# Climate Change and Interventions in the South-East Zone of Nigeria 2013-2023, Interrogating Measures and Achievements.

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## ABSTRACT

This study interrogated climate change interventions in the South-East zone of Nigeria from 2013 to 2023. The aim was to examine measures taken by both states and non-state actors in trying to mitigate the adverse effects of climate change in the South-East zone of Nigeria within the period under review. The study adopted descriptive approach. The researchers analyzed generated data systematically, to ensure validity and reliability. Particular attention was given to how the climate change interventions have impacted the agricultural, energy and power sectors of the economy of the five states in the South-East zone. The study revealed concerted efforts being made in recent times to address the menace of climate change through improved agro and industrial practices. The findings of this study informed our recommendations on areas requiring reinforcement and special attention. This is necessary to guide government policies on these sectors and future engagements with the development partners going forward.

**Keywords:** Climate change, Development partners, sustainability, adaptation

## INTRODUCTION

Climate change has continued to pose a huge threat to humanity as both lives and livelihoods are subjected to its effects globally. Consequently, the United Nations continued to mobilize state actors annually, since 1994, to seek ways of mitigating the adverse effects of climate change. A major outcome of these meetings is the Paris Agreement of 2015 wherein countries made commitments to measures to be taken to stem tide (United Nations, 2021). Also, part of the provisions of this agreement is the commitment by the industrialized countries to provide USD100 billion annual intervention to the developing countries, to facilitate the achievement of their Nationally Determined Contributions (NDC) targets (United Nations, 2021). Years have continued to roll by, and different countries continue to feel the effects of the climate change in varying degrees, Nigeria inclusive. Nigeria as well as other countries, make budgetary provisions, both at the national and state levels, to checkmate the adverse effects of the climate change. The South-East Zone of Nigeria has a lot in common, especially with regards to the effects of climate change on the geopolitical region's economy. The extent to which these states have devoted resources from their budgets and attracted interventions from the development partners towards ameliorating climate change is the focus of this study. The study therefore relied on data generated from states in the southeast to ascertain the level of commitments and climate actions taken over the last ten years. The study adopted a descriptive approach for this research. Particular attention was given to how the climate change interventions have impacted the agricultural, energy and power sectors of the economy of the five states in the South-East zone. The findings of this study informed our recommendations on areas requiring reinforcement and special attention from the government. This serves as a necessary guide for government policies on these sectors and how government engages with the development partners going forward.

### Problem Statement

Climate change is such a huge threat to humanity that both state and non-state actors in the international arena consider it one of the most dreaded phenomena in the 21st century (United Nations, 2021). It is not bound by space or geography. Climate change has resulted to rising temperature across the globe, extreme and unusual

weather conditions, incessant droughts, flooding, violent cyclones, storms and many other adverse climatic conditions. Consequently, unwarranted deaths have resulted from these in several countries of the world, Nigeria inclusive. Economic investments have been destroyed and the entire ecosystem gravely threatened. Carbon emissions have been primarily blamed for climate change. Accordingly, World Health Organization (2022) pointed out that the phasing out of polluting energy systems, or the promotion of public transportation and active movement, could both lower carbon emissions and cut the burden of household and ambient air pollution, which causes about 7 million premature deaths per year.

At the opening plenary of the High-Level Segment of CoP22 held at Marrakech- Morocco, 2016, the then Nigerian President, Muhammadu Buhari pointed out that climate change has taken serious tolls on the Lake Chad as it has shrunken to a mere 10% of its original size with negative consequences on the livelihood of more than 5 million people (Vanguard, Nov. 28, 2016). The former President Buhari also noted that the impact of climate change is also being felt by the more than 2.1m Nigerians displaced by devastating floods suffered since 2012.

Again, Nigeria is an oil dependent nation which is also ranked as one of the most vulnerable countries as long as climate change is concerned (WHO, 2022). Nigeria has been struggling to diversify its economy through increased investments and support to the agricultural sector. Climate change remains a big threat to the agricultural sector. The Nature Conservancy (2018) observed that from straining agricultural systems to making regions less habitable, climate change is affecting people everywhere. This is even more factual when the agricultural sector is central to the country's economic viability. Climate change therefore poses a grave threat to lives and livelihoods across many countries of the world and this includes Nigeria. The South Easter states of Nigeria are therefore seriously affected and are expected to be taking steps to curb the menace. These constitute the primary concerns of this study.

**Objectives of the Study**

The study has broad and specific objectives. The broad objective is to examine how the five states in the South-East geopolitical zone of Nigeria have fared, managing climate change interventions and committing to measures aimed at mitigating the adverse effects of climate change within the geopolitical zone. The specific objectives are to:

1. Evaluate climate change interventions in the five states of the South-East within the period under review.
2. Examine the climate actions taken by the five states in the South-East geopolitical zone of Nigeria within the period under review.
3. Recommend measures to achieve better results with climate actions within the South-East geopolitical zone.

## LITERATURE REVIEW

Dale, Houghton, Greunger, Lugo & Brown (1993) took interest in emissions of greenhouse gases from tropical deforestation and subsequent uses of the land in sustainable agriculture and the environment in the humid tropics. Emphasis of this study was on deforestation and sustainable agriculture in the humid tropics.

Eamus (1991) sought to determine the interaction of rising $CO_2$ and temperatures with water use efficiency-plant cell environ. The study concluded that substantially more data is required before reliable predictions about the regional scale response of water use efficiency plant and catchment hydrology can be made.

Fleischer, Timlin and Reddy,Yang, Kim and Reddy (2010) examined effects of $CO_2$ and temperature on crops and pointed out that results from field studies that evaluated the growth and development of crops implicitly include a limitation of the generic potential of the individual plant as a result of interactions with below and above ground factors.

Turner, Clark, Robert, Richards, Matthew and Meyer (1990) studied the Earth as Transformed by Human Action.

The emphasis was on how various human activities are changing the earth, affecting the entire ecosystem.

Hsiang, Burke & Miguel (2013) studied the influence of climate on human conflict and stated that they found strong causal evidence linking climate events to human conflict across a range of spatial and temporal scales and across all major regions of the world. Jurik, Weber and Gates (1984) studied short-term effects of Co2 on gas exchanges of leaves of Bigtooth Aspen in the field. They found a shift in optimum temperature of CER of aspen in saturating Co2 and saturating light, relative to the optimum temperature in ambient Co2.

Kimball, White, Wall and Ottman (2012) studied infrared-warmed and un-warmed wheat vegetation indices coalesce using canopy-temperature-based growing degree days. They noted that large differences existed between the total amounts of air or canopy temperature-based GDDs required for wheat to mature in our irrigated fields in an arid region.

Kirkham, (2011) examined the impacts elevated carbon dioxide has on soil and plant water relations. He observed that continued increase in co2 concentration will significantly affect long-term climate change, including variations in agricultural yields. Lin, Ziska, Namuco, & Bai (1997) did a study on the interaction of high temperature and elevated $CO_2$ on photosynthetic acclimation of single leaves of rice. They found that the reproductive response was reduced at the higher growth temperature and presumably reflects a greater increase in floral sterility.

Ramanathan and Feng (2008) studied 'Air Pollution, Greenhouse gases and climate change'. Interrogating global and regional perspectives. The study revealed that globally, the surface cooling effect of ABCs may have masked as much as 47% of the global warming by greenhouse gases, with an uncertainty range of 20-80%. They pointed out that this presents a dilemma since efforts to curb air pollution may unmask the ABC cooling effect and enhance the surface warming.

Achike and Onoja (2019) looked at greenhouse gas emission determinants in Nigeria, the implications for trade, climate change mitigation and adaptation policies while Ajaero and Anorue (2018) took interest in Newspaper farming and climate change mitigation in Nigeria and Ghana. Idso and Idso (1994) showed interest in plant responses to atmospheric $CO_2$ enrichment in the face of environmental constraints. Idso and Kimball (1992) on another study looked at $CO_2$ enrichment of sour orange trees and found that in less than 2 years, the trunks of the o2 enriched trees had become twice as large as their ambient treatment counterparts. For Dioha and Emodi (2018) the focus was on Energy- Climate dilemma in Nigeria, options for the future. The scholars insisted that Nigeria has the highest number of persons living without access to electricity and clean combustible cooking fuels in Africa.

Elum and Momodu (2017) studied climate change mitigation and renewable energy for sustainable development in Nigeria. They observed that global anthropogenic activities resulting in the emission of harmful greenhouse gases to the atmosphere have increased the challenges faced from climate change.

Oyegun (2016) investigated petroleum development and environmental quality in the Niger Delta while Sokari (2016) sought to find the silent and sinister effects of gas flaring in the Niger Delta region. These studies which focused on Niger Delta region of Nigeria came up with results pointing to the dangers of environmental pollutions.

For Yakubu (2017), particle pollution in Port Harcourt, Rivers state was the focus. He noted that in recent years, urban air quality in developing countries such as Nigeria has continued to degenerate, thereby constituting a major environmental risk to human health. Ajiere and Nwaerema (2020) studied climate change and air pollution, implications for human health and environment in Rivers state. They maintained that the importance of sustainability is geared towards development that meets the needs of the present without compromising the ability to also meet future needs and that is why all nations of the world are finding solutions to reduce the impact of climate change and air pollution in the environment.

Ede and Edokpa (2017) took special interest in Satellite determination of particulate load over Port Harcourt during black soot-incident. It was argued that the air quality index of a location informs how clean or unhealthy

the ambient air is. Ugbebor, Yorkor and Amadi (2019) assessed the air quality and its health implications on Abuja campus residence. Their study revealed that the air quality in business area of Abuja campus of the University of Port Harcourt is polluted and poses a major risk to human health.

Weli, Adegoke and Eyo (2018) examined the incidence of soot and surface boundary layer meteorology in Port Harcourt metropolis. They cautioned that the current illegal mining of crude oil along pipelines crisscrossing the coastal areas of Rivers state is the reason for the incidence of soot in the lower troposphere of the city of Port Harcourt.

Greenhouse gas emission is a critical factor in climate change. Rising temperatures from human-caused greenhouse gas emissions affects planet-wide systems in various ways (The Nature Conservancy; 2018). It explained that it warms the Polar Regions and the oceans, which melts ice cover at the poles and causes sea level rise. This also affects ocean habitats by lowering oxygen, deceasing phytoplankton and killing coral reefs. Many scholars agree that climate change is an outcome of human activities. Over 97% of scientists agree that human activities engineer climate change (The Nature Conservancy; 2018). The group noted that humanity's accelerated burning of fossil fuels and deforestation has led to rapid increases of greenhouse gases in the atmosphere and global warming. Clearly, climate change results to temperature rise, intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar rice, devastating storms and declining biodiversity (United Nations; 2021).

Carbon emissions have continued to increase and this poses a huge threat to the ozone layer. The rate of carbon emissions are the highest they have been in 66 million years and the amount of warming in the coming decades is expected to be 250 times greater than the average warming during the past century (The Nature Conservancy; 2018). Scholars observed that the warming of the atmosphere affects wealth patterns, causing more frequent and severe storms and droughts across many global regions and that these higher temperatures are affecting the length of seasons. These are already crossing safe levels for ecosystems and humans.

## METHODOLOGY

This study adopted descriptive approach. This enabled the researchers generate data that complemented the secondary data generated for the study. Structured questionnaires and oral interviews were used to generate data from relevant agencies and departments of government and where necessary, development partners and corporate bodies. The study covers the five states in the South-East geopolitical zones namely, Enugu, Anambra, Abia, Imo and Ebonyi states. The researchers focused on climate change interventions in these states in the area of Agriculture, energy and power sectors. However, owing to the volume of data generated, extensive work was done to summarize the data before presentation.

### Data Presentation and Analysis

The researchers adopted thematic approach to data presentation and analysis. Consequently, the data generated were distilled and analyzed under the under-listed sub-themes.

### Climate change interventions and economic development in Southeast, Nigeria

Combating Climate Change is a massive investment in the economic and technological advancement of Nigeria. Fatoki and Sasona (2015) observed that by about 2030, the incremental investment needed for mitigation in developing countries could be $140 to $175 billion, with associated financing requirements of $265 to $565 billion yearly. This is humongous considering the capacity of the developing countries and the nature of funding (loans) and quantum of support coming from the donor agencies and the development partners. This aligns with the practical reality of the findings of this study.

The poor countries have fewer resources to invest in adaptation, with their economies heavily reliant on subsistence agriculture. This agricultural sector of the economy has widely been acknowledged as most vulnerable to changes in the climatic and weather conditions (Fatoki and Sasona; 2015). The case of the states in the south east cannot be better described. Evidently, the poor countries are least responsible for causing climate

change, yet most vulnerable and this includes Nigeria, among which are the states under review. The 2017 Climate Change Vulnerability Index (CCVI) published by the UK-based risk company (Verisk Maplesoft), classified Nigeria as a region of high risk, and indicated that the country is one of the topmost vulnerable countries in the world (Federal Ministry of Environment; 2021). Obviously, due to the magnitude of the challenge, monies made available for developing countries by the foreign donors, Nigeria inclusive, are grossly inadequate to meet the countries' NDC targets.

Moreso, the Federal Ministry of Environment (2021) noted that an investment of 177 billion USD is indicated in the Nationally Determined Contributions for implementation that covers 2021 to 2030. It however explained that this value is an economy-wide productive investment that is not expected to be a burden exclusively on the government budget. The implication is that government would be relying reasonably on interventions from foreign donors and private sector. Some of these interventions actually came in form of micro-managed projects executed in Nigeria by development partners, grants and loans from multilateral agencies, tied to specific climate actions. Accordingly, Busby, Smith and White (2011) argued that government response to climate change in Nigeria has been inextricably tied to the programs of international donors working in Nigeria. Nigeria remains a top recipient of international development funds in Africa. This over dependence on the foreign donors clearly slows the pace of progress and this affects development in the south east. The pace is dictated by the Federal government, who in-turn rely on the guidance of the development partner.

For instance, NEWMAP initiated mechanisms to protect Nigerians from climate change impacts. The project focused on the restoration of 90 gully sites and the construction of close to 60 catchments to control erosion. The Nigeria Erosion and Water Shed Management Project (NEWMAP), adopted innovative integrated approaches based on community participation to address several gully erosion menaces in many communities in the country. The projects completed in 2022, linked poverty alleviation with sustainable ecosystems and better disaster-risk prevention. This approach has improved the lives and safety of more than 12 million people in 23 states in Nigeria (The World Bank; 2022). World Bank Group (2022) also noted that warning systems were implemented, and 103 automated weather and flood alert. Warning systems provide data for catchment planning, rainfall prediction, and flood monitoring for five River Basin Development Authorities. Storm water diversion plans were developed to stop gully formation, manage flood risks in urban areas, and adapt to higher rainfall. It also assisted in helping farmers cope with droughts, climate-smart agricultural innovations, conserve water with innovations as solar-powered drip irrigation and rainwater harvesting.

The World Bank (2022) posited that the NEWMAP supported initiatives helped decrease greenhouse gas emissions, improved afforestation and innovative technologies, such as fuel-efficient cook stoves, solar-powered Primary Health centers, borehole pumps, meat-dryers, and agro-processing plants introduced to reduce greenhouse gas emissions, impact of deforestation, and over reliance on fossil fuels and fuel woods. In addition, 185,000 local government officials and community members were trained in environmental management to boost their knowledge of land degradation, soil and water sustainable farming, and climate friendly waste management methods.

Nigeria's hope to decrease the use of diesel generators for back-up power by improving on-grid power generation and delivery, and by producing an additional 13 gigawatts of off-grid solar power by 2030 also got some buy in. The United States Government's Power Africa initiative, coordinated by USAID, supported the Nigerian government efforts in this direction by unlocking stranded generation through improving on-grid transmission and distribution capacities; facilitating implementation of Nigeria's Presidential Power initiative to improve grid reliability and reach 25 gigawatts of power generation by 2023; and supporting off-grid projects like the 'Solar Power Naija' program and the Nigeria Electrification Project, which will energize millions of houses and offices through the solar home systems and solar hybrid mini grid (USAID; 2022). These efforts supports Nigeria's Electricity "Vision 30:30:30 that aims to increase electric power generation from 5.5 gigawatts to 30 gigawatts with 30 percent of the power sourced from renewable energy resources by 2030. Nonetheless, electricity generation in Nigeria remained abysmally poor.

Since 2013, the Power Africa initiative has achieved nearly two million new on and off grid connections, more than $4.3billion of power sector investment mobilized through U.S Government assistance (USAID; 2022).

Power Africa also helped to develop the $330 million 'Solar Power Naija' Program to provide concessionary financing to private sector developers to deploy five million new solar connections by year 2023. USAID is supporting the Nigerian government's climate priorities by implementing resilience-building activities with a focus on vulnerable communities in ecologically sensitive regions in Nigeria. This has resulted to about 1 million smallholder farmers' use of improved seed varieties, like drought-tolerant and early maturing seed varieties (USAID; 2022). The study also pointed out that over 21,000 hectares of farmland are under improved management practices or technologies that strengthen resilience to withstand shocks from climate change.

The efforts of the Nigerian government to increase on-grid reliability and renewable energy supply are receiving meaningful support from USAID. However, it faces challenges implementing climate priorities related to gas flaring, gas-to-power generation, transportation, climate-smart agriculture, and reforestation (USAID; 2021). USAID also is supporting Nigeria's government development and climate priorities through Power Africa, agricultural feed the future initiative interventions, and Water, Sanitation, and Hygiene Programming (USAID; 2021).

Carbon Brief's climate finance analysis shows that Nigeria received $136m in international climate finance in 2016, more than half of which came from EU grants (858m for energy policy development and $40m for Disaster Risk Reduction-related initiatives (AfronomicsLaw; 2021). Other internationally financed projects in Nigeria include $25m toward a credit system for renewable energy and energy efficiency projects, $5m for a sustainable fuel wood management system, and $3m for scaling up hydropower.

The Bank of Industry (BOI) and the French Development Agency (AFD) signed a N2.5 million grant agreement dedicated by the Green Climate Fund (GCF) to fight climate change in Nigeria (Business Day; Feb. 12, 2023). The aim is to provide tools for effective identification and development of eligible bankable climate-related projects as well as improve the readiness of the bank's customers to implement green practices in their operations. On the 23rd of August, 2022, the BOI and French agency signed a N100 million credit line to expand green finance in Nigeria. This was approved under AFD's Transforming Financial Systems for Climate (TFSC) programme with the Green Climate Fund, a $650 million program developed in 17 countries for 100 percent climate investment projects (BusinessDay; Feb. 12; 2023).

For World Bank (2022), the most comprehensive adaptation projects in Nigeria in recent years include (a) the World Bank assisted Nigeria Erosion and Watershed Management project (NEWMAP), which was designed in collaboration with the Federal Ministry of Environment to tackle the menace of gully erosion in South-East Nigeria and other forms of land degradation in the Northern Nigeria. The study noted that upon approval in 2012, the World Bank Committed approximately USD 500million to it. The project had three facets; (a) Gully Rapid Action and Slope Stabilization (GRASS); (b) Integrated Watershed Management and (c) Adaptive livelihoods. These were implemented in 19 states of Nigeria.

The Africa Development Bank (AfDB) on its part launched USD25billion Africa Adaptation Acceleration Program (AAAP) in collaboration with the Global Centre on Adaptation (GCA) (Butu, Okeke and Chukwumerije; 2022). This was targeted at unlocking financing from African governments, investors, foundations, resilience bonds and debt for climate adaptation swaps. This project was aimed at providing adaptation solutions and best practices to 1,100 villages in the region and in bordering countries. It was a five-year project undertaken from 2013-2018.

In 2021, the World Bank again launched a NEWMAP successor in the Agro-Climate Resilience in Semi-Arid Landscapes (ACReSAL). This project was a $700 million project aimed at improving landscape management in Northern Nigeria. The project has four components intended to address the challenges of large-scale watershed degradation in northern Nigeria, improve community climate resilience, strengthen institutional capacity ad enable institutional and policy foundation for multi-sectoral integrated landscape management and climate resilience (Butu et al; 2022). The scholars observed that, like most nations in the Sub-Saharan Africa, Nigeria relies on foreign loans, aid and grants to finance more than 50% of its climate adaptation and mitigation activities. They explained that a significant percentage of the project costs are born by multilateral financial institutions (MFIS), especially, the World Bank, the AFDB, GIZ, FCDO and USAID.

## RESULTS

This study revealed the extent to which the states in the South-East geopolitical zone of Nigeria have shown commitment to combating climate change. It has also shown the extent to which interventions from development partners have been utilized in the south east geopolitical zone of Nigeria. Particularly, focus was on the agricultural sector of the economy, and innovations in the energy and the power sectors of the economy. These are expected to be quite instructive in guiding policy directions for government in the south-east geopolitical zone of Nigeria.

## CONCLUSION

Most of the programmes of these states are tied to the programmes of the Federal government of Nigeria in trying to mitigate the effects of climate change in the country. Leading the states in the South East geopolitical zones of Nigeria in efforts at climate interventions and building resilience is Enugu state government led by Barr. Peter Ndubuisi Mbah. Bold steps have been taken by the said administration towards sustainability, adaptation and green economy. The state government made a historic move in this direction with the Enugu state climate policy and action plan (ESCPAP), signaling a strong commitment to economic transformation, rooted in environmental sustainability, innovation, inclusiveness, and climate resilience. The policy articulated innovative steps that will ensure that key sectors, such as agriculture, energy, natural resources, and climate-resilient actions are taken progressively. The approach aims to facilitate clean energy development, stimulate job creation, and foster green technological advancements.

**Some key deliverables of the action plan are**

- **Energy transition**: The state targets 80% renewable energy usage by 2060, with a 60% emission reduction in the transport sector, and a robust afforestation plan to enhance carbon sequestration.
- **Climate Resilience**: The policy emphasizes enhancing adaptive capability and reducing vulnerability to climate related challenges, such as flooding and droughts.
- **The Enugu State Executive Council also approved the Enugu state Off**-Grid Electrification (OGE) policy strategy plan, to expand electricity access to unserved and underserved communities, leveraging distributed renewable energy solutions to drive economic growth and improve public service delivery (Vanguard, 27; 2025).

**In Agriculture**

In collaboration with the African Development Bank (AfDB), important private investors, and the Federal Government of Nigeria, the Enugu State Government (ENSG) are developing a special Agro-Industrial Processing zone (SAPZ) project in three locations in the three senatorial zones of the state (ESIA; 2023). See the table below.

**Table ES1: Project categories of SAPZ and Planned Activities**

| SN | Building blocks | NAPZ Categories | Activities |
|---|---|---|---|
| 1 | Agricultural Transformation | Nursery bed | . Develop Nursery bed for palm tree and cocoa |
| | | Oil palm production | . Support to the farmers for transplanting and of oil palm seedlings and production of oil palm. |
| | | Cassava production | . Support farmers for the production of cassava that will serve as feedstock for the ethanol production plant. |
| | | Maize production | . Support farmers for the production of maize that will serve as feedstock for animal feed production. |
| | | Fodder production | . Support farmers for the production of fodder plants for animal grazing |

| | | | |
|---|---|---|---|
| | | Yam production | . Support farmers for the production of yam |
| | | Cocoa Production | . Support farmers for the production of cocoa |
| | | Poultry production | . Construction of poultry houses-deep litter, and battery cage systems |
| | | Livestock production | . Construction of pens for cattles, sheep and goat production |
| | | Breed improvement zone | . Construction of breeding stations |
| | | Soybean production | . Support farmers for the production of soybean that will serve as feedstock for animal (poultry) feed production. |
| 2 | Aggregation center (AC) | Crop sgtorage zone | . Warehouse for the storage of crops and silos for grain storage |
| | | Livestock Handling and storage zone | . Construction of animal handling and storage house |
| | | | . Veterinary and Disease control, construction of veterinary and quarantine stations |
| 3 | Agro-Industrial Hub (AIZ) | Cassava processing | . Ethanol production plant |
| | | Livestock processing zone | . Construction of Abattoir/slaughter house (cattle, sheep, goats, poultry)<br>. Construction of meat processing and storage facilities (coldroom)<br>. Construction of leather curing facilities<br>. Construction of boreholes for water supply<br>. Construction of wastewater treatment plants. |
| | | Animal feed (poultry and aquaculture) | . Animal feed production plant |
| | | Oil palm processing | . Processing of oil palm-palm oil, palm kernel oil and other derivatives. |
| | | Fodder plant | Fodder plants for the processing of feed for livestock |
| | | Infrastructure development | . Access roads, bridges and drainages.<br>. Livestock market<br>. Facilities for managing waste, including wastewater, manure and dead animals.<br>. Building for workers and storage facilities, including farmhouses, offices, Agro-input shops, stores (for feed, materials and equipment) etc<br>. Other buildings including Vocational Training Centre, Primary School and clinic<br>. Truck parking area/car park<br>. Solar farm |

The first phase of the special Agro-Industrial Processing Zone (SAPZ) programme is being implemented in seven (7) states, namely: Cross River, Imo, Kaduna, Kano, Kwara, Ogun, and Oyo, and the Federal Capital Territory (FCT). This phase is valued for a total sum of USD538.05 million (net taxed), funded by AfDB, IsDB,

IFAD, GCE, Federal and state governments.

Expressions of interest in the second phase came from twenty-one (21) states, including Ebonyi state, to participate, having submitted to the Federal Ministry of Agriculture and Food security.

Ebonyi state and other states in the southeast has been enlisted as one of the states to participate in the second phase, having met the pre-conditions for enlistment. Interestingly, Ebonyi state is a leading producer of rice, cassava, yam, potatoes, maize, and beans (...) The state government has prioritized food security and hunger reduction, and to achieve this, it has embarked on an aggressive agricultural revolution with about 2 billion naira in consolidated funds, to boost rice production in the state (...).

The state government, in conjunction with the CBN, has also made it possible for rice farmers in the state to benefit from Anchor Borrower's Programme (ABP) introduced by the apex bank, and over 100,000. Farmers in Ebonyi state have benefited from the scheme. Ebonyi state has this programme of 'one man, one hectre' for agriculture. This is aimed at guaranteeing food security in the state.

Anambra and Abia states are not left out. The Anambra state government (ANSG) is also participating in the Special Agro-Industrial Processing Zone (SAPZ) II programme to boost agro-industrial development through the establishment of an Agro-Industrial Hub (AIH) and three Agricultural Transformation Centers (ATCs). The components include

- Climate adapted infrastructure for Agro-Industrial Hub
- Agricultural productivity and production boost
- Policy & Industrial Development, and
- Program Coordination and Management (AN-ESIA Report, 2024)

Therefore, states in the southeast geopolitical zone of Nigeria have, on a general note keyed into, and initiated programmes aimed at engineering or developing climate friendly economy. However, the area still requires intensified government efforts to match the challenges posed by climate change.

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