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CAUSES OF FOOD INSECURITY IN SOUTH-EAST NIGERIA: IMPLICATION FOR AGRICULTURAL REFORM

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Abstract
It is worthy to note that the South-Eastern region of Nigeria is not food sufficient like other regions of the country. To improve food production in the region, this study was carried to examine the causes of food insecurity in South-East Nigeria. The study was guided by four research questions and three hypotheses. A descriptive survey research design was adopted for the study. Multi-stage sampling was used to select 280 farmers. Data were collected using questionnaire and analysed using descriptive statistics and logistic regression analysis. The study highlighted some of the root causes of food insecurity in the region. They include long era of neglect by government, population growth, degradation of natural environment, traditional agricultural practices, poor involvement of the youth among others. The study shows that majority of the farmers indicated that they were into cassava production (58%), maize production (35%), poultry production (62%), 22% were into fish farming and piggery (16%). For South-East Nigeria to attain food sufficiency, the study recommends proactive policy responses in support of farmers. Also required is infrastructural support in terms of good road networks and marketing facilities to best support agricultural activities.

Key words: Food security, Food insecurity, Southeast, Agricultural reforms

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Introduction

Fighting hunger, which is a basic human need, is one of the century's biggest challenges (Ojo & Adebayo, 2012). Over time, the idea of food security has changed from one primarily concerned with supply to one that also considers physical, social, and economic access, safety and nutritional issues, as well as food preference (an element that was introduced in reaction to the foods' cultural acceptance) (Engler-Stringer, 2014). As a result, food security has a number of components, including food availability, access, use, and stability (i.e., food security should not be dependent on the absence of abrupt shocks or cyclical occurrences but should endure despite them) (FAO 2006). According to Engler-Stringer (2014), there are four aspects of food insecurity at the household level: quantitative, qualitative, socially acceptable, how food is acquired (charity can occasionally result in feelings of loss of dignity), and psychological, which refers to the worry of not having enough to eat. Quantitative refers to having enough food to meet basic needs. Qualitative refers to having food that is both safe and diverse.

After a long period of decline, the number of people who experience hunger have started to rise once more in 2015 (FAO et al. 2019). Two billion people still experience moderate-to-severe food insecurity today because they lack regular access to food, a sufficient variety of food with adequate nutritional value, or enough food to feed their families. Among the two billion people facing food insecurity, 820 million are going hungry (FAO et al., 2019). People are unable to achieve their nutritional needs, especially in poor nations (Oyinloye et al., 2018).

According to the Food and Agricultural Organization (2016), the interplay of food security variables impacts a person's, household's, and state's level of food security. Food security at the national level does not always equate to sustainable food security at the family level. Food security is stated to exist when food is produced and distributed in an amount, quality, and variety that is readily available, accessible, utilised, and stable enough to allow for individual desire. However, food insecurity would result from the opposite.

There is a claim that Nigeria is an agrarian society, since many people engage in subsistence farming. This represents a decrease of 24.7% from 65.7% GDP in 1957 and contributes 41% of the country's GDP in 1999. Due to ineffective policy implementation, this drop continues. Nigeria exports goods, particularly in the 1960s and early 1970s, to Britain, the USA, Canada, France, and Germany. This is due to the country's fertile soil and favourable climate, which enables it to grow a range of food and cash crops. In the 1980s, agricultural activities like cattle herding, fishing, logging, weaving, ceramics, and poultry contributed more than 2% of the GDP. According to a United Nations survey, rural farmers in northern Nigeria were reported to own 26 million goats, 12.2 million cattle, 13.2 million sheep, 1.3 million piglets, 700,000 donkeys, 250, 000 horses, and 18,000 camels. In the 1970s, fishing produced between 600,000 and 700,000 tonnes annually. Statistics, however, indicate that all of these have fallen to their lowest point (Akinwumi, 2015).

There are, however, a number of devastating reports that indicated Nigeria was falling behind in terms of food security. For instance, a research estimated that there are over 50 million hungry people in Nigeria, which represents just under 3% of the 160 million people who call the nation home. Of them, roughly 52% are considered being living in poverty. Nigeria produced enough food for its own needs and was a net exporter of food. But, during the global economic crisis of the late 1970s, along with the finding of oil and rising revenues, things got worse. Nigeria became a net importer of food as a result of the food sector's neglect. By 2009, Nigeria was importing food at a cost of more than $3 billion yearly

(Yakubu & Adamu, 2017). Less than 10% of the annual budget is allocated to agriculture, despite the fact that it accounts for around 42% of the GDP, employment, and means of subsistence for more than 80% of the people. The fact that "Nigeria spends only 3% or less of her budget on agriculture" is more concerning. Other, smaller nations perform far better. Spending on agriculture in Rwanda, Tanzania, Kenya, Malawi, and Mozambique ranges from 10% to 15% or higher. Nigerian farms produce very little agricultural output. One tonne per hectare is the typical yield of seed crops. Only 1% of farmers in Nigeria utilise contemporary seeds. Nigeria uses 13 kilogrammes of fertiliser per hectare, compared to a global average of 100 kilogrammes. Almost 400 per hectare in China (Yakubu & Adamu, 2017).

Instead of higher productivity per unit area, the majority of food produce comes from enlarged farmed areas. Due to inadequate storage and processing facilities, Nigeria frequently loses its production. So, despite having an abundance of tomatoes that frequently go to waste, Nigeria is the biggest importer of tomatoes from China and Italy. Due to its disregard for agriculture, Nigeria spent $4.2 billion (N638.4 billion) annually on food imports (Akinwumi, 2015). In the 2013 UNDP Human Development Index, Nigeria came in at position 152 out of 187 countries, placed 39th out of 78 on the 2013 World Hunger Index, and had 10 million stunted and underweight children. Government efforts to promote development will be ineffective if there are no initiatives to raise the Human Development Index (HDI) by implementing measures to increase residents' access to food and nutrition (Ogunmola, 2014).

According to reports, Nigeria consumes only 1730 Kcal of calories per day and 64 g of protein on average per person, which is significantly less than the recommended 2500–3400 Kcal minimum daily intake. This indicates that Nigeria is currently dealing with the problem of a poor diet. Nigeria ranked 91st out of 109 countries in the 2015 Global Food Security Index (GFSI), receiving a score of 37.1 on the affordability, availability, quality, and safety indices. The government of Nigeria had to turn to food imports since local food production could not keep up with the rising demand for food. As a result, food imports increased from 19.9% in 2000 to around 30.6% and 22.7%, respectively, in 2011 and 2012. According to the 2016 Global Development Indicator, food export remained low at 5.3% (Amaka et al. 2016).

Nigeria has failed in all areas of development, according to El-Kurebe (2012), and this necessitates immediate action to turn around the nation's faltering economic situation. Based on cost, availability, quality, and safety indicators, Nigeria ranks 80th out of 105 countries under examination by the GFSI Economist Intelligence Unit, with a percentage of roughly 34.8%. Nigeria was rated poorly in this study, scoring less than 25% in the following categories: public spending on agricultural research and development; food safety net programmes; gross domestic product per capita; the percentage of the population living below the international poverty line; the share of household spending on food consumption; and the quality of the protein. According to data from the World Bank, over 90% of Nigeria's agricultural output originates from tiny, rural farms, indicating that the country's food security issue is quite significant. According to UNICEF figures, nearly 65% of Nigeria's population experiences food insecurity (Evans, 2011).

A number of concerns that scholars have discussed in various forums causes the above scenarios. For instance, several researchers, Imonikebe (2010), Akinwumi (2015), and Amaka et al. (2016) agreed that a variety of issues represented Nigeria's greatest difficulties in achieving sustained food security. Secondly, they contended that, up to the discovery of oil, Nigeria solely relied on agricultural production to earn income. However, because of poor government policies, the agricultural sector among others was neglected, and farmers' needs were not adequately met. Agricultural research and development also slowed down, and policies were quickly developed with little to no input from farmers. In addition, incentives

for greater food production were ignored. Urban farming was challenging due to a lack of land. Second, Nigeria relies on subsistence farming, basic farming equipment, tiny farms, credit loans that are insufficient, subpar storage facilities, subpar marketplaces, and intermediaries who take advantage of farmers. Poor technology, as well as poverty and illiteracy, among other things, limit farmers' access to information.

Thirdly, as Nigeria's population grows, the country's food demand outpaces its ability to supply it. Also, some of the industrious kids move to the city in search of better opportunities because they live in extreme poverty. Fourthly, among other issues, Nigeria experiences drought, erosion, desertification, and flooding. The loss of farmland, fluctuating food costs, and a rise in food-borne infections are just a few ways that climate change affects the food supply. For instance, in 2012, Nigeria witnessed heavy rains that caused flooding that wiped out homes, cattle, crops, and people. According to Amaka et al. (2016) an estimation of roughly 2.6 trillion was lost. It decreased agriculture's overall contribution to GDP from 23.89% in 2010 to 22.05% in 2012 (WDI, 2016). Last but not least, Nigeria's high level of corruption has impeded the country's progress. This has caused money set aside for public services and security to be diverted for private purposes. Rural infrastructure deteriorates as a result, which affects most farmers. As noted by Ilaboya et al. (2011) it is important to note that the aforementioned issues pose a threat to society as a whole.

Our research aims to add to the corpus of knowledge on the causes of food insecurity in Nigeria focusing on Southeast Nigeria due to its expanding urban population, variations in land use and land cover which has given rise to environmental problems such as gully erosion, landslide, flooding, air and water pollution and depletion of land with high agricultural potentials (Chigbu & Onukaogu, 2012). There are evidences that the issue of food insecurity is more pronounced in Southeast relative to other regions of the country. Evidence from the NBS report revealed that prices of staple food items in the Southeastern region pose a greater threat for its residents as it has more than doubled its fellow regional counterparts in the last 2 years. The data also revealed that on a year-on-year comparison, food prices in this region grew by more than 45-50 percent on the average as compared to other regions that witnessed 30-40 percent price increases within the same period (Okafor, 2022). It was on this premise that this study is undertaken to examine the causes of food insecurity in South-East Nigeria.

Purpose of the study

The main purpose of this study is to examine the causes of food insecurity in Southeast Nigeria. In particular, the study:

- ascertain the state of food security in Southeast Nigeria;
- examine the impact of government role on food security in Southeast Nigeria;
- examine the impact of demographic change on food security in Southeast Nigeria; and
- examine the agricultural practices that affect food security in Southeast Nigeria

Research questions

- What is the state of food security in Southeast Nigeria?
- To what degree has government role affected food security in Southeast Nigeria?
- To what extent has demographic change impacted food security in Southeast Nigeria?
- What are the agricultural practices that affect food security in Southeast Nigeria?

Hypotheses

- Government role have no significant impact on food security in Southeast Nigeria

- Demographic changes have no significant impact on food security in Southeast Nigeria.
- Agricultural practices have no significant impact on food security in Southeast Nigeria.

Methodology

Research design

The study adopted a descriptive survey research deign. This type of research enabled researchers to employ questionnaires to determine the opinions, perceptions, and attitudes of people about issues confronting food security in Southeast Nigeria.

Area of the study

The study was carried out in Southeast Nigeria. Southeast Nigeria comprises of five States, which are Abia, Anambra, Ebonyi, Enugu and Imo State.

Population and sampling technique for the study

The population of the study comprised all contact farmers operating within the urban areas in Southeast Nigeria. Famers in the urban areas were considered because of the availability of sampling frame. Sampling frame was available for Ebonyi (202 farmers), Enugu (192 farmers) and Imo States (537). The sample size used for the study was first determined using Taro Yamani. A multi-stage sampling technique was employed in selecting 280 farmers used for the study. At the first stage, the purposive sampling technique was used to select Ebonyi (61 farmers), Enugu (58 farmers), and Imo (161 farmers) from the five states in the zone. The choice of these states was based on the availability of the updated information on the urban contact farmers at the state's Agricultural Development Programme (ADP) and Fadama III offices. At the second stage, from each of the selected states, three urbanised settlements were randomly selected. Specifically, in Ebonyi, Enugu, and Imo states there were 202, 192, and 537 urban farmers on the list, respectively. At the third stage, proportional sample size was also used to randomly select 280 urban farmers.

Instruments for data collection

A semi-structured questionnaire designed by the researcher was the instrument used for data collection. The questionnaire consisted of two sections I and II. Section I provided information on agricultural farming engaged in by farmers while section II was made up of four clusters according to the four specific objectives/research questions. Responses to the items in the questionnaire were based on a four-point Likert type rating scale, ranging from Very Great Extent (VGE) (4 points), Great Extent (GE) (3 points), Little Extent (LE) (2 points), and Very Little Extent (VLE) (1 points) for research questions one to four. The instrument was duly validated by three experts (2 from the Department of Political Science, Nnamdi Azikiwe University, Awka) and 1 from Department of Computer Science, Nnamdi Azikiwe University, Awka). Reliability of the instrument was ascertained using Cronbach Alpha. A reliability coefficient of 0.89 was established which signified very high reliability of the instrument.

Data collection

Direct method was applied by the researcher and two research assistants in distributing and collecting the questionnaire from the respondents at the respective locations of the study area. Before the distribution of the questionnaire, the research assistants were briefed on the modalities for distributing and collecting the questionnaire from the respondents on the spot.

This ensured that the respondents appropriately complete the questionnaire. Thus, there was 100% return of the questionnaire, and were duly used for data analysis.

Data analysis

The data analyses employed in this study were both descriptive and inferential analysis. Mode, and percentages were used to analyzed the agricultural farming engaged in by farmers, while Mean and Standard deviation were used to answer research questions raised in the study. A criterion mean of 2.50 was used as the benchmark for decision making for each item, since a four-point rating scale was used for the study. Thus any item with a mean of 2.50 and above was considered as accepted by the respondents, while any item with a mean below 2.50 was considered as unaccepted by the respondents. Logistic regression was used to test whether government role, demographic changes and agricultural practices significantly affects food security in Southeast Nigeria at 0.05 level of significance. All computations were carried out using the Statistical Package for Social Science (SPSS) version 25.0.

Results

Two hundred and eighty respondents completed the questionnaire. The responses of the respondents on each of the items in the questionnaire were computed. Results are shown using visuals and Tables. Responses on the type of agricultural farming engaged in by farmers are presented with bar charts, while the responses on the four research questions and three hypotheses that guided the study are presented on Tables.

Types of agricultural practices engaged in by farmers

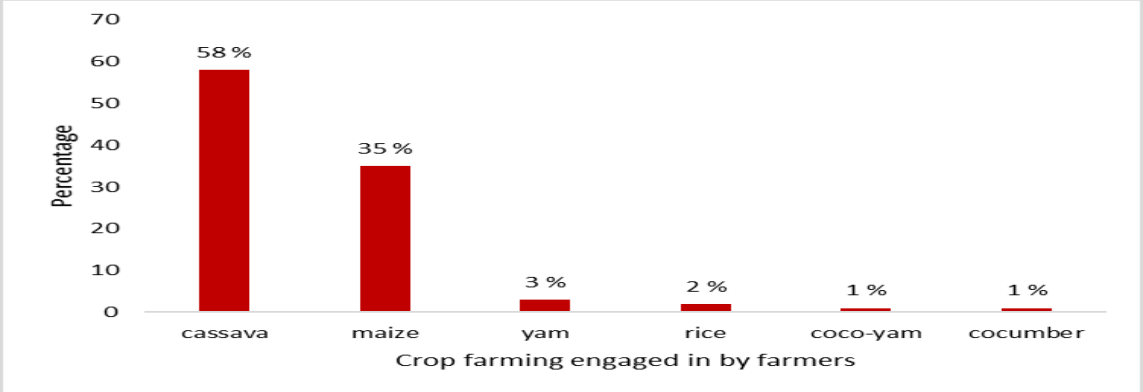

Fig 1: Types of crop farming engaged in by farmers

The result in Fig 1 show that farmers are engaged in different types of cropping farming which ranges from root and tubers, grain, and vegetables. Among the crops cultivated, cassava (58 %) and maize (35 %) were the major crops cultivated by farmers. Other crops cultivated are yam (3 %), rice (2 %), cocoyam (1 %) and cucumber (1 %).

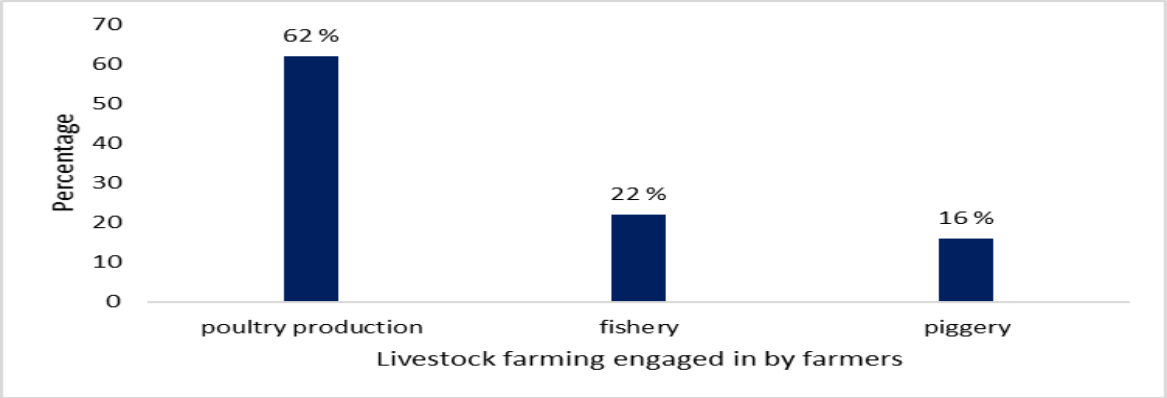

Fig 2: Types of livestock farming engaged in by farmers

Data in Fig 2 show that majority (62 %) of the farmers were engaged in poultry farming, 22 % of the farmers were into fish farming, while 16 % engaged in pig farming.

Research question 1: *What is the state of food security in Southeast Nigeria?*

Results of Research Question one are presented on Fig 3.

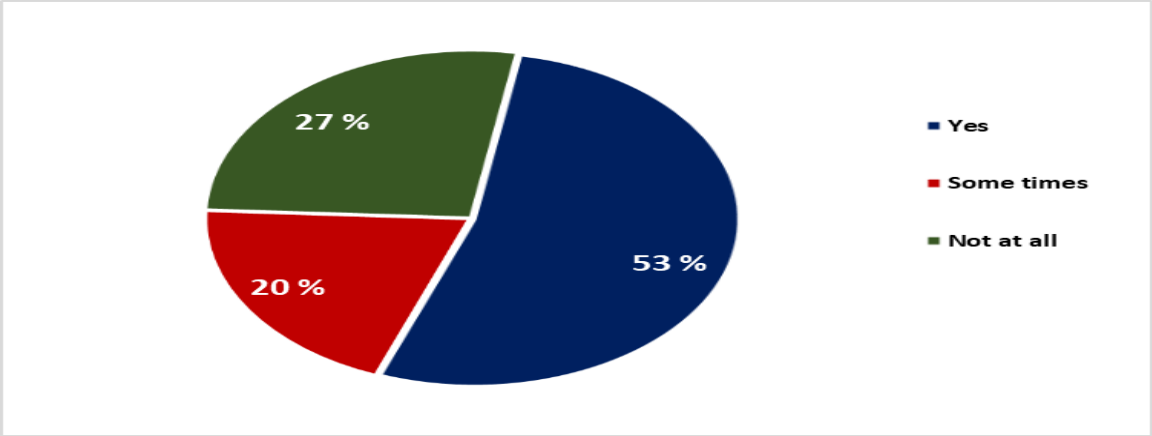

Fig 3: Do you ever worry that your household would not have enough to food?

From Fig 3, it can be seen that majority (73 %) of the respondents were not certain that there would be enough food for the family as opposed by 27 % of the respondents. This goes to show that food insecurity is still an issue in the study area.

Research Question 1: To what degree has government role affected food security in Southeast Nigeria?

Results of Research Question two are presented on table 1.

Table 1: Mean responses of the respondents on the degree to which government role affected food security in Southeast Nigeria

S/N	Item statements:	$\bar{X}$	SD	Decision
1	Provision of adequate basic social amenities	2.38	0.92	LE
2	Adequate supply of subsidized modern farm inputs	2.44	0.83	LE
3	Provision of adequate security	2.47	0.87	LE
4	Adequate funding	2.54	0.83	GE
5	Successful implementation of agricultural programmes	2.21	0.86	LE
6	Proper awareness on best agricultural practices	2.41	0.82	LE
7	Good credit facilities	2.33	0.94	LE
	Grand Mean	**2.39**	**0.87**	**LE**

Note: $\bar{X}$=Mean, SD=Standard Deviation, N = Number of Respondents=605

The results presented in Table 1 showed the mean and standard deviation of respondents on the extent to which the roles of government affected food security in Southeast Nigeria. The results showed that item statements number 1-3 and 5-7 had mean scores below 2.50. This indicates that roles played by government in the provision of basic social amenities, security and the supply of subsidized modern farm inputs had no significant impact in ameliorating food insecurity in the region. Other roles played by government that has not met expectation of the populace in terms of checkmating food insecurity were tied to unsuccessful implementation of agricultural programmes, poor awareness creation on the adoption of best agricultural practices and poor credit facilities ($\bar{X}$< 2.50). However, there is evidence that fund was made available for the sector ($\bar{X}$> 2.50). Overall, results in Table 1 showed that government role had little or no effect in arresting food insecurity in Southeast Nigeria.

Hypothesis 1: Government role have no significant impact on food security in Southeast Nigeria

The Results of Hypothesis 1 are presented on table 2

Table 2: Regression Analysis of the impact of government role on food security in Southeast Nigeria

Model	B	SE	WALD	df	p-value	Decision
Government Role	-0.41	0.19	4.76	1	0.03	Significant
Constant	-5.69	0.86	43.69		0.00	

Dependent variable= State of food security
Hosmer & Lemeshow p-value = 0.86
Nagelkerke R-square = 0.35

The results of a regression analysis that examines the impact of government role on food security in Southeast Nigeria are displayed in Table 2. The p-value of 0.86, which is greater than 0.05, shows that the model fits the data. The variable "Government Role" is negative (-0.41) and statistically significant (*p-value = 0.03*). To put it in another way, government role did not improve food security. In fact, food security declined by 41 % suggesting that government is not doing enough to fight food insecurity in the region. Overall, the model accounted for approximately 35 percent of the variance in the outcome (State of food security); Nagelkerke R-square = 0.35.

Research question 2: *To what extent has demographic change impacted food security in Southeast Nigeria?*

Results of Research Question two are presented on table 3

Table 3: Mean responses of the respondents on the impact demographic changes have on food security in Southeast Nigeria

S/N	Items statements:	X	SD	Decision
1	Rapid population growth	2.78	0.64	GE
2	Pressure on land use	2.83	0.77	GE
3	Land grabbing	2.47	0.85	LE
4	Food shortage	2.38	0.82	LE
5	Competition for limited arable land	2.65	0.83	GE
6	Degradation of the natural environment	2.69	0.84	GE
7	Increase in youths involvement in agriculture	2.42	0.89	GE
	Grand Mean	2.60	0.81	GE

Note: $\bar{X}$=Mean, SD=Standard Deviation, N = Number of Respondents=605, LE = Low Extent, GE = Great Extent

From Table 3, it can be seen that the demographic changes witnessed in Southeastern part of the country to great extent, impacted food security ($\bar{X}$> 2.50). Some of the demographic changes that are contributing the food crises experienced in the Southeastern are rapid population growth, pressure exerted on the land, completion for arable land, degradation of the natural environment and poor participation of youths in agriculture.

Hypothesis 2: Demographic changes have no significant impact on food security in Southeast Nigeria

The Results of Hypothesis 2 are presented on table 4

Table 4: Regression Analysis of the impact of demographic changes on food security in Southeast Nigeria

Model	B	SE	WALD	df	p-value	Decision
Demographic Changes	-0.64	0.22	8.83	1	0.00	Significant
Constant	-9.14	1.49	37.64		0.00	

Dependent variable= State of food security
Hosmer & Lemeshow p-value = 0.11
Nagelkerke R-square = 0.50

Table 4 shows the computations of a regression model that investigates the impact of demographic changes on food security in Southeast Nigeria. Hosmer & Lemeshow p-value = 0.62 is greater than 0.05, showing that the model fits the data. The variable "Demographic changes" is negative (-0.64) and statistically significant (*p-value = 0.00*). This signifies a negative relationship between the demographic and food security experienced in the Southeast Nigeria. In other words, the pattern of changes in the demography of Southeast Nigeria has a detrimental effect on the food security of the region. Food security is likely to drop by 62 % if the demographic changes is not controlled. Overall, the model accounted for approximately 50 percent of the variance in state of food security; Nagelkerke R-square = 0.50.

Research question 4: *What are the agricultural practices that affect food security in Southeast Nigeria?*

Results of Research Question four are presented on table 5.

Table 5: Mean responses of the respondents on the agricultural practices that affect food security in Southeast Nigeria

S/N	Item statements:	$\bar{X}$	SD	Decision
1	Overdependence on rainfall	2.66	0.79	GE
2	Poor agricultural extension service delivery	2.79	0.87	GE
3	Use of underdeveloped farm mechanization	2.81	0.83	GE
4	Limited use of improve farm inputs	2.89	0.84	GE
5	Pre-harvest and post-harvest loss	2.91	0.92	GE
	Grand Mean	2.81	0.85	GE

Note: $\bar{X}$=Mean, SD=Standard Deviation, N = Number of Respondents=605, HE= High Extent

Result in Table 5 shows that items 1-5 were identified by the respondents as the agricultural practices that affected food security in Southeast Nigeria ($\bar{X}$> 2.50).

Hypothesis 3: Agricultural practices have no significant impact on food security in Southeast Nigeria

The Results of Hypothesis 3 are presented on table 6.

Table 6: Agricultural practices have no significant impact on food security in Southeast Nigeria

Model	B	SE	WALD	df	p-value	Decision
Agricultural practices	-0.38	0.18	4.35	1	0.04	Significant
Constant	-5.21	0.75	47.74		0.00	

Dependent variable= State of food security
Hosmer & Lemeshow p-value = 0.62
Nagelkerke R-square = 0.34

Table 6 shows the computations of a regression model that investigates the impact of agricultural practices on food security in Southeast Nigeria. Hosmer & Lemeshow p-value = 0.62 is greater than 0.05, showing that the model fits the data. The variable "Agricultural practices" is negative (-0.38) and statistically significant (*p-value = 0.04*). This signifies a negative relationship between the demographic and food security experienced in the Southeast Nigeria. In other words, traditional agricultural practices have a detrimental effect on the food security of the region. Food security is likely to drop by 38 % if farmers do not change in adopting the traditional agricultural practices. Overall, the model accounted for approximately 34 percent of the variance in state of food security; Nagelkerke R-square = 0.35.

Discussion

The study found out that tubers and maize constitute the bulk of crops cultivated in the region. Whereas, poultry, fishing and pig farming were the major livestock farming engaged in by farmers in the region. This suggests that the region is yet to benefit from the numerous options that can be derived from the sector. Because of this, most household heads were bound to go through some psychological distress of not sure of providing sufficient and continuous supply of food to their families.

The study discovered that the looming food crisis experienced in the Southeast region is associated with a number of factors. One of the causes of food insecurity in the region is as a result of a protracted period of government negligence. This result is consistent with the findings of Yakubu and Adamu (2017), who in their study reported that government neglect

of the agricultural sector is demonstrated in the poor state and shortage of social amenities; inconsistent policy implementation; insufficient supply of subsidised modern farm inputs; and rising insecurity that takes the form of kidnapping, banditry, pockets of unrest and corruption. Moreover, funds designated for agricultural programmes and the distribution of public goods are misappropriated for private purposes. In general, this has impeded agriculture and halted economic activity, leading to famine. It is well known that high levels of corruption, collusion, and nepotism characterise Nigerian governance and politics and negatively impact people's access to and use of food (Olumba, Olumba & Alimba, 2021). Supporting this finding, Egbutah (2009) observed that funds allocated to the agricultural sector are mostly diverted into the pockets of political office holders and government officials, leaving little funds, which is hardly sufficient for any meaningful impact on agriculture. Other roles played by government that has not met expectation of the populace in terms of checkmating food insecurity were tied to unsuccessful implementation of agricultural programmes, poor awareness creation on the adoption of best agricultural practices and poor credit facilities. In line with this finding, Edeoghon and Izekor (2017), reported credit constraints as a limiting factor to farming in Southeast Nigeria.

The study identified, demographic changes, such as rapid population increase, strain on the environment, and competition for arable land, as signs that the region's ability to produce enough food to meet the requirements of its growing population is declining. This claim is consistent with the research findings of Onyebueke et al. (2020), who noted that population expansion led to a decrease in the amount of agricultural land that was available, which had a negative impact on agricultural output. Land deterioration due to wind and water erosion, which has furthered led to declines in soil fertility, is another prominent demographic element linked to food insecurity in the Southeast. The study's further findings showed that young involvement in agricultural endeavours is not encouraging. Youth are undoubtedly the main source of labour needed for agriculture in the absence of machines. The lack of farm labour recorded in the research area may be related to young people's perceptions that nonagricultural pursuits are more appealing than farming activities (Ayinde et al., 2014). As a result, labour will be costly if this is the case, which could lower agricultural production.

Lastly, the study revealed that the adoption of traditional agricultural practices contributed to food insecurity in the region. Some of the agricultural practices are shown in the overdependence on rainfall, poor agricultural extension service delivery, use of underdeveloped farm mechanization such as hoes and cutlass, pre-harvest and post-harvest loss and limited use of improve farm inputs. The over-dependence of conventional agricultural practices could be link to the findings of Salau and Attah (2012), reported poor extension service as a constraint to agricultural production in, Nigeria. Otitoju and Enete (2016) demonstrate the significance of farmers' contact with agricultural extension agents in positively influencing their production levels, resource use efficiency, and profitability.

Regression analysis shows that the role of government, changes in demography and agricultural practices did not improve food security in Southeast Nigeria ($p < 0.05$). Based on the results of the demographic changes had a more impact on food security relative to government roles and over dependence on traditional agricultural practices.

Conclusion

Majority of households are not certain of continuous food supply. The situation faced by majority of persons in the region is not unconnected to the misappropriation of funds earmarked for agricultural development and government nonchalant attitude towards the

sector. Other factors contributing to the looming food crisis in the region are demographic changes demonstrated in rapid population growth, attitudes of the youth towards agriculture and over dependence of conventional agricultural practices by farmers of the region. Among the factors responsible for food insecurity in the study area, demographic changes had the greatest impact.

Recommendations

- There should be strict implementation of anti-corruption laws to the latter to serve as a deterrent to others without fear or favor.
- There should be proactive policy responses in support of farmers especially now that the landscape is been eaten away by erosion etc.
- The government must provide basic social amenities and farm inputs to help reduce rural-urban drift and boost agricultural and economy activities. Also required is infrastructural support in terms of good road networks and marketing facilities to best support agricultural activities.
- The agriculture sector should be made more attractive and friendly so that more people especially the youths will begin to embrace it.
- More agricultural personnel need to be recruited to expand extension services in the rural areas.

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