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**AGRICULTURAL POLICIES ON CEREAL CROPS PRODUCTION AND FOOD SECURITY IN NASARAWA STATE NIGERIA, 2015-2024**

**Kana Aminu Isyaku**

Department of Political Science, Nasarawa State University, Keffi

**Abdullahi Mohammed Yamma, PhD**

Department of Political Science, Nasarawa State University, Keffi

**Canine E. Erunke, PhD**

Department of Political Science, Nasarawa State University, Keffi

### **Abstract**

*This study examines the agricultural policies on cereal crops production and for food security in Nasarawa State, Nigeria, between 2015 and 2024. Despite several agricultural policies and government interventions implemented between 2015 and 2024, including those aligned with national strategies like the Agricultural Policies and the Anchor Borrowers' Programme, the expected increase in cereal crop production and corresponding improvement in food security has not been fully realized in Nasarawa State. Persistent issues such as low yield per hectare, limited access to quality inputs, inadequate extension services, poor infrastructure, climate variability, and post-harvest losses continue to affect productivity. The research assesses the effectiveness of government initiatives and reforms targeted at boosting the production of key cereal crops such as maize, millet, sorghum, and rice. Using a mixed-methods approach that combines qualitative interviews with government officials and farmers, alongside quantitative analysis of crop yield data, the study explores policy implementation during the administrations of Governors Umaru Tanko Al-Makura (final term years) and Abdullahi A. Sule. Findings reveal that while several policy interventions, including the Anchor Borrowers' Programme, input subsidy schemes, and rural infrastructure development, contributed to improved production in some regions, inconsistent policy implementation, limited access to credit, and insecurity remained major obstacles. The study concludes that sustained policy commitment, improved access to modern farming technologies, and investment in rural agricultural extension services are critical to enhancing food security in Nasarawa State. Recommendations are offered for strengthening policy frameworks to support smallholder farmers and ensure long-term agricultural sustainability in the region.*

**Keywords:** Agricultural Policies, Cereal Crops Production, Food Security, Nasarawa State, Nigeria.

### **Introduction**

Agriculture plays a critical role in the economic development of many nations, particularly in sub-Saharan Africa, where it is a primary source of livelihood and food security. In Nigeria, agriculture is a key sector, contributing significantly to the Gross Domestic Product (GDP) and providing employment to a large portion of the population (Adubi, 2002). Among the various agricultural products, cereal crops such as maize, rice, millet, and sorghum are essential staples that contribute to the food security of the country. The implementation of agricultural policies, therefore, directly impacts the production of these crops and, consequently, the overall food security in areas like

Nasarawa State. Nasarawa State, located in the North Central zone of Nigeria, has a predominantly agrarian economy with cereal crops forming a significant part of its agricultural output (Akinola, 2011). Between 2010 and 2014, various agricultural policies were implemented by the state government, aimed at boosting cereal crop production and enhancing food security. These policies were influenced by national agricultural reforms and international food security initiatives, reflecting a broader attempt to improve agricultural productivity and sustainability (Olomola, 2006).

Meanwhile, raising agricultural productivity, reducing

food insecurity and poverty should be an important policy goal for concerned government since agriculture plays a major role in the economy of many developing countries. It is a significant source of nourishment for citizens and a means of livelihood for the most vulnerable members of this country (Adewuyi, 2014). Increasing agricultural productivity requires one or more of the following; an increase in input with output increasing proportionately more than inputs; an increase in output while inputs remain the same; a decrease in both inputs and output with input decreasing more; or decreasing input while output remains the same (Adewuyi, 2014; Oni *et al.*, 2016). Increasing inputs in order to expand output involves raising both the quality and quantity of inputs, examples of which will include the mechanization of agricultural processes, use of high yielding varieties of crop seeds or planting materials, use of fertilizers, irrigation in areas where rain fall is inadequate, and the use of agro chemicals such as herbicides and pesticides.

Cereals are those members of the grass family, the *Peace ace* grown for their characteristic fruit, the caryopsis, which have been the most important sources of world's food for the last 10,000years (Oredipe, 2015). Wheat and barley are the oldest cultivated cereals. Their cultivation started in the fertile crescent of Mesopotamia some 10,000 years ago, this region now include parts of Turkey, Syria, Iraq and Iran (Oredipe, 2015). The major cereal crops in Nigeria are rice, maize, sorghum, wheat, pearl, millet and folio millet with rice ranking as the sixth major crop in terms of the land area devoted to cereal production. Sorghum account for 50% of the total cereal production and occupies about 45% of the total land area devoted to cereal production in Nigeria (National Extension Agricultural Research and Liaison Station (NEARLS, 2014).

Despite the region's favourable climate and fertile soil, cereal crop production remains suboptimal. This shortfall poses a significant threat to food security in the state, leading to reliance on food imports and a prevalence of hunger and malnutrition among the population. One of the critical factors contributing to

this situation is the insufficiency of agricultural policies tailored to the unique needs of cereal crop production in the state. Existing policies often fail to address critical issues such as access to quality inputs, modern farming techniques, financial support, and effective distribution channels. Additionally, poor infrastructure, market access, and post-harvest losses exacerbate the challenges faced by cereal farmers. Furthermore, the state's agricultural policy framework is often poorly implemented, with limited government support and insufficient stakeholder involvement. As a result, the potential of cereal crops to contribute to food security and economic development in Nasarawa State remains largely untapped. This research seeks to analyze the current agricultural policies related to cereal crop production in Nasarawa State, assess their impact on food security, and identify gaps or inefficiencies that need to be addressed.

The aim of this study is to assess the food security and status of cereal crop farmers Nasarawa State, Nigeria. The specific objectives are to:

- i. Examine the Nature of Agricultural Policies enunciated by Nasarawa state Government to mitigate food security?
- ii. Examine Agricultural Policies failed to achieve its target of curtailing food security in Nasarawa State.

## Conceptual Review

### Concept of Policy

Dye (1995) defined public policy as "whatever governments choose to do or not to do." This definition emphasizes that policy is not just about action but also inaction, where a decision to refrain from taking action is itself a form of policy.

Easton (1957) defined policy as the "authoritative allocation of values for a society." According to him, policy is about making decisions that reflect the values and priorities of a society, typically made by those in positions of authority.

Lasswell (1956). Viewed policy as a process, describing it as the "science of democracy" and focusing on the

stages of policy-making: problem identification, policy formulation, policy adoption, implementation, evaluation, and termination. He stressed the importance of knowledge in decision-making and the distribution of values in society.

Friedrich, (1940) argued that policy is a proposed course of action of a person, group, or government within a given environment providing obstacles and opportunities which the policy was proposed to utilize and overcome in an effort to reach a goal or realize an objective or purpose.

Rose (1987) described public policy as a series of patterns of related decisions to which many circumstances and personal, group, and institutional influences have contributed. He emphasizes that policy is not a single decision but a series of decisions made over time.

Anderson defined policy as a "purposive course of action followed by an actor or set of actors in dealing with a problem or matter of concern." This definition highlights the intentional and goal-oriented nature of policy, typically addressing specific societal issues. Jenkins (1997). Defined policy as "a set of interrelated decisions taken by a political actor or group of actors concerning the selection of goals and the means of achieving them within a specified situation where those decisions should, in principle, be within the power of those actors to achieve." Jenkins' definition emphasizes the interrelated nature of policy decisions and the importance of context and actor capacity.

### **Food Security**

Food security refers to the availability of food and one's access to it. A household is considered food secure when its occupants do not live in hunger or fear of starvation (FAO 2016). Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (Idachaba, 2006). Food security for a household means access by all members at all times to enough food for an active and healthy life.

Food security includes a minimum of the ready availability of nutritional adequate and safe foods ii. An assured ability to acquire acceptable foods in socially acceptable ways, that is without resorting to emergency food supplies, scavenging, stealing or other cropping strategies (USDA, 2011). Food security is a flexible concept as reflected in the many definitions in research and policy usage. Whenever the concept is introduced in the title of a study or its objectives, it is necessary to look closely to establish the explicit or implied definition. Food security as a concept originated only in the mid-1970s, in the discussions of international food problems at a time of global food crisis. The initial focus of attention was primarily on food supply problems of assuring the availability and to some degree the price stability of basic food stuff at the international and national level.

Musa and Ibrahim (2021) Food security is a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. The international community has accepted these increasingly broad statements of common goals and implied responsibilities.

### **Agricultural policy**

Agriculture is the main stay of Nigerian economy. It involves small scale farmers that are scattered over wide expanse of land area, with small holding ranging from 0.5 to 3.0 hectares per farm land. It is characterized by rudimentary farm systems, low capitalization and low yield per 9 hectare (Kolawale & Ojo, 2013). The roles of agriculture remain significant in the Nigerian economy, despite the strategic importance of the oil sector. Agriculture provides primary means of employment for Nigerians and accounts for more than one third of total gross domestic product (GDP) and labour force (Babatunde & Oyatoye, 2016). The role of cereals to modern society is related to its importance as food crop throughout the world. In most parts of Asia and Africa, cereal products comprise 80% or more of the average diet, in central

and western Europe, as much as 50% and in the United States, between 20 - 25% (Onwueme & Sinha, 2012).

### **Cereal Crops**

Cereal crops, also known as grains, are grass plants cultivated primarily for their edible seeds. These seeds, known as cereal grains, are fundamental to human diets worldwide due to their rich nutrient content and versatility in food production. Common cereal crops include wheat, rice, maize (corn), barley, oats, rye, and millet.

Cereals are the cornerstone of global agriculture, accounting for a significant portion of the world's cultivated land and food production. Wheat, rice, and maize are the three most important cereal crops, collectively providing more than half of the world's caloric intake (FAO, 2020). They are staple foods in many cultures and are integral to the food security of billions of people.

### **Theoretical Framework**

#### **The Diffusion Theory (1950s)**

The diffusion of better husbandry practices was a major source of productivity growth even in pre-modern societies. The diffusion approach to agricultural development rests on the empirical observation of substantial differences in land and labour productivity among farmers and regions.

Models were developed emphasizing the relationship between diffusion rates and the personality characteristics and educational accomplishments of farm operators. The insights into the dynamics of the diffusion process, when coupled with the observation of wide agricultural productivity gaps among developed and less developed countries and a presumption of inefficient resource allocation among "irrational tradition bound" peasants, produced an extension bias in the choice of agricultural development strategy during the 1950s. The limitations of the diffusion model as a foundation for the design of agricultural development policies became increasingly apparent as technical assistance and community development programmes, based explicitly or implicitly on the

diffusion model, failed to generate either rapid modernization of traditional farms or rapid growth in agricultural output.

### **Critics of Diffusion Theory**

Critics of the Diffusion Theory, proposed by Everett Rogers, argue that it oversimplifies the diffusion process by assuming uniform adoption across diverse societies. They contend that it neglects power dynamics and inequalities, overemphasizes rational decision-making, and relies on a linear model that doesn't capture the complexities of diffusion. Additionally, some scholars question its predictive power and its neglect of cultural factors influencing adoption behaviors. Overall, critics call for a more nuanced understanding of diffusion that considers diverse social, cultural, and structural factors.

### **Relevance of the Diffusion Theory**

The Diffusion Theory, proposed by Everett Rogers, remains highly relevant in academia across various disciplines. Its significance lies in providing a framework to understand how innovations, ideas, behaviors, and technologies spread within societies. In sociology, it informs studies on social change and the adoption of new practices. Communication scholars use it to analyze the dissemination of information and media content. Anthropologists apply it to study cultural exchange, while public health researchers utilize it to design interventions and understand health behavior adoption. Moreover, the Diffusion Theory contributes to innovation studies, policy development, and planning across different academic fields, showcasing its versatility and wide applicability in academia.

### **Research Design**

The study will adopt survey research design. Survey research design consists of the use of questionnaire and interview methods. For the purpose of this study therefore, samples will be carefully systematically selected to represent the characteristics of the population in Nasarawa state Ministry of Agriculture and Rural Development, Nasarawa Agricultural and

Development Programme and the sample size to be chosen using appropriate tools.

The population of the study comprises the entire people of the selected study areas (Nasarawa West, Karu and Kokona LGAs (1464) Nasarawa North LGAs, Wamba and Nasarawa Eggon (2142) and Nasarawa South, Lafia and Awe LGAs (1962) respectively). The selection of these Zones would be informed first and foremost for a fair representative purpose of federal constituency. The population of Nasarawa State, organized by senatorial zones, reflects the state's distribution across its 6 Local Government Areas (LGAs). Here's an approximate breakdown based on recent estimates and previous census data, although specific 2024 figures may vary:

For clarity purpose, Data for the study will be collected from both primary and secondary sources.

The primary sources of data to be used for the study will be through administration of questionnaire and in order to obtain more information in terms of input and services, access to credit facilities, improved farmers livelihood and the challenges of Agricultural Policies on Cereal Crops production and its effect on Food Security in the study areas, the researcher will conduct structured interview to elicit respondents' opinion by focusing on key individuals who are directly involved and have knowledge of the implementation of Agricultural Policies on Cereal Crops production and its effect on Food Security in order to complement the questionnaire.

**Table 1: Data Presentation of Questionnaire for the First Proposition**

| The Agricultural Policies on Cereal crops production and Food security is very rich in content in the period under review |                                                                                                                                                                                                                                                            | No. of Respondents |             |              |             |             |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------|--------------|-------------|-------------|
|                                                                                                                           |                                                                                                                                                                                                                                                            | SA                 | A           | D            | SD          | Total%      |
| 1                                                                                                                         | There is a dialectical relationship between Cereal crops production and Food security in Nasarawa State                                                                                                                                                    | 242<br>62.5%       | 30<br>7.7%  | 72<br>18.25% | 38<br>9.5%  | 390<br>100% |
| 2.                                                                                                                        | There is citizen participation in formulation and implementation of policies on Cereal crops production and Food security in Nasarawa State                                                                                                                | 260<br>64.25%      | 21<br>5.25% | 81<br>20.5%  | 20<br>5.10% | 390<br>100% |
| 3.                                                                                                                        | One of the policies is the focus on agriculture as a business with the government-enabled private sector-led initiative as the driver of the sector                                                                                                        | 203<br>53.25%      | 94<br>23.5% | 41<br>10.5%  | 44<br>11%   | 390<br>100% |
| 4.                                                                                                                        | Another policy under the Aliyu Akwe Doma's administration was Youth in Agriculture and Skill Acquisition which looked at the development of agriculture through improvement of access to input ranging from fertilizer, mechanization to extension workers | 260<br>64.25%      | 17<br>4.25% | 89<br>22.25% | 16<br>4%    | 390<br>100% |
| 5.                                                                                                                        | One other agricultural policies in Nasarawa State under Umaru Tanko Almakura's administration is on Adoption of the Agriculture Transformation Agenda (ATA)                                                                                                | 242<br>62.5%       | 30<br>8%    | 80<br>20%    | 30<br>7.7%  | 390<br>100% |
| 6.                                                                                                                        | Under the current administration, the policy on cereal crops is the initiation and implementation of extension programmes which will impacts directly on rural farmers?                                                                                    | 262<br>64.25%      | 21<br>5.25% | 81<br>20.25% | 26<br>7%    | 390<br>100% |

Source: Field Survey, February, 2025

### Summary of Findings

Firstly, government policies are not properly directed toward improving productivity per unit and sustainable agricultural intensification has not significantly reduced the rate at which arable lands are used;

Secondly, land expansion is limited and without the use of modern agricultural technology, agricultural production and productivity may decline further.

Thirdly, agricultural export which once moved the economy forward had declined to as low level.

Fourthly, the challenges adopting new technologies and the embracing science-based agriculture is a big challenge to the state.

### Conclusion

Between 2015 and 2024, agricultural policies in Nasarawa State largely aligned with national initiatives such as the Agricultural Promotion Policy (APP), Anchor Borrowers' Programme (ABP), and the APPEALS project have significantly influenced cereal crop production, particularly rice, maize, millet, and sorghum. These interventions improved farmers' access to inputs, finance, and extension services, leading to measurable increases in yield and productivity in many areas of the state.

However, despite these gains, food security in Nasarawa State remains uneven. Challenges such as poor infrastructure, post-harvest losses, and limited access to markets, climate variability, and insecurity have undermined the full realization of policy goals. Additionally, smallholder farmers who constitute the majority often face difficulties in accessing the benefits of these programs due to bureaucratic inefficiencies, inadequate awareness, and exclusion from credit schemes.

In conclusion, while agricultural policies have had a positive impact on cereal crop production in Nasarawa State, their effect on overall food security has been limited by systemic and environmental constraints. Going forward, policy implementation must be more inclusive, data-driven, and responsive to local realities. Enhancing rural infrastructure, strengthening extension systems, supporting climate-smart agriculture, and ensuring equitable access to government support will be critical to achieving long-term food security in the state.

### Recommendations

- i. Agricultural policy on cereal crops and food security enables the citizens in Nasarawa State to witness a turnaround in agricultural sector because of the attention given to it by the government., the study suggests the need for government policies to be directed toward improving productivity per unit area through sustainable agricultural intensification as this may significantly reduce the rate at which arable lands in the state are currently being converted to cropped area.
- ii. Sustainable agriculture is a key element of sustainable development and essential to the future well being of the planet. Sustainability aims to achieve adequate safe and healthy food production, improved livelihoods of food producers and the preservation of non-renewable resources. Effective policies and programmes that encourage high investment and high growth rate are highly needed to revamp the Nasarawa State agricultural sector.
- iii. The challenges and shortcomings in policy to promote agriculture and the adoption of new technologies and the embracing of science-based agriculture the expected benefits of yield will increase astronomically.

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