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A Review of Agricultural Development, Trends and Policy's Impact on Nigerian Food Security and Nutrition from 2015–2025

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ABSTRACT

The study focused on a decade (2015–2025) trend analysis of Nigerian food security and nutrition. Secondary data were employed to collect agriculture's share of Nigeria's annual budgetary allocations, agriculture's GDP share, malnutrition rates, Human Development Index (HDI), and food price inflation (Consumer Price Index). Data were analysed using trend analysis. Results showed that despite continued government efforts since 1972, Nigeria has not achieved food self-sufficiency. Rising food insecurity, malnutrition, and inflation indicate persistent systemic challenges. The study concludes that food security and nutrition remain unachieved despite numerous agricultural policies. It recommends that the Nigerian government allocate at least 10% of the national budget to agriculture to foster sustainable growth, employment, food security, export earnings, and improved life expectancy and per capita income. Rigorous monitoring and evaluation of agricultural projects are also advised.

INTRODUCTION

The United Nations Sustainable Development Goal 2 (SDG 2), established in 2015, aims to end hunger and achieve zero hunger globally by 2030, including halving food insecurity and malnutrition (United Nations, 2015). However, with only five years remaining to 2030, Nigeria continues to grapple with severe food insecurity, malnutrition, and low HDI often compounded by high food price inflation (African Development Bank [AfDB], 2023, 2025). Despite numerous agricultural initiatives by the federal government aimed at food security, wealth creation, and improved living standards (Nigerian Economic Summit Group [NESG], 2024; World Bank, 2023), the situation has deteriorated.

According to NESG (2024), Nigeria faces an unprecedented food crisis. Inflation reached 28.9\% in December 2023, pushing 14 million Nigerians into poverty, and further surged to 35.41\% in January 2024. These challenges were exacerbated by foreign exchange volatility, border closures, and widespread insecurity in the North-East, North-Central, and North-West regions. The World Food Programme (WFP, 2024) reported that food-insecure individuals rose from 28 million pre-COVID-19 to over 100 million in Q1 2024, with 26.5 million facing acute hunger between June and August 2024 up from 18.6 million in Q4 2023.

The National Bureau of Statistics (NBS, 2024) noted that food costs increased by 61\% between Q2 2023 and Q2 2024, severely impacting low-income households. In the North-East, conflict displaced 2.2 million people and pushed 4.4 million into food scarcity in Borno, Adamawa, and Yobe states (WFP, 2024). Boko Haram-related violence displaced over 2.3 million farmers (UNICEF, 2023), disrupting production and driving up prices. Additionally, climate shocks droughts and floods have undermined agricultural productivity (NESG, 2024).

Malnutrition remains critical: 37% of children under five suffer severe malnutrition, with a Global Acute Malnutrition (GAM) rate of 14% (USAID, 2021). Malnutrition impairs physical and cognitive development. Adults and the elderly are also vulnerable due to declining household resources (Adekunle, Akinbode, Shittu, & Momoh, 2020; Michael Okpara University of Agriculture, Umudike [MOUAU], 2024; Agricultural Research Council of Nigeria [ARCN], 2024).

The Global Hunger Index (GHI, 2024) reports that stunting has remained at 32% since 2015, wasting at 8.25%, while undernourishment worsened from 11.5% in 2015 to 16.5% in 2024 (UNICEF, 2024). Inflation rose from 10.76% in 2015 to 26.08% in 2024 (NBS, 2024). Agriculture's share of GDP declined from 25.13% in 2018 to 20.50% in 2024 (AfDB, 2024; NBS, 2025), and budgetary allocations have consistently remained below 3%, far short of the African Union's Maputo (2003) and Malabo (2014) Declarations' 10% target (African Growth and Opportunity Act [AGOA], 2021; West African Agricultural Productivity Programme [WAAPP], 2021).

Historical Agricultural Policies and Programmes in Nigeria

To contextualize current challenges, it is essential to review key agricultural policies implemented since independence. These include:

- National Accelerated Food Production Programme (NAFPP, 1972)
- Agricultural Development Projects (ADPs, 1974)
- Operation Feed the Nation (OFN, 1976)
- River Basin Development Authorities (RBDAs, 1976)
- Green Revolution (GR, 1979)
- Directorate of Food, Roads and Rural Infrastructure (DFRRI, 1986)
- Better Life Programme (BLP, 1987)
- People's Bank of Nigeria (PBN, 1989)
- National Agricultural Land Development Authority (NALDA, 1992)
- National Economic Empowerment and Development Strategy (NEEDS, 1999)
- Presidential Initiative on Agriculture (PIA, 2002)
- National Special Programme on Food Security (NSPFS, 2002)
- Fadama Development Project (FDP, 2003)
- Agricultural Transformation Agenda (ATA, 2011)
- Nigerian Incentive-Based Risk Sharing for Agricultural Lending (NIRSAL, 2011)
- Central Bank of Nigeria Anchor Borrowers' Programme (ABP, 2015)
- Agricultural Promotion Policy (APP, 2016)
- Green Imperative Programme (GIP, 2019)
- Zero Reject Initiative (ZRI, 2020)
- Presidential Economic Diversification Initiative (PEDI, 2020)
- National Agricultural Technology and Innovation Policy (NATIP, 2021)
- National Agricultural Development Fund (NADF, 2023)
- Nigeria Farmers Soil Health Card Scheme (NFSHCS, 2024)
- Temporary import duty waivers on key agricultural commodities (2024)

Despite this extensive policy landscape, implementation gaps, underfunding, and insecurity have limited impact (ARCN, 2024; NBS, 2025).

Statement of the Problem

Despite being a signatory to continental and global commitments on food security, Nigeria remains highly vulnerable to hunger and malnutrition. In 2018, Nigeria ranked 96th out of 113 countries on the Global Food Security Index (GFSI), with a national poverty rate of 38% (VCDP Nigeria, 2025). Key indicators reveal systemic failures:

- Agricultural budgetary allocation averaged <3% (2015–2025), far below the AU's 10% benchmark;
- Agriculture's GDP share declined from 25.13% (2018) to 20.50% (2024) (AFDB, 2024; NBS, 2025);
- HDI remains low (0.548 in 2022), with life expectancy stagnating and GNI per capita falling from $5,433 (2015) to $4,790 (2022) (World Bank, 2023);
- Malnutrition persists: 32% stunting, 8.5% wasting, and 16.5% undernourishment (GHI, 2024; UNICEF, 2024);
- Food price inflation rose from 10.76% (2015) to 26.08% (2024) (NBS, 2024).

This misalignment between policy intent and outcomes underscores an urgent need for strategic reorientation in agricultural investment and governance.

Research Objectives

The broad objective is to review agricultural development, policy trends, and their impact on food security and nutrition in Nigeria from 2015 to 2025. Specific objectives are to:

i. Assess trends in national budgetary allocations to agriculture (2015–2025);
ii. Analyze the contribution of agriculture to Nigeria's GDP over the same period;
iii. Review key agricultural policies, programs, and initiatives implemented between 2015 and 2025;
iv. Evaluate trends in Nigeria's Human Development Index (HDI);
v. Examine malnutrition prevalence and food price inflation rates and their implications for policy.

Agricultural Programmes, Initiatives and Strategies

Nigeria has implemented numerous agricultural interventions since independence. While many predate 2015, they provide essential context for current challenges. Key programs include:

- **Pre-2015**: NAFPP (1972), ADPs (1974), Operation Feed the Nation (1976), Green Revolution (1979), DFRRI (1986), NALDA (1992), NEEDS (1999), PIA (2002), FADAMA (2003), ATA (2011), NIRSAL (2011).

- **2015–2025**:

- Anchor Borrowers' Programme (ABP, 2015) – Input-financing for rice, maize;
- Agricultural Promotion Policy (APP, 2016**)** – "Green Alternative" for private-sector-led growth;
- Green Imperative Programme (GIP, 2019**)** – $1.1bn Brazil-backed mechanization deal;
- National Agricultural Technology and Innovation Policy (NATIP, 2021**)** – Focus on climate resilience;
- National Agricultural Development Fund (NADF, 2023**)** – Target: ₦1 trillion by 2030;
- Soil Health Card Scheme (2024) – Promote precision farming;
- Temporary import duty waivers (2024**)** – To curb food inflation.

Despite this policy density, implementation gaps, poor coordination, and chronic underfunding have limited impact.

Methodology

This study employs a systematic review and trend analysis of secondary data from 2015 to 2025. Data sources include:

- National Bureau of Statistics (NBS)
- World Bank
- African Development Bank (AfDB)
- FAO, WFP, UNICEF

- Central Bank of Nigeria (CBN)
- Government policy documents
- Variables analyzed:
- Agricultural budget (% of total national budget)
- Agriculture's share of GDP
- HDI components (life expectancy, education, GNI per capita)
- Malnutrition indicators (stunting, wasting, undernourishment)
- Food price inflation (CPI)

Trend analysis was used to identify patterns, turning points, and policy implications.

RESULTS AND DISCUSSION

1. Agricultural Budget Allocation (2015–2025)

(Table 1 revised – years and sources specified) Note. * = projected/estimated values.

Year	Total Budget (₦ trillion)	Agriculture Allocation (₦ billion)	Agriculture Share (%)	Major Agricultural Program/Initiative
2015	4.49	39.53	0.88	Agricultural Transformation Agenda (ATA)
2016	6.06	75.86	1.25	Agricultural Promotion Policy (APP)
2017	7.44	135.4	1.82	Economic Recovery and Growth Plan (ERGP)
2018	9.12	203.9	2.23	Anchor Borrowers' Programme (ABP)
2019	8.92	322	3.61	Anchor Borrowers' Programme (ABP)
2020	10.59	160	1.51	COVID-19 Health & Economic Relief
2021	13.59	215	1.58	National Agricultural Technology and Innovation Policy (NATIP)
2022	17.13	283	1.65	NATIP Implementation
2023	21.83	228.4	1.11	National Agricultural Development Fund (NADF)
2024	28.8	362.91	1.26	Mechanization & Food Security Initiatives
2025	47.9	826.5	1.7	Projected Target

Source: *National Bureau of Statistics (NBS, 2015–2025); Budget Office of the Federation (2025); AfDB (2024**). Allocation peaked at 3.61% in 2019 but fell to 1.26% in 2024, well below the 10% AU target. This chronic underfunding explains low mechanization, poor extension services, and limited R&D.*

2. Agriculture's Share of GDP

(Table 2 – source years specified) Note. * = projected/estimated values.

Year	Agriculture Share of GDP (%)	Key Contextual Notes
2015	23.11	Agriculture remained main GDP driver despite low mechanization
2016	24.43	Slight decline in commodity prices
2017	25.08	Boost from Agricultural Promotion Policy (APP)
2018	25.13	Despite flooding and conflict in key zones

2019	22.04	Service sector (ICT, finance) grew faster
2020	22.04	Lockdowns and supply chain disruptions
2021	23.36	Growth in maize, rice, and cassava output
2022	22.85	Impacted by insecurity, flooding, and climate shocks
2023	21.07	Persistent insecurity and high input costs
2024	20.5	Continued contraction; AfDB recommends increased funding
2025	21	Projected recovery with improved security and investment

Source: NBS (2024, Q1 2025); AfDB (2025). Decline from 25.13% (2018) to 20.50% (2024) reflects not reduced output alone, but faster growth in services (ICT, finance), and agricultural contraction due to insecurity and climate stress.

3. Human Development Index (HDI)

(Table 3 – corrected life expectancy typo: "5.7" → "52.7") Note. Dashes (—) indicate unavailable official data. * = projected value.

Year	HDI Value	Global Rank	Life Expectancy (years)	Mean Years of Schooling	GNI per Capita (PPP, USD)
2015	0.527	152/188	53.1	6	5,433
2016	0.53	—	—	—	—
2017	0.532	157/189	53.9	—	—
2018	0.534	158/189	—	—	—
2019	0.539	161/189	54.3	6.1	5,135
2020	0.539	—	—	—	—
2021	0.535	163/191	54.7	—	—
2022	0.548	—	52.7	7.2	4,790
2023	0.548	—	—	—	—
2024	0.548	—	—	—	—
2025	0.555	—	—	—	—

Source: *UNDP Human Development Reports (2015–2024); World Bank (2023). HDI rose marginally (0.527 → 0.548), but Nigeria remains in the low HDI category. Life expectancy declined from 54.7 (2021) to 52.7 (2022)- a red flag.*

4. Malnutrition Trends

(Table 4 – consistent formatting) Note. Stunting = chronic malnutrition; Wasting = acute malnutrition. * = projected values.

Year	Stunting (%)	Wasting (%)	Undernourishment (%)
2015	32.9	7.9	11.5
2016	33.1	7.2	12
2017	33	7.4	12.5
2018	31.5	7	13.1
2019	31.5	6.8	13.3
2020	31.5	7	14
2021	31.5	7.1	14.6
2022	31.5	7.3	15
2023	31.5–32.0	7.5–8.0	15.5
2024	32	8.5	16.5
2025	32.5	9.5	17.5

Source: *UNICEF-WHO-World Bank Joint Malnutrition Estimates (2015–2025); GHI (2024), Stunting remains above 31%, wasting increased to 8.5%, and undernourishment rose to 16.5%—indicating systemic failure in nutrition-sensitive agriculture*.

5. Food Price Inflation

(Table 5 – clarified CPI vs. headline inflation) Note. Food inflation data (CPI-food) available only for select years. * = projected/estimated.

Year	Headline Inflation (%)	Food Inflation (CPI, %)
2015	10.76	8.5
2016	18.36	—
2017	16.52	—
2018	14.8	—
2019	—	—
2020	—	—
2021	—	—
2022	23.72	—
2023	24.05	—
2024	26.08	33.69
2025	—	—

Source: *NBS (2015–2025); accessed March 20, 2025. Food inflation (CPI-food) reached 33.69% in April 2024, severely eroding household purchasing power.*

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