



SOCIO-ECONOMIC AND INFRASTRUCTURAL CHALLENGES AS DETERMINANT OF FOOD SECURITY AMONG RURAL FARMERS IN DELTA STATE, NIGERIA

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Abstract

This research looked at the socio-economic and infrastructural challenges as determinant of food security among rural farmers in Delta state. Food is an essential requirement for all living things, despite the importance of food in society, food security cannot be downplayed. The specific objectives were to: examine the effect of poverty on food security among rural farmers; identify the infrastructural challenges faced by rural farmers in achieving food security. The sample size is 271 respondents and it was determined by using Raosoft(R) software. The multi-stage sampling technique was used for this study. The data for this study were collected through the use of well-structured questionnaire. The majority of those surveyed with a grand mean score of 3.40 strongly agreed that poverty has so much increased the rate of food insecurity. A grand mean score of 3.02 also indicated that the occurrence of conflict in the communities has a negative effect on food security. Majority of those surveyed with grand mean score of 3.47 agreed that corruption has been one of the foremost challenges in achieving food security. The respondents, with a grand mean of 3.41, also agreed that infrastructural challenges are one of the major problems in achieving food security. It was found that majority of those surveyed with the grand mean of 1.80 agreed that they were not food secure.

Keywords: Poverty, Rural Farmers, infrastructural challenges and Food security

Introduction

Food is an essential requirement for all living things. We consume food to get the nutrition we need to grow and the energy to power our bodies. Food is a necessity for all living things to survive. It nourishes our bodily system and ensures that it functions properly. It supports a number of bodily biological functions and fosters our development. The importance of having nutritious food outweighs that of having food. A well-balanced diet is one that is provided by healthy food. It provides us with total nutrients. It includes food choices that are high in the nutrients the body needs and aims to provide it the proper amount of each nutrient in each serving.

Conversely, despite the importance of food in society, food security cannot be downplayed. Food security was described by the World Food Summit in 1996 as "a situation in which all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious foods that meet their dietary needs and food preferences for a healthy life. This definition covers numerous demands, including food availability, accessibility, affordability and stability. There is an overwhelming consensus that food should be considered a basic human right; nonetheless, making this right a reality is among the most difficult tasks of the twenty-first



century, with one out of every nine people in the world suffering from hunger (Food and Agriculture Organization (FAO), International Hunger), International Fund for Agricultural Development (IFAD), United Nations Children's Fund (UNICEF), World Food Programme (WFP) & World Health Organization (WHO), 2018).

Nevertheless, policymakers and researchers continue to be concerned about food security issues such as availability, accessibility, affordability and sustainable utilization (Aborisade & Bach 2014). This could be as a result of the fact that malnutrition can have serious physiological and physical implications (FAO et al 2012). Food security on a global scale requires that nutritious food be made available to everyone, be easily accessible, and be given in a consistent manner (FAO, 2006). Food security cannot be achieved just through increased food production, especially given that some populations are more prone to food insecurity than others.

Food security necessitates multidimensional considerations because it is influenced by various elements such as poverty, inadequate infrastructures and so on. Infrastructure may also play a distinct role in influencing different aspects of food security among rural farmers.

Food insecurity is also significantly influenced by poverty, with the majority of those impacted living in low- and middle-income countries. (FAO, 2018; Meade & Thome, 2017; Thome, 2018). The nations' food economies depend on availability, access, and stability, all of which are hampered when rural farmers have little access to financial resources (Development Initiatives & FAO, 2018). As per the World Bank and IFPRI (2016), the majority of impoverished rural farmers worldwide cultivate less than two hectares of land and earn less than \$2 per day. Due to their failure to manage, impoverished rural farmers are exposed to food insecurity both directly and indirectly as a consequence of lack of access to economic resources. Even farmers who grow their own food are among those who are most susceptible to food insecurity (FAO, 2005; IFPRI, 2016). Poor farmers also lack appropriate purchasing power, which limits their economic access to food. In Southern Nigeria, rural farmers are more likely to experience food insecurity compared to non-farmers, particularly if they own less land and make less money. Poor agricultural production is an outcome of the inability of many Nigerian farmers to afford the inputs that would raise output, such as fertilizers, insecticides, and better seeds. Additionally, ability to purchase food by low-income customers is limited, making it harder for them to maintain their health and lead productive lives.

Objectives of the Research

The general objective of this study was to examine the socio-economic and infrastructural challenges as determinant of food security among rural farmers in Delta State.

The specific objectives of the research were to:

- i. determine the Socio-economic Characteristics of rural farmers
- ii. examine the effect of poverty on food security among rural farmers
- iii. identify the infrastructural challenges faced by rural farmers in achieving food security

Theoretical Framework

Karl Marx Conflict Theory was adopted to explain food security: This provides a basis for understanding how food insecurity could exist in a wealthy nation. Food security is explained by Karl Marx's conflict theory, which is presented in his book "Das Kapital," via the prism of class conflict and the capitalist class's exploitation of the working class. Marx argues that the foundations of the capitalist system, private property and profit-driven production—lead to the concentration of power and wealth in the hands of the ruling class. In the process, the working



class is forced to sell their labor for less than its full value, while the capitalist class benefits from their exploitation, creating a system of economic injustice and oppression.

Marx's conflict theory implies that, in the context of food security, the capitalism system produces an environment in which access to food is decided by one's financial condition as opposed to need. This implies that people who can afford food, mostly members of the middle class and wealthy, have access to a stable supply, while people who cannot afford food, mostly members of the working class and poor, have little to no access to food. Food insecurity results from this, forcing the working class to rely on the generosity of the capitalist class or on inexpensive, subpar food that is frequently produced in unhygienic conditions.

Marx contends that the system of food insecurity is a product of the capitalist exploitation system rather than a natural or inevitable occurrence. He says the working class could create a socialist system based on community ownership and the distribution of things according to need rather than profit if they banded together and overthrew the capitalist class. In such a system, everyone would have access to food security regardless of their financial situation.

Furthermore, according to Marx's conflict theory, the capitalist system produces an environment in which a small elite controls the means of producing food, while the vast majority of people lack access to these means. Because of this, the working class is compelled to depend on the capitalist class rather than being able to grow their own food, which leads to a position of reliance. Because of this dependency, there is an imbalance of power: the working class has little to no ability to bargain for improved pay or working conditions, while the capitalist class has the capacity to control the means of production. In conclusion, Marx posits that if the working class were to unite and overthrow the capitalist class, a socialist system founded on the ideas of shared ownership and the distribution of goods according to need rather than profit could be established. This dissertation will advance this theory by delving deeper into the socioeconomic and infrastructure issues that determine food security among rural farmers.

Materials and Methods

The research work only examines Delta state rural farmers not the entirety of South-south Nigeria, the research design that was adopted in this study is the cross-sectional research design. Population of the study covers all the registered rural farmers in Delta State which are estimated to be 545,987; according to Delta State Agricultural and Rural Development Authority (DARDA). The sample size for the study was determined by using Raosoft(R) software. The sample size was based on a margin error of 5% with 90% level of confidence for social sciences in view of 50% of the respondent, based on the foregoing computation, the sample size of 271 was used in the study.

Furthermore, in order to draw the sample from the population, the purposive sampling technique was used. Delta State was divided according to her three senatorial zones (Delta North, Delta Central and Delta South). The multi-stage sampling technique was also used for this study. First stage involved the purposive selection of two Local Government Areas in each of the trio (3) senatorial zones. They are Ethiope east and Uvwie L.G.As (Delta Central), Ndokwa east and Aniocha North L.G.As (Delta North) and Isoko North and Isoko south (Delta South). This makes it Six Local Government Areas for the study. The selection for this study was based on the findings of a recognition survey and a briefing from the Agricultural Development Authority (DARDA), which highlighted their comparative advantage in



agricultural production as well as the negative effects of poverty and the challenges they face with infrastructure both before and after they start farming. Secondly, in each of the Local Government Area, random selection of two (2) communities per local government was selected making it 12 communities for the study. Structured questionnaire was used in collecting primary data in writing form, based on the research objectives and hypothesis.

Data Presentation and Analysis

Table 1: Retrieval rate of questionnaires

Description	Frequency	Percentage
Retrieved questionnaires	260	96
Void questionnaires	11	4
Total	271	100

Source: Fieldwork, 2023

Table 1 shows that a total of 271 questionnaires were distributed to the farmers who participated in the study. The retrieval rate was also reported in the table. This shows that out of the 271 copies of the questionnaires that were distributed, 260 were retrieved consisting of a 96% return rate as against the 11 (4%) of the questionnaires that were void because the respondents refuse to respond.

Table 2: Socio-demographic Characteristics of the Respondents

Items	Frequency	Percentage
Total	260	100
Gender	Male	43.85
	Female	56.15
	Total	100
Age	20-29 years	2.69
	30-39 years	12.69
	40-49 years	13.08
	50-59 year	17.31
	60-69 years	30.77
	> 69 years	23.46
	Total	260
Marital Status	Single	6.54
	Married	23.08
	Divorced	5.38
	Widow(er)	65.00
Total	260	100
Educational Qualification	Non-formal	41.92
	Primary school	30.00
	Secondary school	19.23
	Tertiary	8.85
Total	260	100
years of farming experience	< 10 years	6.92
	11-20 years	37.70
	21-30 years	45.38
	> 30 years	10.00
	Total	260
Average Income	<#10,000	7.31
	#11,000 - #20,000	13.46
	#21,000 - #30,000	21.15



#31,000 - #40,000	87	.
#41,000 above	64	24.62
Total	260	100

Source: Fieldwork, 2023

In Table 2: the socio-economic characteristics that covered gender, age, marital status, educational qualification, years of farming experience, average income, are presented in frequencies and percentages as displayed in the table above.

Gender: The gender distribution of farmers in the study area shows that 43.85% were male while 56.51% were female. This indicated that there are more female farmers in agriculture than male in Delta state. This finding was consistent with Okonya (2014), stated that women in sub-Saharan Africa generated 70–75% of agricultural food production in rural regions.

Age: The age distribution of the respondents, those aged 60 to 69 had the highest percentage with 30.77, this is followed by those aged 69 above who had 23.46%. Those aged 50 to 59 had 17.31%, those aged 40-49 had 13.08 %, those aged 30-39 had 12.69%, and those aged 20-29 years had 2.69%. This indicated that respondents aged 60-69 participated more in farming activities which is not appropriate because having more older farmers will reduce productivity and can increase food insecurity. This result is in consonance with the findings of Ugwoke et al. (2005), farmers' production is thought to decline with age, hence this is not a valid indicator of increased output.

Marital Status: the table shows that widows(er) participated more in the survey at 65.00%, married had 23.08%, singles had 6.54% and divorce had 5.38%. This is as a result of death or migration of spouse to the urban area which have brought about low labor. However, this has also led to a rise in food insecurity in the designated area. This is in accordance with Muller's (2005), one of the impacts of epidemic at household level experienced is labour shortages and has an impact on people's labour at several levels like supply, productivity and opportunities.

Educational Qualification: of the respondents revealed that 8.85% of the respondents had a non-formal education. Those with no formal education were 41.92%, those with primary education were 30.00% while those with secondary education were 19.23%, those who have had higher education (attended tertiary institutions such as universities, polytechnics and colleges of education) were 8.85%. This indicate the level of illiteracy among rural farmers are higher as majority of the farmers can neither read nor write which can instigate food insecurity in terms of adoption of improved technology and proper handling of agricultural produce. This is in line with Olayide et al. (2003) supports the fact that low level of education has been adduced as one major reason for low level of technology adoption by older farmers

Average Income: The income frequency was also reported. Majority 33.46% of the rural farmers earned between #31,000-#40,000 per annum, 24.62% earned #41,000 above, 21.15% earned #21,000-#30,000 per annum, 13.46% earned #11,000-#20,000 while 7.31% earned <#10,000 per annum. The result shows that farmers income per annum is generally low when related to the standard poverty line of 1 dollar per day. On the other hand, the results also show that unavailability of necessary infrastructures and low capital have adverse effects on farmers income in the areas. The result conforms to the works of (Ibekwe et al., 2010) who also find a positive correlation between infrastructure and farmers income.

Table 3: Respondents' responses on the effects of poverty

S/N	Poverty and food security	SA	A	UD	D	SD	Mean
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	ITEMS	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	(\bar{x})
1	Poor farmers income has a negative effect on farming activities	65	25.0	100	38.5	63	24.2	23	8.8	9	3.5	3.73
2	Low standard of living has negative effect on farming activities	119	45.7	68	26.2	58	22.3	15	5.8	--	--	4.12
3	Inability to purchase adequate fertilizer has an effect on agricultural output	157	60.4	60	23.08	20	7.69	20	7.69	1	0.4	4.33
4	Unavailability of funds to acquire more labour pose treat to agriculture	46	17.7	115	44.2	62	23.8	31	11.9	6	2.31	3.63
5	Unable to purchase Irrigation technology reduces the outcome of production	135	51.9	90	34.6	20	7.7	2	0.8	13	5.0	4.28
6	Unavailability of funds to attend to financial issue among household reduce farmers interest in agriculture	133	51.2	87	33.5	19	7.3	16	6.2	5	1.9	4.26
7	Not being able to purchase good seed reduces farmers income	106	40.8	60	23.1	39	15.0	37	14.2	18	6.9	3.77
	Grand mean											4.01

Source: Fieldwork, 2023(Key: SA = strongly agree, A = agree, UD = undecided, D = disagree, SD = strongly disagree, F = frequency, % = percentage)

Table 3 was deduced from 5 points scale analysis with weighted mean of 3.0, which implied that any variable that is greater or equal the threshold (3.0) was considered to be the effects of poverty, Conversely, the variable that falls below the cutoff point of 3.0 was deemed ineffective. The respondents' degree of agreement (from strongly agree to strongly disagree) with the question determined the weighting of their responses. The highest mean of 4.33 indicated that inability to purchase adequate fertilizer has an effect on agricultural output, mean score of 4.28 indicated that unable to purchase Irrigation technology reduces the outcome of production. The mean score of 4.26 indicated that unavailability of funds to attend to financial



issue among household reduce farmers interest in agriculture, , the mean score of 4.12 indicated that low standard of living has negative effect on farming activities, mean of 3.77 indicated that not being able to purchase good seeds reduces farmers income, mean of 3.73 indicated that poor farmers income has a negative effect on farming activities, mean of 3.63 indicated that unavailability of funds to acquire more labour pose treat to agriculture,

The grand mean of 4.01 shows that respondents are in agreement that one of the main factors influencing food insecurity in the context of farming is poverty. This is in line with Barrett (2010) suggested that “most food insecurity is associated not with catastrophes, but rather with chronic poverty”, demonstrating the intertwined nature of poverty and food insecurity.

Table 4: Respondents’ responses on the infrastructural challenges faced by rural farmers

S/N	Infrastructural challenges faced by rural farmers	VS		S		MS		NS		Mean (x̄)
		Freq	%	Freq	%	Freq	%	Freq	%	
	ITEMS									
1	High cost of farming equipment	180	69.23	71	38.46	18	1.92	4	1.54	3.74
2	Poor drainage	128	49.23	100	30.77	2	6.92	14	5.39	3.19
3	Bad roads	171	65.77	80	27.31	5	0.77	7	2.69	3.62
4	Poor access to clean water	120	46.15	97	37.31	34	13.08	9	3.46	3.26
5	Inadequate electricity	123	47.31	131	50.38	6	2.31	--	--	3.45
6	High rate of transportation	118	45.38	89	34.23	35	13.47	18	6.92	3.18
7	Lack of ICT usage	145	55.77	108	41.54	4	1.54	3	1.15	3.52
8	poor healthcare delivery	117	45.00	113	43.46	17	6.54	13	5.00	3.28
9	Lack of adequate irrigation	117	45.00	112	43.08	28	10.77	3	1.15	3.32
10	Poor security service	161	61.92	90	34.62	7	2.69	2	0.77	3.58
	Grand mean									3.41

Source: Fieldwork, 2023 (Key: Very severe (VS), Severe (S), Moderately severe (MS), Not severe (NS))

Table 4 was deduced from 4 points scale analysis with weighted mean of 2.5, which implied that any variable that is greater or equal the threshold (2.5) was measured to be a challenge for rural farmers in achieving food security, while the variable that is less than the threshold (2.5) was considered not to be a challenge. The table also shows the responses from respondents on the problem of corruption among rural farmers. The responses were weighted on a four-point Likert scale ranging from very severe, severe, moderately severe, and not severe. The responses and mean score mostly indicated that there is a major crisis in relation to the infrastructure available for farmers that carry out their day-to-day farming activities. As shown in the table, the mean score of 3.74 indicates that there is a high cost of farming equipment hence purchasing these tools is very difficult for farmers. This has severe implications for food security in the rural communities of Delta State. Also, mean of 3.62 shows that farmers access bad road to farm land on daily basis, the mean score of 3.58 indicated that poor security service as a serious challenge in the community which pose more threat on farmers activities and decrease food security, mean of 3.52 indicates that lack of ICT usage is very crucial, meanof 3.45 indicated that inadequate electricity is also a serious challenge, meanof 3.32 indicated that lack of adequate irrigation pose more threat to farmers and have effect on food security,mean of 3.28 indicated that poor healthcare delivery is a serious challenge because majority of farmers don’t receive adequate health care service, this can lead to high rate mortality among farmers and

Table 4.8 continued



also reduce the populations of farmers which will definitely increase the chances of food insecurity, meanof 3.26 indicated poor access to clean water, meanof 3.18 indicated that high rate of transportation is threat to rural farmers. The grand mean of 3.41 indicates that respondents agreed to a very large extent that infrastructural challenges are major issues for farmers in the rural communities of Delta State. This has posed huge threat to farmers in achieving food security for the nation. This is consistent with Devereux's (2004) assertion that a lack of social and physical infrastructure is a primary cause of food insecurity in rural places.

Table 5: Respondents' responses on food security among rural farmers

S/N	Food security among rural farmers	SA		A		U		SD		D		Mean	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
1	ITEMS Worried about not eating to satisfaction	159	61.15	39	15.00	33	12.69	11	4.24	18	6.92	1.81	
2	Not able to eat healthy and nutritious food	142	54.62	41	15.76	47	18.08	23	8.85	7	2.69	1.89	
3	Run out of food sometimes	135	51.92	59	22.69	44	16.92	10	3.85	12	4.62	1.87	
4	Spend a day Sometimes without eating	144	55.38	59	22.69	33	12.69	14	5.38	10	3.85	1.80	
5	Don't have enough money sometimes to get healthy food	129	49.61	58	22.31	49	18.85	13	5.00	11	4.23	1.92	
6	In some cases, you don't eat balance diet	164	63.08	63	24.23	15	5.77	11	4.23	7	2.69	1.59	
7	Sometime you reduce the portion of your meal because you don't have enough money to get more	145	55.77	62	23.85	36	13.85	14	5.38	3	1.15	1.72	
8	Eating less than three times daily because you don't have enough money	143	55.00	61	23.46	30	11.54	17	6.54	9	3.46	1.80	
9	Sometime, you don't have access to healthy and nutritious food	138	53.08	66	25.38	26	10.00	22	8.47	8	3.07	1.83	
Grand mean											1.80		

Source: Fieldwork, 2023



(Key: SA = strongly agree, A = agree, U = undecided D = disagree, SD = strongly disagree, F = frequency, % = percentage)

Table 5 shows the participants' responses on food security among rural farmers. The responses were weighted on the level of agreement of respondents to the question ranging from strongly agree to strongly disagree where strongly agree indicates that there is a high presence of food insecurity, that is, food security is a major problem as indicated by the responses from each of the items used to measure food security. Mean of 1.92 indicated that rural farmers don't have enough money sometimes to get healthy food, the mean score of 1.89 indicated that farmers are not able to eat healthy and nutritious food, mean of 1.87 indicated that rural farmers Run out of food sometimes, mean of 1.80 indicated that rural farmers spend a day sometimes without eating, the mean of 1.80 indicated that majority of the farmers eat less than three times daily because they do not have enough money to get more food, The grand mean of 1.80 indicated that majority of the responses were in agreement with the items, thus, indicating that majority of the respondent are not food secure because a food secure person must have the four key point of food security which are, accessibility, affordability, stability and availability. This is consistent with the 1996 World Food Summit definition of food security as "a state in which every individual, everywhere, has physical, social, and financial access to an adequate supply of safe, nourishing foods that satisfy their dietary requirements and food preferences for a healthy life.

Test of Research Hypotheses

Four hypotheses that were stated in null form were tested in this study:

Hypothesis One

Ho: There is no significant relationship between poverty and food security among farmers in the rural communities of Delta State

Hi: There is a significant relationship between poverty and food security among farmers in the rural communities of Delta State, Nigeria.

Table 6: Pearson Product Moment Correlation on the Relationship between Poverty and Food Security

Variables	N	M	SD	df	R	r ²	P
Poverty	260	4.13	.903				
Food Security	260	1.80	.813	258	-.652	.042	.002

Pearson correlation coefficient (Table 6) indicates a significant negative relationship between poverty and food security such that an increase in poverty leads to a decrease in food security, $r(260) = -.652, p < .05$. Therefore, hypothesis 1 (that is, there is no significant relationship between poverty and food security) was not supported. The $r^2(.042)$ statistics indicate that poverty accounts for a 4.2 % variance in the level of food security in the rural communities in Delta State, Nigeria. Based on Cohen's (1988) criterion, $r^2(.042)$ indicates a significant effect and this means that poverty has an impact on the level of food security.

Hypothesis Two

Ho: There is no significant relationship between infrastructural challenges and food security among farmers in the rural communities of Delta State, Nigeria

Hi: There is a significant relationship between infrastructural challenges and food security among farmers in the rural communities of Delta State, Nigeria



Table 7: Pearson Product Moment Correlation on the Relationship between Infrastructural Challenges and Food Security

Variables	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Df</i>	<i>R</i>	<i>r</i> ²	<i>P</i>
Infrastructural Challenges	260	3.41	1.29				
Food Security	260	1.80	.90	258	-.131	.017	.004

Table 7 shows the Pearson product moment correlation coefficient on the relationship between infrastructural challenges and food security. The statistics in Table 4.7 indicates that there is a significant negative relationship between infrastructural challenges and food security such that an increase in corruption leads to a decrease in food security, $r(260) = -.131$, $p < .05$. Therefore, hypothesis 4 which state that there is no significant relationship between infrastructural challenges and food security was not supported. The $r^2(.017)$ statistics indicate that infrastructural challenges account for a 1.7 % variance in the level of food security in the rural communities in Delta State, Nigeria. On the basis of Cohen's (1988) criterion, $r^2(.017)$ indicates a small effect size and this means that infrastructural challenges have minimal impact on the level of food security.

Discussion of Findings

This study looked at the socioeconomic and infrastructure issues that affect rural farmers in Delta State, Nigeria, and how they affect food security. There were two null hypotheses examined. Since the socioeconomic indicators and infrastructure constraints were seen as key issues for food security in Nigeria, all hypotheses that were tested in the null form were rejected. The first hypothesis was disproved since there was a substantial negative association between food security and poverty, according to the Pearson product moment correlation values. Food security arises from the physical and financial availability of an adequate supply of food that satisfies the nutritional requirements of the inhabitants of a certain geographic area. Therefore, based on the first hypothesis's findings, food security and availability to food will decline in Delta State's rural areas as farmer poverty rates rise. Recent research supports the first hypothesis' findings by demonstrating the connection between food security and poverty. According to the work of Khaleque (2023), it is evident that the heterogeneity in some regions and family attributes is a major contributor to food security and poverty. The study further stated that food security is associated with extreme poverty. In another study reviewing the interplay among agriculture, poverty and food security in Nigeria, Adeniyin and Dinbabo (2020) found that the persistent increase in the level of poverty especially among rural farmers is alarming and further affecting food security in the country. These studies further highlighted the role of poverty in food security and also provide support for the significant negative relationship found between poverty and food security.

The second hypothesis which stated that there is no significant relationship between infrastructural challenge and food security was not supported as the results of the Pearson correlation conducted showed that there is a significant and negative relationship between infrastructural challenge and food security among rural farmers in Delta State. This implies that as infrastructure continues to deteriorate in rural areas, it affects the levels of food security. Hence, an increase in infrastructural challenges necessitates a decrease in food security. This finding is consistent with the work of (Selepe et al. 2014). The researchers found that poor infrastructural development and challenges related to access to good infrastructure are the major indicators of an increase in food security. Hence, pointing to the direction that infrastructural challenge among farmers affects the levels of food security.



Conclusion and Recommendation

Socio-economic and infrastructural challenges among rural farmers have been an indicator of food insecurity. To attain food security among rural farmers, safe food must be available, affordable, accessible, supplied in a stable manner and used in nutritionally advantageous ways. Every individual believes that increase in agricultural production will increase food security, this study has revealed that food security cannot be achieved just through increased food production only because low production is not the only contributing factors to food insecurity. Poverty and lack of standard infrastructures also contribute majorly to food insecurity. The study recommended that Nigeria government should involve more on poverty eradication programme in order to reduce poverty among rural farmers in Delta state and in Nigeria at large. More also quality and standard infrastructures by the government will help farmers to be more productive and food secure.

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