



Challenges and Strategies to Improve Agricultural Development and Food Security in Awka South Local Government Area of Anambra State

Nwafor, Angela Ebele¹, Umetiti, Chidinma Benedicta², Gladys Unoma Ndu-Anunobi³

¹Department of Public Administration NnamdiAzikiwe University, Awka, Anambra State, Nigeria

ae.nwafor@unizik.edu.ng/angelanwafor11@gmail.com

²Department of Public Administration Chukwuemeka Odumegwu Ojukwu University, Igbariam Okoyepio18@gmail.com

³Department of Public Administration NnamdiAzikiwe University, Awka, Anambra State, Nigeria gu.ndu-anunobi@unizik.edu.ng

ABSTRACT

This study investigates the challenges and strategies to improve agricultural development and food security in Awka South Local Government Area of Anambra State. It was necessitated by hunger and persistent rise in prices of food stuff in Awka South Local Government Area of Anambra State. Nigeria at large has witnessed Covid-19 pandemic as well as Fulani-herdsmen and farmers clashes which have contributed to the loss of lives and properties, crop destruction and abandonment of farm settlement resulting in low food production and food shortage. The study was guided by two research questions. Survey research design was employed for the study. The instrument for data collection was questionnaire administered to 100 farmers. Data collected were analyzed using frequency, percentage, mean and standard deviation. The results of study revealed among others that the challenges of agricultural development and food security in Awka South Local Government Area of Anambra State are use of simple farm tools, limited access to credit facilities, low technical know how, pests, poor infrastructural development, inadequate storage facilities, insecure markets for post-harvest products, government policies and corruption. Based on the findings, it was recommended among others that Government should remove stringent conditionality of accessing loans to enable rural farmers obtain credit facilities from banks at lower interest rate for large scale production of food.

Introduction

The agricultural sector is the mainstream of the Nigerian economy prior to independence in 1960 and before the discovery of oil in the early 1970s. During the period, the agricultural sector export raw materials and capital goods which account for large percentage of Nigerian foreign earnings. Akinyetun (2018) asserted that the agricultural sector actively employed about two-thirds of the country's total labour force and provided employment for about 90 percent of the rural population. However, with the discovery of crude oil in Nigeria and the subsequent oil boom in the 1970s, less attention was given to agricultural sector which hitherto had been the major foreign exchange earner for the country (Abdulkadir, Adefila, & Yusuf, 2018). The "oil boom" which led to less dependence on the agricultural sector contributed to economic crisis in Nigeria. Soon after the discovery of petroleum in the early 1970s, the cultivation of lands for food production was abandoned for the new found liquid gold. Amaechi (2018) pointed out that after the discovery of oil, the agricultural sector received less attention and this resulted to food insecurity, unemployment and youth restiveness. Food importation took over as opposed to exportation of food, billions of naira was spent on food importation.

The crisis of the Nigerian economy triggered the Federal and State Governments to formulate several policies and programmes to improve the function of the agricultural sector. Abur (2014) noted that these programmes include: National Accelerated Food Production Programme, NAFPP (1973); Agriculture Development Project, ADP (1975); Operation Feed the Nation, OFN (1976); National Seed Service, NSS (1977); Agricultural Credit Guarantee Scheme ACGS (1977); Rural Banking Scheme, RBS(1977); Green Revolution GR(1979); Directorate of Food, Road and Rural Infrastructure, DFRRI(1986); National Agriculture Land Development Authority, NALDA(1992), National Fadama Development Project, NFDPI, II, and III(1992, 1999 and 2008 respectively). The authors identified other programmes to include: Nigeria Agricultural Cooperative and Rural Development Bank, NACRDB (2000); National Agricultural Development Fund, NADF(2002); National Special Programme on Food Security, NSPFS (2002); Commodity Marketing and Development Companies, CMDC (2003); the Presidential Initiatives on selected crops (2004-2005), 7 Points Agenda with emphasis on Food Security (2009) and the Agricultural Transformation Agenda of Former President Goodluck administration. These programmes failed to solve the problem as indicated by large proportions of Nigerians in hunger and poverty. One of the means to eradicate the hunger and poverty is food security.

Food security is a situation where all people have physical access to sufficient, safe and affordable nutritious diet to improve their well-being. According to Akinyetun (2018), food security means ensuring that sufficient food is available; maintaining sufficient supplies through domestic production at relatively stable levels; allowing access to food for those in need of it; and ensuring biological utilization of food. It is the availability, accessibility and utilization of nutritional diets to guarantee good feeding and healthy lifestyle. Otaha (2013) noted that food security for a household means access by all members at all times to enough food for an active, healthy life. It is the availability, access and affordability of quality and sufficient

nutritious food for an active and healthy life. Durodolu and Odunlade (2020) stressed that the concept of food security is tightly knit with the agricultural development which contributes to food supply. It entails making food available and accessible during farming and harvest time. The food security can only be attained by country that invests in human and material resources in agricultural development.

According to Abiodun et al (2017), agricultural development is the process of promoting the proper conditions for farming in all facets so that planting, harvesting and processing of crops are made easy. It extends beyond the physical conditions of farming into research, technology and political policy. It entails the use of modern facilities to engage in large scale production and also the control of pest using innovative means. Ogbanga (2018) noted that agricultural development is critically important for ensuring food and nutritional security, income and employment generation, and for stimulating industrialization and overall economic development of the country. The agricultural development is engineered through supporting farmers to engage in large scale production. Agbasi, Michael and Okonkwo (2019) asserted that the major characteristics of Nigerian farmers are poverty, small farm holding and their inability to increase their output and income above the subsistence level which militate against food production. Anambra State in particular and Nigeria in general is struggling to attain self-sufficiency in food production. There is remarkable increase in the prices of food items in Awka South LGA of Anambra State. The increasing prices of food stuff in Awka South LGA and Nigeria at large is contributing to poverty and hunger in the country. Nwajuiba cited in Akinyetun (2018) stressed that 70 percent of the Nigerian population live on less than N100 (US\$ 0.70) per day, thus entrenching suffering, hunger and poverty culture. Some of the populace in Awka South LGA who are suffering from hunger and malnutrition are prone to physical and mental retardation and threatens their survival. The farmers in Awka South LGA of Anambra State face challenges which seems to contribute to the small scale farming and poverty. Given this background the study investigated the challenges and strategies to improve agricultural development and food security in Awka South Local Government Area of Anambra State.

Objectives of the Study

The broad objective of this study is to investigate the challenges and strategies to improve agricultural development and food security in Awka South Local Government Area of Anambra State. The specific objectives of the study include:

1. To determine the challenges of agricultural development and food security in Awka South Local Government Area of Anambra State.
2. To examine the strategies to improve agricultural development and food security in Awka South Local Government Area of Anambra State.

Research Questions

The study was guided by two research questions.

1. What are the challenges of agricultural development and food security in Awka South Local Government Area of Anambra State?
2. What are the strategies to improve agricultural development and food security in Awka South Local Government Area of Anambra State?

Theoretical Framework

The Conservation Model

The conservation model of agricultural development evolved from the advances in crop and livestock husbandry associated with the English agricultural revolution and the concepts of soil exhaustion suggested by the early German chemists and soil scientists.

The conservation model emphasized the evolution of a sequence of increasingly complex land and labour-intensive cropping system, the production and use of organic manures and labour-intensive capital formation in the form of physical facilities to more effectively use land and water resources. This model was the only approaches to intensification of agricultural production that was available to most of the world's farmers.

Agricultural development within the ambit of the conservation model, clearly was capable in many areas of the world of sustaining rate of growth in agricultural production around 1.0% per year over relatively long periods of time. This rate is not compatible with modern rates of growth in the demand for agricultural output which typically fall between 3-5% in the developing countries.

Method

Survey research design was adopted for the study. The study was carried out in Awka-South Local Government Area of Anambra State. It is bounded in the north by Awka North Local Government, on the South by Anaocha Local Government, on the East by Orji River Local Government, and on the West by Njikoka Local Government Area. Awka South is made up of nine major towns, namely, Amawbia, Awka, Ezinato, Isiagu, Mbaukwu, Nibo, Nise, Okpuno and Umuawulu. The ethnic group of the people of the area is Igbo which is one of the three major ethnic groups in Nigeria. The people are mostly Christians of different denominations. The area has federal, state and private educational institutions.

The area is home to people from numerous ethnic extractions in Nigeria. Most of the inhabitants in the area are farmers and traders. The population of the study comprised all the farmers in Awka-South Local Government Area of Anambra State. The sample size of the study was 100 farmers drawn using judgmental sampling technique. The study utilized primary source of data collected from the 100 farmers using structured questionnaire administered to

them. A total of 100 copies of the questionnaire were distributed, and 84 copies of questionnaire were successfully retrieved, indicating 84% return rate. The data collected were analyzed using, frequency, percentage, mean and standard deviation. The decision rule is that the mean ratings that fall below 2.50 were taken as disagreement, while mean rating of 2.50 and above were taken to indicate agreement. Standard deviation was used to ascertain the homogeneity or otherwise of the respondents mean ratings.

Results

The demographic characteristics of the farmers consisted of their sex, marital status and age.

Table 1: Distribution of Respondents based on Gender

Gender	Frequency	Percentage (%)
Male	37	44
Female	47	56
Total	84	100

Source: Researcher's Field Survey and Computation, 2021

As shown on Table 1, 44% (37) of the farmers are male, while 56% (47) are female showing that there are more female farmers than male in the area.

Table 2: Distribution of Respondents based on Martial Status

Martial Status	Frequency	Percentage (%)
Married	67	80
Single	17	20
Total	84	100

Source: Researcher's Field Survey and Computation, 2021

As shown on Table 2, 80% (67) of the farmers are married, while 20% (17) are single showing that there are more married farmers than single in the area.

Table 3: Distribution of Respondents based on Age

Age	Frequency	Percentage (%)
Below 25 years	2	2
25 – 49	50	60
50 and above	32	38
Total	84	100

Source: Researcher's Field Survey and Computation, 2021

The result on Table 3 show that majority 60% (50) of the farmers are between 25-49 years of age, 2% (2) of the respondents are below 25 years, while 38% (32) of the respondents are 50 years and above.

Research Question One: What are the challenges of agricultural development and food security in Awka South Local Government Area of Anambra State?

Table 4: Mean and Standard Deviation Scores of Famers on the Challenges of Agricultural Development and Food Security

S/N	ITEMS						\bar{x}	SD	Decision
		N	SA	A	D	SD			
1	Use of simple farm tools	84	29	34	10	11	2.96	1.00	Agree
2	Limited access to credit facilities	84	18	33	20	13	2.67	0.99	Agree
3	Low technical know how	84	21	34	17	12	2.76	0.99	Agree
4	Destruction of crops by pests	84	25	27	18	14	2.75	1.06	Agree
5	Poor infrastructural development	84	23	31	17	13	2.76	1.03	Agree
6	Inadequate storage facilities	84	20	37	17	10	2.80	0.94	Agree
7	Insecure markets for post-harvest products	84	19	32	19	14	2.65	1.02	Agree
8	Poor governmental policy	84	21	35	18	10	2.80	0.95	Agree
9	Corruption	84	24	32	21	07	2.81	1.01	Agree
10	Naturally Disasters	84	17	39	19	09	2.89	0.86	Agree
11	The increasing rate of insecurity	84	22	28	19	15	2.68	1.05	Agree
Cluster Mean							2.78	0.99	Agree

Data Analysis presented on Table 4 revealed that the farmers recorded mean scores above the cut-off mean of 2.50 for all items indicating agreement with the items as the challenges of agricultural development and food security. The overall standard deviation score of 0.99 are closer to the mean indicating similarity in their responses in each cluster. The cluster mean of 2.78 indicated that there are challenges of agricultural development and food security in Awka South Local Government Area of Anambra State.

Research Question Two: What are the strategies to improve agricultural development and food security in Awka South Local Government Area of Anambra State?

Table 2: Mean and Standard Deviation Scores of farmers on the strategies to improve agricultural development and food security in Awka South Local Government Area of Anambra State

S/N	ITEMS								Decision
		N	SA	A	D	SD	\bar{x}	SD	
12	Making available modern equipment to farmers to use for cultivation	84	14	35	20	15	2.57	0.97	Agree
13	Provision of credit facilities to farmers	84	20	34	18	12	2.74	0.98	Agree
14	Training of farmers to improve their technical-know-how	84	19	30	24	11	2.68	0.97	Agree
15	Subsidize the cost of insecticides to help farmers control pests in the farm	84	20	29	25	10	2.70	0.97	Agree
16	Provision of social amenities	84	20	30	20	14	2.67	1.02	Agree
17	Using agricultural extension workers to educate farmers on ways to store their farm products	84	21	28	24	11	2.70	0.99	Agree
18	Regulation of market places	84	11	20	34	19	2.27	0.96	Disagree
19	Making realistic policy that support food production	84	22	32	18	12	2.76	1.00	Agree
20	Appropriate sanctions on corrupt public officers that embezzle funds for farming	84	17	30	22	15	2.58	1.01	Agree
21	Construction of drainage system to control some natural disasters	84	09	22	32	21	2.23	0.95	Disagree
22	Stationing of security personnel close to farm settlements	84	18	40	14	12	2.76	0.95	Agree
Cluster Mean							2.61	0.81	Agree

As revealed on Table 5, all items except 18 and 21 have mean scores above the cut off mean of 2.50 and this indicates their agreement with the items as the strategies to improve agricultural development and food security. The overall standard deviation score of 0.81 indicated that the respondents are homogeneous in their responses. The cluster mean of 2.61 indicated that there are strategies to improve agricultural development and food security in Awka South Local Government Area of Anambra State.

Discussion of Findings

The result of the study revealed that there are challenges of agricultural development and food security in Awka South Local Government Area of Anambra State. The challenges of agricultural development and food security in Awka South Local Government Area of Anambra State are use of simple farm tools, limited access to credit facilities, low technical know how, pests, poor infrastructural development, inadequate storage facilities, insecure markets for post-harvest products, government policies and corruption. This is in line with the finding of Metu, Okeyika and Maduka (2016) who reported that the challenges of food security in Nigeria are use of simple farm tools, small farm holdings, restricted access to credit facilities and low agricultural inputs, inadequate storage facilities, insecure markets for post-harvest products, government policies and corruption. This also supported the finding of Ojeka, Effiong and Eko (2016) who observed that the constraints to agricultural development in Nigeria include; diversion of funds meant for investment in agriculture, poor infrastructure, increasing food imports and lack of requisite technologies. The finding of this study also revealed that there are many strategies to improve agricultural development and food security in Awka South Local Government Area of Anambra State. The strategies to improve agricultural development and food security in Awka South Local Government Area of Anambra State include: making available modern equipment to farmers to use for cultivation, provision of credit facilities to farmers, training of farmers to improve their technical know-how, subsidize the cost of insecticides to help farmers control pests in the farm and provision of social amenities among others.

Conclusion

Based on the findings, it is concluded that farmers in Awka South LGA of Anambra State face many challenges that undermine their crop production to foster food security. No meaningful development can be made in the agricultural sector without strengthening and supporting farmers for attaining food security. The attainment of food security in Nigeria requires commitment of government, non-governmental organization and individuals to stir this nation back to the gracious days of food self-sufficiency in the country.

Recommendations

Based on the findings, it was recommended among others that:

- Government should remove stringent conditionality of accessing loans to enable rural farmers obtain credit facilities from banks at lower interest rate for large scale production of food.
- The government should develop policy that promotes zero import duty on agricultural machinery to encourage farmers to procure modern facilities for farming.
- Government should mass media to sensitize farmers on innovative means of cultivating crops.
- The State Ministry of Agriculture should organize annual workshop for farmers to update their knowledge and skills of farming.

References

- Abdulkadir, H., Adefila, J. O., & Yusuf, R. O. (2018). Analysis of spatial variation in agricultural development programmes in Kano State, Nigeria. *Dutse Journal of Pure and Applied Sciences*, 4(2), 1-9.
- Abiodun, A.A., Olatilewa, O.M., Adegbola, A.J., Atibioko, O.A., Ogundele, B.A., Adetayo, S.A., Ilemaye, F.O., Oyebamiji, I.T., & Iworji, A.A. (2017). Corruption and agricultural development: Analysis of fertilizer distribution in rural communities of Kwara State, Nigeria. *International Journal of Development and Sustainability*, 6(10), 1271-1281.
- Abur, C.C. (2014). Assessment of food security status among rural farming households in Guma Local Government Area of Benue State, Nigeria. *International Journal of Research in Humanities and Social Studies*, 1(2), 34-42.
- Agbasi, O.E., Michael, M.C., & Okonkwo, S.M. (2019). Effect of cooperative on farmers output in Awka South local government area, Anambra State, Nigeria. *International Journal of Research and Innovation in Applied Science*, 4(8), 87-95.
- Akinyetun, T.S. (2018). Towards achieving food security in Nigeria: The economic strains and strategies for way forward. *Global Journal of Economics and Finance*, 2(1), 7-23.
- Amaech, L.N. (2018) Food security and sustainable agricultural development in Nigeria. *The International Journal of Social Sciences and Humanities Invention*, 5(5), 4765-4768.
- Durodolu, O.O., & Odunlade, R.O. (2020). Food security: An informetric analysis of agricultural sector in Nigeria from 2009-2018. *International Journal of Library & Information Science*, 3(1), 126-135.
- Metu, A.G., Okeyika, K.O., & Maduka, O.D. (2016). *Achieving sustainable food security in Nigeria: Challenges and way forward*. 3rd International Conference on African Development Issues, 182-187.
- Ogbanga, A. (2018). Agricultural development and employment generation in Nigeria. *International Journal of Advanced Studies in Ecology, Development and Sustainability*, 5(1), 1-22.
- Ojeka, G.O., Effiong, C.E., & Eko, E.O. (2016). Constraints to agricultural development in Nigeria. *International Journal of Development and Economic Sustainability*, 4(2), 1-15.
- Otaha, I.J. (2013). Food insecurity in Nigeria: Way forward. *African Research Review*, 7(4), 26-35.
- Udemezue JC, Osegbue EG. (2018). *Theories and models of agricultural development*. Annals of Reviews and Research. 1(5): 555574.