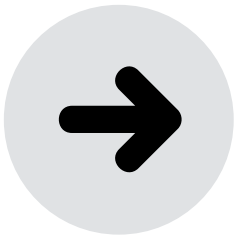
CONSOLIDATION

Consolidate all national plans and policies addressing adaptation into one document that provides guidance for adaptation action in Nigeria.

NEXT STEPS



Development of a **national report** and **policy recommendations** based on the mapping exercise, inputs from stakeholder engagement, and case studies in locally-led adaptation initiatives, together with the Department of Climate Change (DCC).



Launch of **project report** and **policy recommendations** in **Abuja** in **August 2023** in collaboration with the DCC. **Joint planning for a COP28 side event** on adaptation actions in Nigeria based on the results of this project and the ongoing work at the DCC.



Organisation of a **hybrid event in Germany** to **launch** the **synthesis report** on **climate change adaptation in West Africa** (Nigeria, Ghana, and Senegal), timed around COP28.



Discussion and **planning** for **continued collaboration** in support of climate action in Nigeria and, specifically, on locally-led adaptation actions.

ACKNOWLEDGMENTS

We gratefully acknowledge and appreciate the contributions and support of Dr. Iniobong Abiola-Awe, Director of the Department of Climate Change (DCC) and by extension the Federal Ministry of Environment, Nigeria.

We would like to thank Prof. Chukwumerije Okereke, Senior Non-resident Fellow at APRI and Director of CCCD-AEFUNAI, and Dr. Chukwueloka Okeke, the in-country Researcher and Senior Climate Change Fellow at APRI, for leading the research activities and for ensuring the ideas and inputs from all relevant stakeholders were included and the findings were spread among a broad audience.

Our special thanks go to Maite Iriarte Arrieta (Project Intern, APRI) for her support in preparing this briefing. We also thank Dr. Olumide Abimbola (Executive Director, APRI), Dr. Grace Mbungu (Senior Fellow and Head of Climate Change Program, APRI) Serwah Prempeh (Programme Lead, APRI), and Isabella Roberts (Project Coordinator, APRI) for their invaluable leadership and offering administrative support to the project.

Our sincere gratitude goes to all the participants who joined us in person in Abuja and online for their participation and contributions. We would especially like to thank the following organizations; Anambra State Ministry of Environment; Centre for Climate Change & Development (CCCD); Central African Forest Initiative (CAFE); Department of Erosion, Flood and Coastal Zone Management (FMENV); Federal Ministry of Women Affairs; Federal Ministry of Finance, Budget and National Planning; Federal Ministry of Power; Nigerian Meteorological Agency (NiMet); Federal Ministry of Health; Federal Ministry of Transportation; UNDP; UNESCO; UNICEF; Nigeria Climate Change Response Programme (NCCRP); Global Environment & Climate Conservation Initiative (GECCI); Hydrocarbon Pollution Remediation Project (HYPREP); International Organization for Migration (IOM); Niger State Ministry of Environment; Women Environmental Programme (WEP); Nigerian Young Generation in Nuclear (NYGN); Climate & Sustainable Development Network of Nigeria (CSDevNet); Development Impact Pathfinders Initiative (Devimpath); Global Initiative for Food Security & Ecosystem Preservation (GIFSEP); Lagos State Emergency Management Agency; National Institute for Policy and Strategic Studies (NIPSS); NESREA; Nigeria Atomic Energy Commission; Nigeria Stored Products Research Institute (NSPRI); Surge Africa; Suavers Lead Initiative; WHO; WMO; and others.

This briefing was prepared by the Africa Policy Research Institute (APRI) — a Berlin-based independent, non-partisan African Think Tank researching key policy issues affecting the continent.

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