



TREND ANALYSIS OF NIGERIAN AGRICULTURAL POLICY FROM 1960 TO 2023

Salihu Musa and *Abdulazeem Hudu Wudil

Department of Agricultural Economics and Agribusiness, Federal University Dutse, Jigawa State, Nigeria

*Corresponding authors' email: azeezhud4real@gmail.com

ABSTRACT

Agricultural policy is generally concerned with the development of agriculture and increasing the rate of production per acre and per man. The study assessed the Nigerian Agricultural policy from 1960 to 2023 by the use of data obtained from World Bank. The objectives of this article were to; identify variables related to agriculture and to assess these variables based on the data obtained. Maximum values added in % GDP (8.83), %GDP of current currency (36.9), in constant 2015 US\$ (9.81), in constant local currency (9.52), in current US\$ (9.88), in annual % growth (55.9) and per worker in constant 2015 US\$ (4669). Agricultural land % of land area accounted a maximum value of 75%, in 2019 with a minimum value of 59% in 1961. Similarly, the arable land in % of land area had a maximum of about 40% in 2019, while agricultural land in sq. km had a minimum of 541,760 sq km in 1960 with a maximum of 686,440 sq. km in 2020. The food production index had a mean of 52.18, while fisheries production had a mean of 384,179, 078 metric tons and agricultural production had a mean of 72,207,875.1 metric tons, cereal yield had a mean of 1,187.9 and a mean crop production index of 52.94. Food exports has declined from a maximum 65% in 1962 to minimum of 0.02% in 2001 with a mean of 15% while food imports had increased with a maximum of 30.6% in 2011, a minimum of 8.1% in 1968 and mean of 14.6%. In conclusion, agricultural sector has made a remarkable improvement in some areas and has worsened in some area and is generally not in accordance with the agricultural policy of the country. The study recommends bottom top approach in policy formulation. It is also desirable to involve stakeholders like World Bank and NGOs in policy formulation, this will tackle the issue of bureaucracies and corruption.

Keywords: Nigerian Agricultural policy, Economic impact on Agriculture, Land use and Productivity, Policy Recommendations and Challenges

INTRODUCTION

Agricultural policy refers to the government's aims, aspirations, and goals for the agricultural sector, as well as the methods to achieve those goals given existing resources, technology, preference patterns, and institutional competence. The significance of studying agricultural policy stems from its ability to promote problem-solving interventions and skills in the sector, influence future policy courses and directions, and improve overall capacity for better prescriptions and advocacy of solutions and strategies in the sector (Kuhmonen, 2018).

For the new economic order in Nigeria to succeed, policies must be stable enough to guarantee that the goals, plans, and programs that flow from them continue to be effective for a sufficient amount of time. Therefore, this is not meant to have a strict policy document; rather, it is anticipated that over time, changes to policies may be necessary due to unanticipated events, outside influences, and inevitable mistakes. The government understands that investment in agriculture depends critically on the continuation of policies and the programs that support them. Therefore, the government is determined to make sure that the current set of agricultural policies will continue to be in place for at least the next fifteen years (Food and Agriculture Organization (FAO, 2024).

Agriculture has historically been seen as the "mainstay" of the Nigerian economy, having several responsibilities to play in the country's economic growth (Bethel, *et al.*, 2025; Usman *et al.*, 2024). The agricultural sector plays several roles in a growing economy, including providing food for a growing population, supplying raw materials to the industrial sector, providing employment, earning foreign exchange, and serving as a market for industrial products (Federal Ministry of Agriculture, Water Resources and Rural Development,

2024). Nwankwo *et al.*, (2024) indicated that agriculture is expected to contribute more than other sectors in Gross Domestic Product (GDP) and employment in the Sub-Saharan Africa. As such there are various ways in which agriculture as a vital ingredient could to annual national GDP through the use of policies believed to have positive change in agriculture and national economy.

Access to production factors, inputs, and services remained low in 2016, with moderate development from 2010 to 2016. This presents a significant opportunity for increased output and productivity, for instance, doubling access to supplies and services might significantly increase production, productivity, and agricultural revenue (Olomola and Nwafor, 2019) Poor incentive systems have resulted in inefficiency, ineffectiveness, mismanagement, and fraudulent and unethical behaviors by some major industry actors, limiting the private sector's capacity to supply inputs to targeted farmers (Balana and Fasoranti, 2022)

In Nigeria contribution of agriculture has declined steadily from 1970 to the 2000s as economic attention turned to petroleum exploration following the discovery of crude oil. In 2018, agriculture contributed just 21.5% of GDP, while industry contributed 25.75% and the services sector contributed 52% (Plecher, 2020). The oil sector accounts for more than 90 percent of total foreign exchange. Nigeria's agricultural sector has been neglected, prompting the need for government intervention through programs and reforms. Prior to 1970, Nigeria had a strong agricultural industry that produced enough food to meet its own needs. Nigerian farmers during that time produced enough food crops to feed the population and earned foreign cash from exports to fund government spending on health and education (Adenomon and Oyejola, 2013).

Analyzing the link between government policy and agriculture needs applying various approaches. Governments' approaches to agricultural production are influenced by policies aimed to handle multiple problems to agricultural growth on a spatial-temporal scale, with shared responsibility. Success of these policies and programs varies depending on government commitment and farmer integration over time. However, the policies faced technological, social, political, and economic constraints (Abubakar *et al.*, 2021)

As indicated by Shehu (2023) that three distinct policy periods were examined: independence (1960-1969), oil boom and policy reconstruction (1970-1985), and policy stabilization era (1986-2020). During the oil boom and policy reconstruction phase, Nigeria's agricultural industry saw stagnant development; however growth accelerated during the policy stabilization era. To attain national food security, the agricultural sector must be intentionally prioritized. This may be accomplished by purposeful policy approaches and implementations that ensure self-sufficiency in food production.

Analyzing the link between government policy and agriculture needs a multi-level approach. Governments' approaches to agricultural production are influenced by economic development, economic interests, international agency requirements, local environmental conditions, and institutional legacy (Lencucha *et al.*, 2020)

MATERIALS AND METHODS

Problem Statement

Towards the end of the 1960s there were signs that of declining exports and indications of food shortage in the country which were assumed to be caused by civil war, but later it was proven wrong by the magnitude the problems kept escalating to date

The Nigerian agricultural policy was well formulated but unfortunately, the policy is constrained by implementation issues, sectorial policies, lack of coherence, formulation of policies from the top but not from the grassroots, government bureaucracies, corruption and nepotism were part of factors that retard or disrupt the policy.

FAO (2024) asserted that previous agricultural policies in Nigeria have been marked by frequent changes or instabilities. This instability is generally caused by changes in administration or the personalities of the system's operators, rather than by unanticipated outside events. When there is change in governments to new governance, the system that underpins prior agencies is likely to alter. This is because the formation of these policies has never represented the core values and aims of the whole society, nor have they been formed on the basis of concepts that are widely accepted by the population. The government always guarantees that policies are closely monitored and evaluated on a regular basis in order to address deviations from established parameters as soon as they are identified. Douillet (2010) indicated that the government's goal of achieving food self-sufficiency poses a significant obstacle. Therefore, the objective of the study is to; The study aimed to assess Nigeria's Agricultural Policy from 1960 to 2023 by identifying and evaluating agriculture-related variables over this period based on obtained data trends.

Methodology

The study made use of secondary data, obtained from World Bank on the trend periods of 1960-2023. Some important variables related to agricultural policy were identified, extracted and assessed; these variables were analyzed using

descriptive statistics such as means, percentages, range, line graphs and bar charts. The charts and graphs were drawn by the use of Microsoft Excel.

The means were calculated without frequencies because the data is not grouped, the formula for the mean is given as;

$$\text{Mean} = \frac{\sum X_i}{N} \quad (1)$$

Where; $\sum X_i$ Summation of the total outcome identified and; N is the total number of outcomes identified.

Percentages is the number of selected outcomes divide by the number of total outcomes multiplied by 100, which is given as;

$$\text{Percentage} = \frac{\alpha}{\beta} \times \frac{100}{1} \quad (2)$$

Where; α is the number selected outcome; and β is the total number outcome.

While the range is calculated by subtracting the minimum number from the maximum number of a particular outcome Given as;

$$\alpha_{\max} - \alpha_{\min} = \text{Range} \quad (3)$$

Where; $\alpha_{\max}$ is the maximum number in group, and; $\alpha_{\min}$ is the minimum number in a group.

Data Interpretations and Discussions

Value added refers to the additional value generated above the initial value. It may be used in manufacturing, goods, services, businesses, management, and other aspects of business. In other words, it is an improvement made by a firm or individual to a product or service prior to releasing it for sale to the end user. Value added is a sector's net output after adding all outputs and removing intermediate inputs. It is estimated without taking into account the depreciation of manufactured assets or the depletion and deterioration of natural resources. The data has recorded maximum values of 8.83 and 8.55 in 1989 and 2007 respectively in current local currency, with minimum value of 1.01 in 2008 and a range of 7.82. The recent values of 4.11, 4.79 and 5.33 indicate gradual improvement in agriculture in 2021, 2022 and 2023 respectively in percentage of GDP. This could be attributed to increase prices and demand of food produce in the country which is continuously raising thereby compelling citizens to go into farming as indicated in Figure 1a below.

Figure 1b is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources calculated in percentage of GDP from 1981 to 2023. The data indicates increase in the value from 12.240141 in 1981 to 27.90837 in 1998. It decreased to 26.02849 in 1999 and the maximum value of 36.96508 in 2002 was recorded which has later reduced to 22.72494 in 2023. The results indicate a general decrease in the contribution of agriculture to GDP, and hence economic growth of Nigeria.

Value added in as indicated in Figure 1c was calculated in constant 2015 prices, expressed in U.S. dollars. The maximum value of 9.81 in 2014 was obtained and a minimum value of 1.10 in 2017 with a range of 8.71. There is significant improvement from 1.51 in 1981 to 9.81 in 2014 but from that year there was serious drop in the value to 1.05 in 2015. The value did not appreciate until 2023 with a value of 1.19 in 2021. This shows that calculated based on constant 2015 expressed in US dollars, there was no improvement in agricultural sector as indicated in Figure 1c below.

The data calculated in local currency obtained maximum values of 8.36, 8.89 and 9.52 in 2003, 2004 and 2005 respectively with a minimum value of 1.02 in 2006 but the trend indicated decrease in the values to about 1.87, 1.91 and 1.93 in 2021, 2022 and 2023 respectively with range of 8.50,

which indicated low performance in the sector as indicated in Figure 1d calculated in current local currency.

Figure 1e indicates that the maximum value of 9.88 was obtained in 1986 with a minimum value of 1.01 in 2012 with a range of 8.87, the values were generally low, but later appreciated to 8.23 in 2023. High values were recorded in 1986, 1989 and 2011 with values of 9.88, 9.36 and 9.22 respectively. This shows inconsistency in the Nigerian agricultural sector calculated in current U.S dollar.

Figure 1f was calculated without any deductions for depreciation of fabricated assets or depletion and degradation of natural resources determined by International Standard Industrial Classification (ISIC) expressed in constant 2015 U. S. dollars. The annual growth rate for agricultural sector a maximum value of 55.578 in 2002, the value reduced drastically to 7.00 in 2003, and it continue falling to 1.128 in 2023, but it was observed that negative values of -0.695, -4.382 and -3.186 in 1983, 1984 and 1987 respectively. This is also an indication of low performance in the agricultural sector.

Figure 1g shows the value added per worker is a measure of labor productivity. Value added per unit of input. Value added

denotes the net output of a sector after adding up all outputs and subtracting intermediate inputs. Data are in constant 2015 U.S. dollars. Agriculture corresponds to the International Standard Industrial Classification (ISIC) tabulation, and includes forestry, hunting, and fishing as well as cultivation of crops and livestock production. The values show consistency and increase in the values from 1384 to 4540 in 1991 to 2022 respectively, and a maximum value of 4669 in 2017 was observed with a minimum value of 1384 in 1991 with a range value of 3,285.

Generally, the value added for agriculture, forestry and fishery indicated increase the value added in various forms but has not achieved the objective of the agricultural policy that is why value added (% of annual growth) indicated a decreasing trend with some negative values which could be attributed to lack of funding and other factors that has retarded the growth of the Nigerian economy as confirmed by the study of Fankun and Evbuomwan (2017) indicating that on the issue of agricultural activities the government has not injected enough funding on agricultural policies, initiatives and programs which has resulted to less impact on the sector.

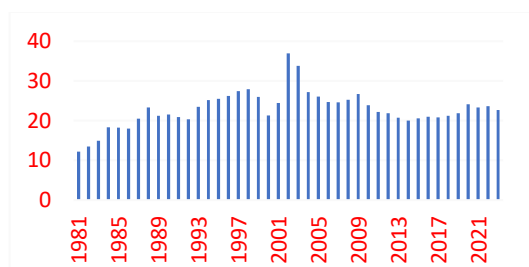


Figure 1a: Agriculture, forestry, and fishing value added (% of GDP)

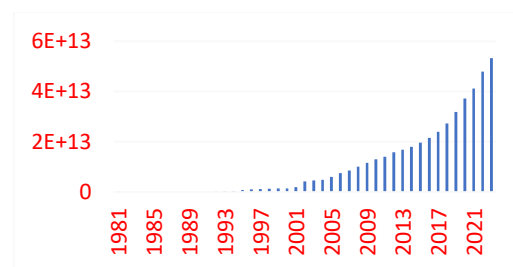


Figure 1b: Agriculture, forestry, and fishing, value added (current LCU)

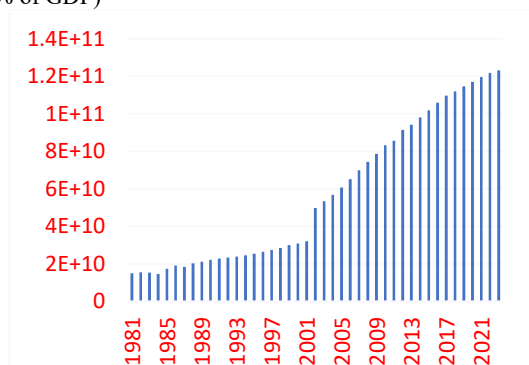


Figure 1c: Agriculture, forestry, and fishing value added (constant 2015 US\$)

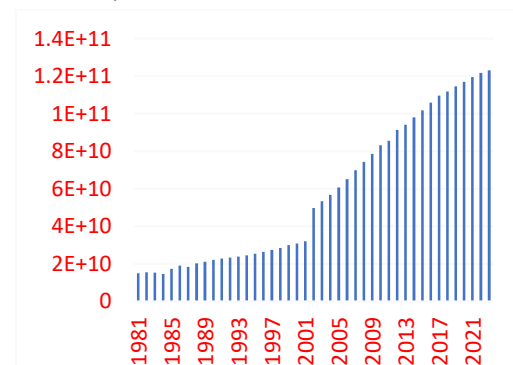


Figure 1d: Agriculture, forestry, and fishing value added (constant local currency)

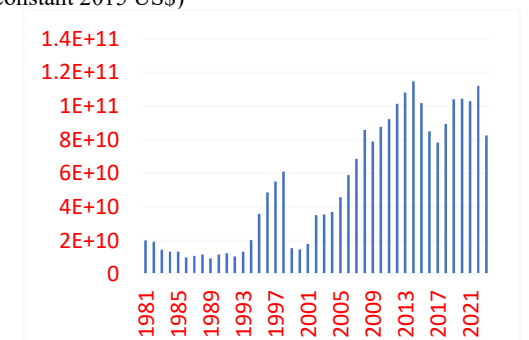


Figure 1e: Agriculture, forestry, and fishing value added (current US\$)

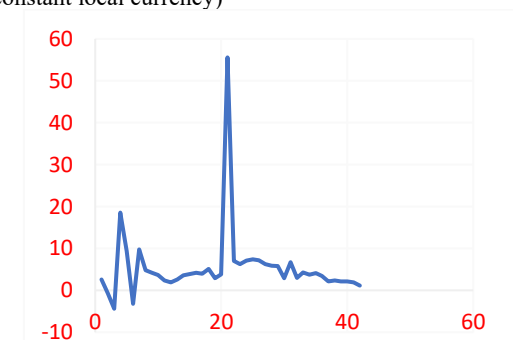


Figure 1f: Agriculture, forestry, and fishing value added (annual % growth)

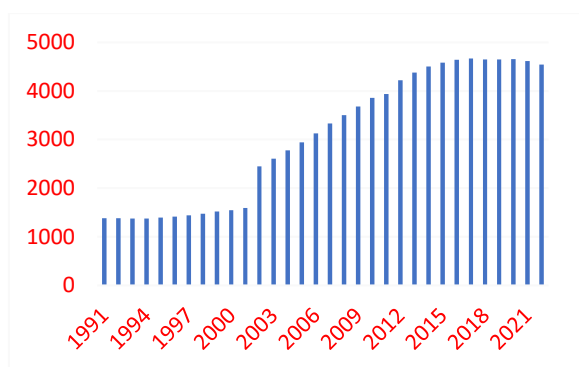


Figure 1g: Agriculture, forestry, and fishing, value added per worker (constant 2015 US\$)

Figures 1(a-g): Agriculture, forestry and Fishing, value added in various forms

Arable land (hectares per person) includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded. From 1960, land under cultivation in Nigeria has increased but it has not met the policy requirement of Nigeria because the increase in production has not cater the consumption requirement of the country. In 1961 about 23,676,000 hectares was cultivated and production has increased to about 36,872,000 hectares in 2021, although the value was maintained from 2019 to 2021 with a mean of 28,560,908 hectares as indicated in Figure 2a below.

Figure 2b shows the Agricultural land area percentage of the total land area and indicates that about 75% of the land area were obtained in 2019, 2020 and 2021 and has accounted to be the maximum percentage throughout the period, while the minimum percentage was in 1961 with a value of about 59% of the land area and a mean of 63% with a range of only 16%. This data indicates that there was an increase in the percentage of the agricultural land area throughout the period of study.

The data in Figure 2c revealed that about 40% was obtained in 2019, 2020 and 2021 respectively which accounted for the maximum value throughout the period and about 26% was obtained in 1961 as the minimum percentage while the mean value was found to be 31% of the total land area in the country with a range of 14%.

Agricultural land refers to the share of land area that is arable, under permanent crops, and under permanent pastures. The maximum area of agricultural land was in 2020 with a value

of 686,440 sq. km and a minimum of 541,760 sq. km in 1960 with a range value of 144,680 sq. km. This is indication of increase in the area of agricultural land as shown in Figure 2d below.

Figure 2e shows the forest area which is land under natural or planted stands of trees of at least 5 meters in sit, whether productive or not, and excludes tree stands in agricultural production systems (for example, in fruit plantations and agroforestry systems) and trees in urban parks and gardens. The minimum forest area was 214,636.5 sq. km in 2021 and a maximum of 265,260.9 sq. km in 1990 with a mean of 118,260.9 sq. km and a range value of 50,624.4.

The trend movement of lands associated with agriculture were continuous and without and fluctuations throughout the period. The objectives of agricultural land policy include establishing an acceptable land tenure system to discourage land fragmentation and make land accessible to all persons and ensure that land allocation procedures promote optimal use and land conservation. The government policies have not elicited any change in the traditional land tenure system, none of the strategies specified has been implemented and all the problems associated with gaining access to farm land still continues to farmers and would be farmers problems several years after the land policy was decreed. as stated in the study of Kanayo *et al.* (2013) that there was no economies of scale and persistence and continuous reliance on rain-fed agriculture method of land ownership and the land tenure system and unavailability of land for commercialized and mechanized cultivation has been a major problem in the sector and the country at large.

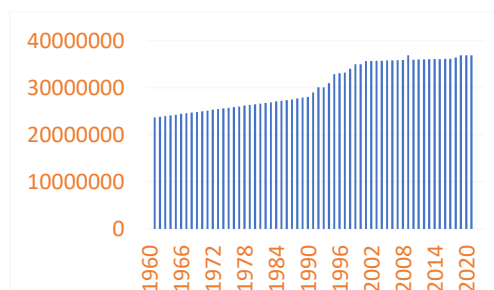


Figure 2a: Arable land (hectares)

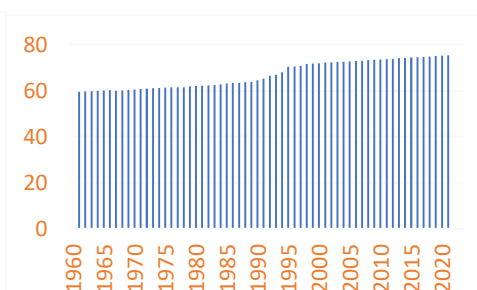


Figure 2b: Agricultural land (% of land area)

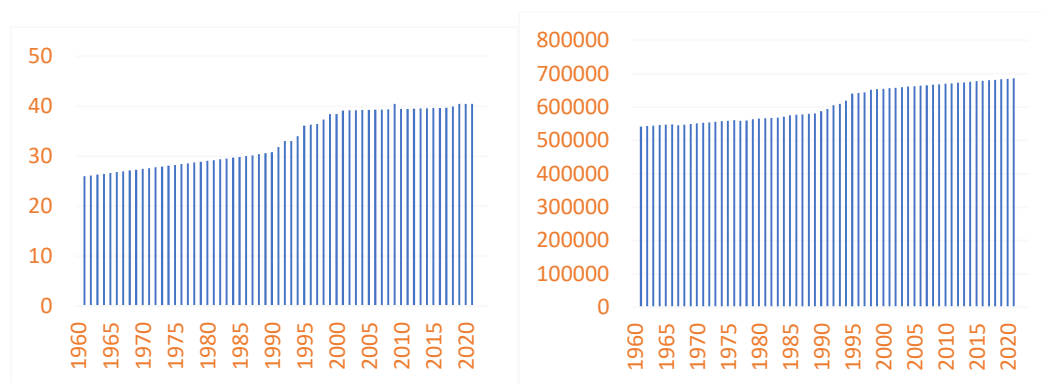


Figure 2c: Arable land (% of land area)

Figure 2d: Agricultural land (sq. km)

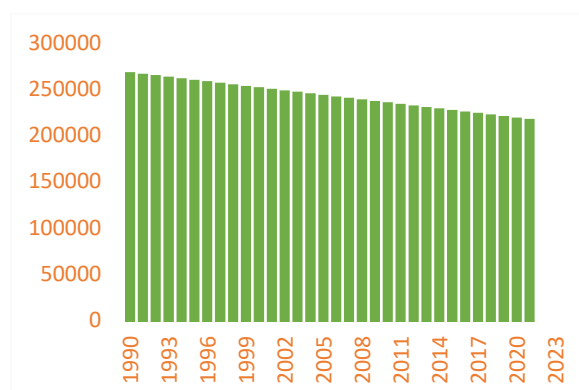


Figure 2e: Forest area (in sq. km)

Figures 2 (a-e): Agricultural lands, arable land and forest area

Food production index comprise of crops that contain nutrients which are regarded as edible, example is tea and coffee which have no nutritive value but are edible. The index indicates a mean value of 52.18 in the trend of 1990 to 2022, the maximum value obtained was 119.85 in 2022 which indicates the annual growth of 3.64% averagely, while the minimum value was 17.87 in 1961 with a range value of 101.98 as presented in Figure 3a below.

Capture fisheries production takes into account the quantity of fish landed by a country for all recreational, subsistence industrial and commercial use expressed in metric tons. Figure 3b indicated that the mean metric ton of fisheries production during period of study was 384,179.078, while the maximum value was 916,284 in 2017 and a minimum value of 56.505 in 1961 with a range value of 859,779. This has shown a remarkable increase in fisheries production as indicated in Figure 3b below.

Aquaculture is the output obtained from all aquatic activities for harvest and consumption. Organisms regarded as aquatic include molluscs, aquatic plants, crustaceans, and fish. The mean aquaculture production was 72,702.726 metric tons while the minimum production is 2005 metric tons in 2005 and a maximum production of 316,727 metric tons in 2015 while the value of 314,722 was obtained. This is indication of increase in aquaculture production as indicated in Figure 3c below.

Cereal production (metric tons) from 1961-2022 in Figure 3b below is specifically referring to crops harvested only for the dry grain. Here, crops that were used for grazing are excluded while it also includes all harvested green food, feed, silage and hay. The maximum cereal production is

30,645,842 metric tons in 2018, while the minimum production is 5,809,000 in 1972 metric tons, and the mean production of 17,207,875.1 metric tons and a range of 24,836,842 metric tons.

Cereal yield (kg per hectare) in Figure 3e comprises of rye, Oats, sorghum, millet, barley, wheat, maize, buckwheat, mixed grains and rice. Data comprise of all cereals associated with dry grains only. The year in which bulk harvest took place was used by FAO in allocation of data and almost all crops harvested at the end of the year were carried forward to the following year. The maximum yield was 1,733.4kg per hectare in 2016 and a minimum of 611kg per hectare in 1969 with a mean yield of 1,187.9 kg per hectare and a range value of 1,122.4 kg per hectare throughout the trend. This shows increase in yield throughout the period.

Figure 3f shows the crop production index shows agricultural production in relation to the base year of 2014 to 2016. All crops were included except regional and income aggregates, fodder crops and were calculated from values in international dollars which were normalized to the base period of for all FAO's production indexes. The data revealed a mean production index of 52.94 with a range value of 101.58 and a maximum of 120.89 in the year 2022 and a minimum of 19.31 in the year 1961. This indicates consistent increase in general production but need to increase production because it has not yet produced enough for local consumption. The study by Akpan *et al.* (2024) indicated that agricultural sector was significant driver to financial sector, as a result they recommended increase investment in the agricultural sector through increasing the amount made available to farmers to boost productivity.

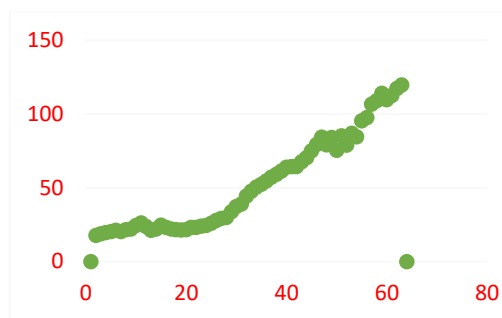


Figure 3a: Food production index (2014-2016 = 100)

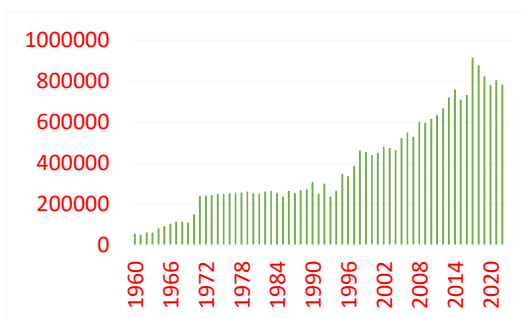


Figure 3b: Capture fisheries production (metric tons)

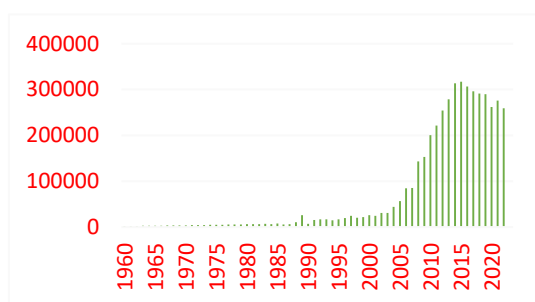


Figure 3c: Aquaculture production (metric tons)

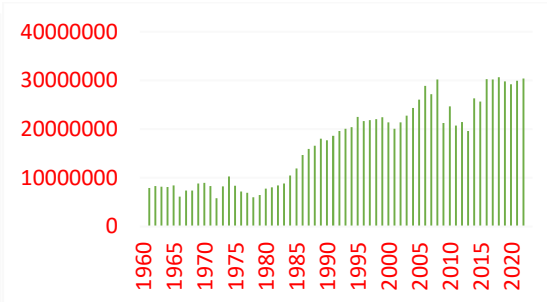


Figure 3d: Cereal production (metric tons)

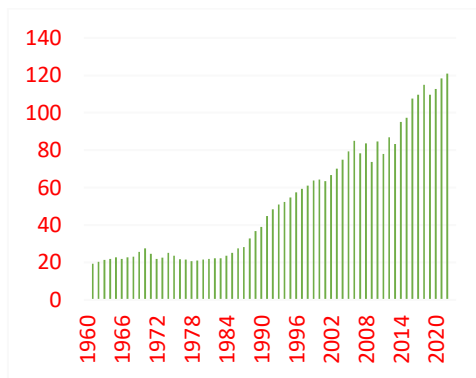


Figure 3f: Cereal yield (kg per hectare)

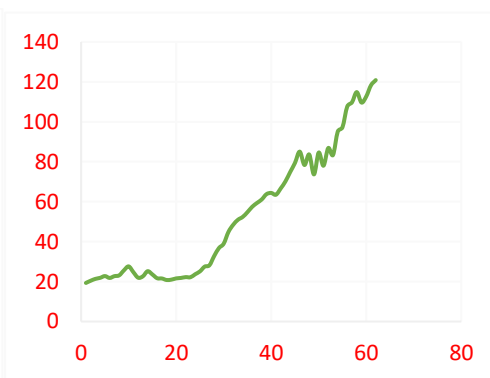


Figure 3g: Crop production index (2014-2016 = 100)

Figures 3(a-g): Food and Crop production Indexes, yields, agricultural production

Agricultural raw materials exports (% of merchandise exports) comprise of crude fertilizers and minerals excluding coal, petroleum and precious stones and also crude materials except fuels and melliferous ores and scrap. The data shows a maximum of only about 4.2% and a minimum of 0.3%. this indicates a low agricultural raw material in relation to merchandise exports as shown in Figure 4a below

As presented in Figure 4b below, agricultural machinery, tractors consist of number of wheels and crawler tractors with exception of garden tractors in use in agriculture at end of the calendar year or during the first quarter of the following year. This revealed a maximum of 24,800 tractors in 2007 and minimum of 500 tractors in 1961. This shows that a significant increase in the number of tractors.

Agricultural raw materials imports (% of merchandise imports) comprise of crude materials except fuels and also excluding crude fertilizer and minerals, coal, petroleum, precious stones, metalliferous ores and scrap. The data indicated a maximum of 4.2% in 2011 which shows a very low % of agricultural raw materials imports (% of merchandise imports) and a minimum of 0.3% as shown in Figure 4c below.

Agricultural machinery, tractors per 100 sq. km of arable land are the number of wheel and crawler tractors used in agriculture to end of the calendar year excluding garden tractors. The data shows a maximum of 6.7 per 100 sq. km in 2007 which indicates an increase but low usage of agricultural machinery in the country and a minimum of 0.21 per 100 sq. km in 1961 as shown in Figure 4d below. The country is blessed with abandon raw materials and the machineries is too expensive for farmers coupled with high price of fuel to operate the machines. However, Onwualu (2009) identified human resource development, funding, entrepreneurship development, technology as the five major challenges of raw materials sourcing and development in Nigeria. He added that there are least 2000 agriculturally based raw materials that can be cultivated in commercial production in the country. Moreover, the government is responsible to provide all necessary conditions and encouragements in promoting agricultural activities which includes mechanization which is the practice worldwide but reverse is the case in Nigeria (Augustine, 2019).

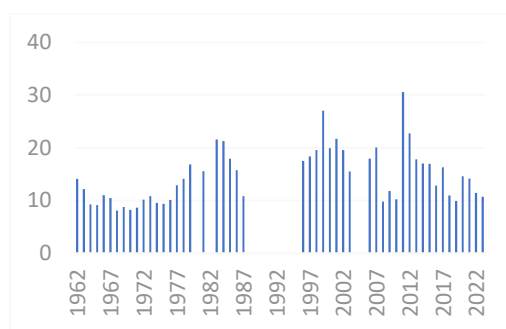


Figure 4a: Agricultural raw materials exports (% of merchandise exports)

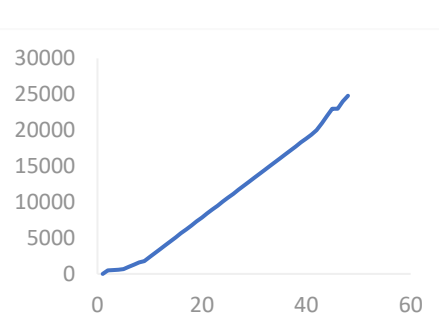


Figure 4b: Agricultural machinery, tractors

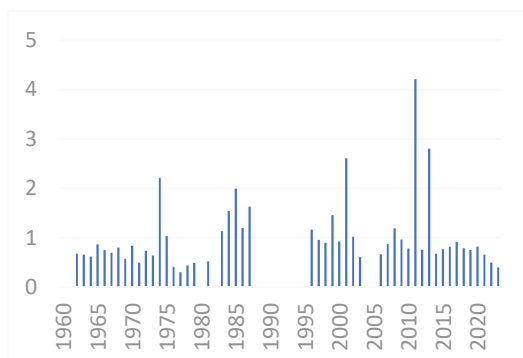


Figure 4c: Agricultural raw materials Imports (% of merchandise imports)

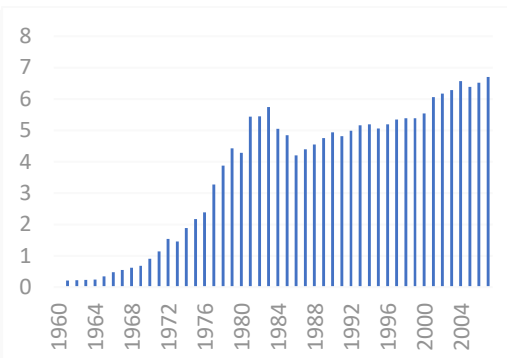


Figure 4d: Agricultural machinery, tractors per 100sq km of arable land

Figure 4(a-d): Agricultural raw materials imports, exports, agricultural machineries.

Food Imports and Exports

Food imports (% of merchandise imports) comprise of food and live animals like beverages, tobacco animal, vegetable oils, fats, oil seeds, oil nuts, and kernels. Food imports had a maximum of 30.6% in the year 2011 and a minimum of 8.1% in 1968 and the mean food imports is about 14.6% with a range value of 22.5. The trend indicated less food imports from 1960 to 1999 and later food imports kept increasing to 2023. This is an indication that the country is not producing enough to meet local consumption as indicated in Figure 1a below.

Food exports (% of merchandise exports) comprise of food, live animals, beverages, tobacco, animal and vegetable oils, fats, oil seeds, oil nuts and oil kernels. Food exports had a maximum of about 65% in 1962, but it kept decreasing across

the trend until 1970 and 1971 to about 19% and 13% respectively. The trend continues decreasing with little fluctuations to about 3.8% in 2023. The mean export in the trend was 15% which is low. The minimum food export was in 0.02% in 2001 with a range value of 64.98 as shown in Figure 5b. This is an indication that the country's economic growth has decreased drastically and also shows that the objectives of Nigerian agricultural policy have not been achieved. This was ascertained by the study of (2017) which indicated that as a result decrease in local food supply within the country, it was clearly noticed that there was increase in the composition and volume and the huge amount of money dedicated to import food for a period of time (Kanayo *et al.*, 2013) with noticeable decrease in exports.

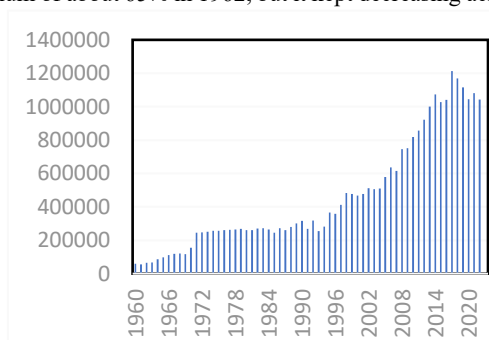


Figure 5a: Food imports (% of merchandise imports)

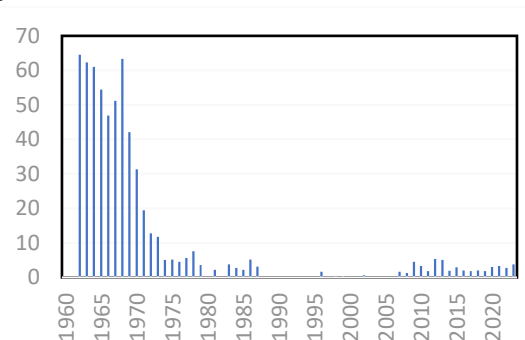


Figure 5b: Food exports (% of merchandise exports)

Fertilizer consumption (% of fertilizer production) measures the quantity of plant nutrients used per unit of arable land. The mean % of fertilizer production is 1171.5%, while the maximum is about 6178.6% in 1983 and the minimum was 102.9% in 1988 and a range value of 6,075.7%. The high

percentage of fertilizer consumption could be attributed to high demand of fertilizer in the country because farmers cannot obtain the required yield if fertilizer is not applied on the farm as shown in Figure 6a below.

Fertilizer consumption (kilograms per hectare of arable land) measures the quantity of plant nutrients used per unit of arable land. The maximum fertilizer consumption is 1861 k/ha of arable land, while a minimum of 0.06 k/ha of arable land was obtained in 1961 and a mean value of 7.14 k/ha and a range value of 1,860.94 of arable land as shown in Figure 6b below. The amount of consumption could be attributed to the high cost of fertilizer and farmers could not afford buying enough for cultivation and fertilizer distributed by government requires bureaucracy and does not meet the targeted farmers but rather diverted to politicians due to nepotism, who later resell the product at exorbitant prices. This has also violated

one of the main objectives of Nigerian agricultural policy i.e. to provide incentives and inputs farmers at subsidized rate or even free. The major issues that affected fertilizer policies were lacked of consistency and continuity which has changed the fertilizer prices, access to inputs, crop productivity, untimely application rates, fertilizer prices, supply chains, and logistics and has led to low fertilizer consumption and farm application rates (below 20% of the application rate per hectare) while Nigeria is the is one of the leading producers of fertilizer in the sub-Saharan Africa (Bulama and Fasoranti, 2022)

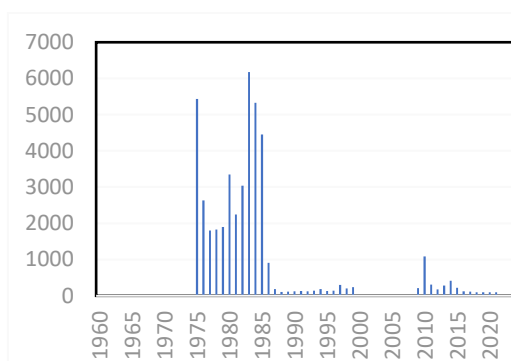


Figure 6a: Fertilizer consumption (kilograms per hectare of arable land)

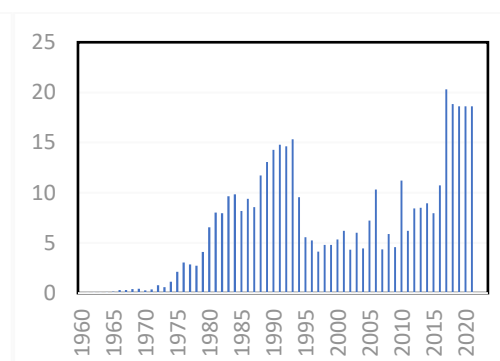


Figure 6b: Fertilizer consumption (% of fertilizer production)

Employment Generation

Employment in agriculture, male (% of male employment) (modeled ILO estimate) is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. These activities consist of agriculture. Fishing, forestry and hunting. The trend data revealed a mean of 50.9% which indicates that agricultural sector employs about 50% of the male employment in the country which shows that the sector has performed well, while a maximum of 57.4% was obtained in 1991 and a minimum of 44.9% in 2022 with a range value of 12.5% as indicated in Figure 7a below. This is an indication that of achieving one of the objectives of agricultural policy by providing maximum employment to the citizens of the country.

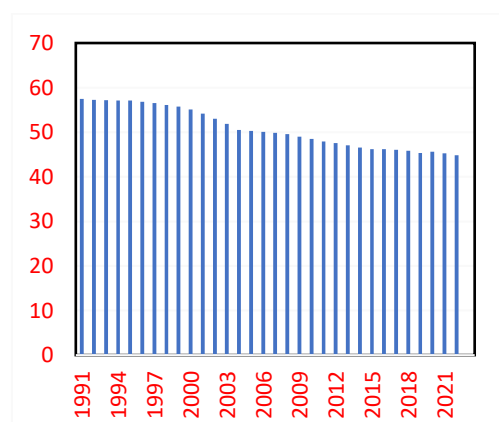


Figure 7a: Employment in agriculture, male (% of male employment) (modeled ILO estimate)

Figure 7(a & b) Employment in agriculture % of male and female employment

Child employment in agriculture, female (% of female economically active children ages 7-14) Employment by economic activity refers to the distribution of economically active children by the major industrial categories of the International Standard Industrial Classification (ISIC). Economically active children refer to children involved in economic activity for at least one hour in the reference week of the survey. The only data obtained for the female child employment was 76.65% in 2010 as shown in Figure 7b below. The high percentage of female child could be attributed to socio-economic, cultural and religious factors that allows women always at home performing vast variety of agricultural processing and value addition at home. The study of (2023) concludes that agricultural productivity in Nigeria does not generate employment. It was observed in the study that livestock, crop production, fishing and deposit money banks' credit to agriculture does not generate employment while forestry does (Dikeogu- Okoroigwe, 2023).

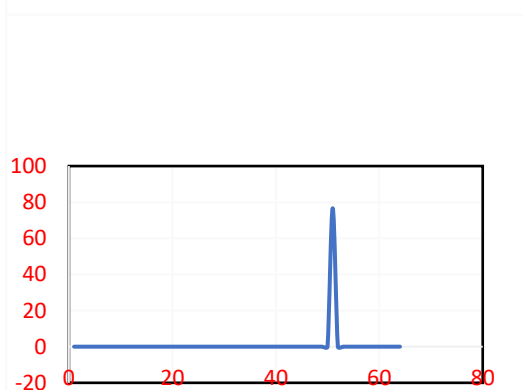


Figure 7b: Child employment in agriculture, female

CONCLUSION

In conclusion, agricultural sector has made a remarkable improvement in some areas and has worsened in some areas. There was general improvement in value added, land for cultivation, food production, fertilizer consumption, and agricultural raw materials, but does not improve the economy and did not achieve the desired objective of agricultural policy. Moreover, there was increase in food imports and decrease in exports and employment in agriculture which also violates the objectives of agriculture policy. In general, it is concluded that the Nigerian agricultural policy is well-formulated but not achieved. The study recommends that Nigerian agricultural policies should involve stakeholders like the World Bank and NGOs for better implementation, be more people-centered by addressing grassroots needs, eliminate bureaucratic bottlenecks to expedite processes, and tackle corruption to ensure effective policy outcomes.

REFERENCES

- Abubakar, A., Gambo, J. and Umar, S. (2021). An Overview of the Effects of some Agricultural Policies in Nigeria 1960-2020. *Nigerian Agricultura Journal* 52(3): 151-162.
- Adenomon, M. O. and Oyejola, B. A. (2013). "Impact of Agriculture and Industrialization on GDP in Nigeria: Evidence from VAR and SVAR Models." *International Journal of Analysis and Application* 1: 40-78.
- Akpan, M., Aigbedion, M., Dandaura, J. J. and Musa, I. C. (2024). Impact of Agricultural Sector on Sustainable Financial Sector Growth in Nigeria. *Iconic Research and Engineering Journals*.7(12), 1-15.
- Augustine, A. A. (2019) A review on the Performance of Government Policy on Agriculture in Nigeria. *African Journal of Agricultural Economics and Rural Development*. 7(6),1-9.
- Balana, B. B. and Fasoranti, A. S. (2022). A Historical Review of Fertilizer Policies in Nigeria. International Food Policy Research Institute [IFPRI] Development Strategy and Governance Division. November, 2022 IFPRI Discussion Paper 02145
- Bethel, O., Anyanwu, T., & Robinson, A. T. (2025). Determinants of cassava production in Kolokuma/Opokuma Iga, Bayelsa state, Nigeria. *Fudma journal of sciences*, 9(1), 318-322.
- Bulama and Fasoranti (2022). A Historical Review of Fertilizer Policies in Nigeria. International Food Policy Research Institute (IFPRI) Discussion Paper November 2022. Abuja, Nigeria.
- Dikeogu- Okoroigwe, C. C. F., Okonkwo, O. N. and Ifeanyichukwu, A. (2023) Agricultural Sector Productivity And Employment Generation In Nigeria. *Imo State University /Business & Finance Journal*.14(4), 126-141.
- Douillet, M. (2010). Nigeria's Agricultural Policy: Seeking Coherence within Strategic Frameworks Special Report *Grain de sel* No July to September. <http://www.interreseaux.org/ressourcesthematiques/ressources-parpays/article/politiquesagri-coles>
- Fankun, D. S. and Evbuomwan, G. O. (2017). An Evaluation of Agricultural Financing, Policies and Initiatives for Sustainable Development in Nigeria, in the 21st Century: 1990-2024. *Journal of Economics and Finance* 8(3), 32-38.
- Federal Ministry of Agriculture, Water Resources and Rural Development [FMAWRRD] (2024) Abuja Nigeria. Agricultural Policy for Nigeria. <https://faolex.fao.org/docs/pdf/nig149296.pdf>
- Kanayo, O., Nancy, S.I. and Maurice, O. U. (2013). A Review of Value Added in Nigeria's Pre and Post-SAP Agricultural Sector: Background. *Journal of Economics and Behavioral Studies*.5(1). 44-56.
- Kuhmonen, T. (2018). Systems view of future of wicked problems to be addressed by the Common Agricultural Policy. *Land Use Policy*, 77, 683-695.
- Lencucha, R., Pal, N. E., Appau, A., Thow, A. M. and Drope, J. (2020). Government policy and agricultural production: A scoping review to inform research and policy on healthy agricultural commodities. *Globalization and Health*, 16(1),1-15. <https://doi.org/10.1186/s12992-020-0542-2>
- Nwankwo CU, Ikehi ME, Ejiofor TE, Ifeanyieze FO (2024). Successive National Agricultural Policies/Programmes, Growth of Gross Domestic Product (GDP) and Expansion of Agribusinesses in Nigeria. *PLOS ONE*. 19(2):1-18.
- Oji, K. O. (2002). Basic Principles of Economics for Agricultural Projects and Policy Analyses. Prize Publishers, Nsukka, Nigeria.
- Olomola and Nwafor (2019). Nigerian Agriculture Sector Performance Review. A background Report for the Nigeria 2017 Agriculture Joint Sector Review. August 2018 P 1-80
- Onwualu, A. P. (2009). Developing Agricultural Raw Materials for Wealth Creation in Nigeria. 3rd Forum of the Laureates of the Nigerian National Order of Merit (Nnom) Merit House Complex, Abuja December 1 – 2, 2009. Raw Materials Research And Development Council (Rmrdc) 17 Aguiyi Ironsi Street, Maitama, Abuja
- Plecher, H. (2020) *Distribution of Gross Domestic Product (GDP) Across Economic Sectors Nigeria 2018*, Statista. <https://www.statista.com/statistics/382311/nigeria-gdp-distribution-across-economic-sectors/>.
- Shehu, U. M. (2023) Agricultural Sector Policy Periods and Growth Pattern in Nigeria (1960–2020): Implications on Agricultural Performance. Web of Science. <http://dx.doi.org/10.5772/intechopen.111382>
- Usman, M. B., Ademola, O. T., & Oni, B. O. (2024). PROFITABILITY AND CONSTRAINTS OF AGRICULTURAL COMMERCIALIZATION AMONG SMALLHOLDER RICE FARMERS IN NASARAWA STATE, NIGERIA. *FUDMA JOURNAL OF SCIENCES*, 8(6), 94-99.
- World Bank (2024). World Development Indicators, Last updated on 28th June, 2024. Washington, DC. <https://data.worldbank.org/country/nigeria>

