



## Research Article

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# Herdsmen/Native Farmers' Violence in Benue State and Food Security in Nigeria

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Doi: 10.36941/mjss-2019-0077

## Abstract

*The herdsmen/farmers' violence in Benue State, Nigeria has constituted security challenges and could have contributed to food insecurity as more than 2000 lives were lost in Nigeria and over 170,000 were internally displaced in Benue state, a state tagged "food Basket of Nigeria". The paper among others examined the effects of the violence on food production in Benue State and Nigeria. It was descriptive study that adopted mixed method, using quantitative and qualitative approaches by relying on secondary data. The violence was negatively significantly correlated with sorghum production alone out of ten food crops examined in Benue State ( $p < 0.05$ ). Contrary to general perception, there was no significant relationship between food production in Benue State and Nigeria ( $p > 0.05$ ). Population growth was significantly correlated with maize production only ( $p = 0.023$ ); agricultural budgetary allocation was positively significantly correlated with rice production only ( $p = 0.001$ ). It concluded that food insecurity in Nigeria was beyond herdsmen/farmers' violence. It recommended modernization and transformation of agriculture to increase food production and government should develop political will and be proactive in confronting security challenges in an inclusive manner.*

**Keywords:** Herdsmen, Native Farmers, Violence, Food Insecurity, Population Growth, Budgetary allocation

## 1. Introduction

The need to overcome the challenges associated with insufficiency of food production and consumption in Nigeria has been a recurring issue manifesting since independence in 1960 and agricultural sector was sector contributing 61.2 percent to the Gross Domestic Product (GDP) (first National Development Plan, 1962-68) and a major foreign exchange earner but was subsequently neglected when emphases were shifted to crude oil.

The projection of Federal Ministry of National Planning (1975) was that agricultural sector was expected to generate employment for the active but unemployed individuals, guarantee self-sufficiency and self-reliance in food production as well as foreign exchange but these were not realized. It was not until 1990s that Nigerian government became conscious of the challenge measures such as Operation Feed the Nation and Agricultural Revolution among others failed.

Food importation due to inability to meet home needs according to World Atlas Data (2017)

from 2002 -2016 fluctuated between 9.8 per cent in 2010 to 30.6 per cent in 2011 but sliding consistently downward yearly to 12.8 per cent in 2016. This explained why Abubakar cited in Elekebe (2016) noted that importation of four top food items cost Nigeria over N1 trillion annually while the farmers were not exposed to modern methods of farming. The same report ranked Nigeria as number one importer of United States of America wheat, estimated at N635 billion yearly and came second globally in rice importation estimated at N356 billion.

The recent upsurge of herdsmen and native farmers' violence though national in scope but concentrated largely in the North Central Region of Nigeria associated with herdsmen migration has made the examination of the effects on food security imperative. The herdsmen according to Global Terrorism Index (2015) were classified as the fourth deadliest terrorist group globally as at 2014. Though most reports focused on herdsmen brutality, the report by Premium Times, (2017) revealed that the Fulani lost more than two million cows to rustlers in the last two years while over six hundred lost their lives.

Several studies such as Oseni (2001), Adeyeye (1992) and World Bank (1986) focused largely on measuring food security using consumption expenditure and proffering solutions to food insecurity. Brinkman and Hendrix (2011) consider the effect of conflict on food security and measures to overcome the challenge. The study by the FAO (2016) focuses on peace, conflict and food security but questioned the effect of conflict on food security and whether food insecurity triggers conflict. The IPCC (2007: 444) among others examined the effect of climate change on food security. This served as an impetus for this study to consider herdsmen/native farmers' violence and its effect on food production in Benue state and Nigeria as the Global Hunger Index (2017) put Nigeria in 84<sup>th</sup> position out of 119 sampled in respect of food insecurity.

With specific reference to Benue State, between 2013 to March 2018, the attack by herdsmen claimed over 1600 lives (Godwin, 2018) while SEMA (2018) recorded that 117,771 were internally displaced and relocated to eight camps in the state. This could partly explain why the Food and Agriculture Organization (2017) declared in March 2017 that about 7.1 million people in Nigeria were subjected to food insecurity and required urgent intervention. The study is however limited because it focused largely on food production than distribution which might open up another ground for further study.

The scenario informed the four basic assumptions of the study as stated in the hypotheses below that:

H1. The violence in Benue state has drastically reduced food production in the State tagged as the "food basket of Nigeria";

H2. The effect of Herdsmen/Native farmers' violence in Benue State has negatively affected national food production thereby compounding the challenges of food insecurity from the perspective of food production;

H3. The dwindling budgetary allocation to agriculture has been responsible for food production and food insecurity;

H4. Higher percentage growth in population than food production has been responsible for food insecurity.

## 2. Conceptual Review

### 2.1 Food Security

Food security constitutes one of the seven elements of human security (UNDP, 1994). By implication, human security cannot be effectively achieved if food security constitutes a threat. Food and Agriculture Organization (FAO 2003) observes that food security exists "when all people at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for a healthy life" (P4). The emphasis in this study is food production.

Four key elements associated with food security to include availability, adequacy, accessibility and sustainability of access (Burchi & De Muro, 2012:8). The assumption of the paper is that direct violence in line with the position of Simmons (2013) has the tendencies to reduce food availability

by disrupting the channel of production and distribution. This scenario can also hinder food accessibility and make the supply not sustainable. With specific reference to Nigeria, it is assumed that many factors could operate at the same time to complicate food insecurity. Such factors might include budgetary allocation to agriculture, general insecurity, population explosion, government policy on food importation and shift of emphasis from agriculture among others.

The primary concern in respect of violence is that the significant majority of the attacks took place in rural farming communities which could have had negative effect on food production. With specific reference to herdsmen and native farmers' violence in Benue state alone, Godwin (2018) reported that since 2013 to March 2018, over 1600 deaths have been recorded while the internally displace people in eight camp was put at 176,070. Though there were conflicting records of deaths and IDP, but those available points to the magnitude of the violence.

It is therefore an irony that the President, Rice Farmers Association of Nigeria, Aminu Goronyo cited in *The Punch* (2017) revealed that Nigeria has increased its annual rice production from 5.5 million tons in 2015 to 5.8 million tons in 2017 while BBC Report (2017), noted as at 2016 that Nigeria imported 2.3 million tons of rice while the demand was 5.2 million tons. The Global Hunger Index (2017) put Nigeria in 84<sup>th</sup> positions out of 119 sampled while World Food Programme (WFP) (2016) could be right that conflict is compromising the food security as Nigeria is a food deficit country and is Africa's largest importer of rice.

Hence, Nigeria is currently experiencing food insecurity. In order word, food insecurity exists when people lack adequate physical, social or economic access to food (FAO 2013) as the experience in Nigeria.

## 2.2 *Herdsmen Southward Migration and Violence*

The southward migration of the herdsmen particularly to Nigeria is not a recent phenomenon as this has been the practice more than three centuries partly for nourishing pasture to feed the cattle, religious and trading purposes. The Fulani controls about 90 per cent of the livestock population in Nigeria as this constitutes relatively one-third of agricultural GDP and 2.52 percent of the nation's GDP as at the third quarters of 2017. For a long period, conflict between the herdsmen and native farmers were common features but didn't degenerated to the magnitude of willful and criminal destruction of lives and property. Traditional methods of resolving dispute were usually applied or/and in some instances through the police or court system which enabled the parties to cohabit peacefully.

Many factors are responsible for the recent southward migration of the herdsmen and violence, particularly to Nigeria. Climate change, human activities on account population growth and increase in farming activities are factors to consider as noted by Blench (2010). Economic Commission (2008: 1, 4) and WBGU (2007: 1). Other scholars blame the migration and violence on the decline of internal discipline and social cohesion and poor governance as well as International Crisis Group (2017), Ingawa, Ega, and Erhabor (1999).

The study however argues that the tension and violence in upper Volta region, the drying up of lake Chad, Boko Haram criminality in the North East and the Federal Government failure in its primary responsibility to guarantee security of lives and protection of property as provided under Section 14 (2) B. of the 1999 Constitution of Federal Republic of Nigeria are the major challenges. Hence, it failed to respond to modern technological development to stem desertification and initially showed little concern to herdsmen/native farmers' violence thereby allowing the issue to be politicized. In addition, loose border and weak and uncared attitude by government made the herdsmen to find Nigeria conducive than other neighboring nations like Ghana, Togo and Benin Republic. Lamenting on the cost of the violence, the former Military Head of State Abdulsalami Abubakar, NAN (2017) said that the nation has lost \$13.7bn annually and that Farmers and herdsmen conflicts have become a threat to peace, security and development of our nation.

## 3. Methodology

The study was descriptive and adopted mixed research method. It was based on quantitative and

qualitative approach for the purpose of triangulation. For the quantitative part of the study, ex post facto research design was adopted because the events under consideration had occurred and may not lend themselves to further manipulation. On the other hand, descriptive approach was adopted for the qualitative aspect of the study. Both the quantitative and qualitative data were secondary and collected from available data from State Emergency Management Agency, World meters (2018), Statista (2018), NBC, (2018), FAOSTAT (2017) and World Data Atlas (2017), relevant text books, Internet sources and Journals. Quantitative data was analyzed using Pearson Product Moment Correlation (PPMC); while the qualitative data was analyzed and discussed using content analysis.

#### 4. Results

Table 1 revealed that between the periods under review, there were recorded 47 attacks and 2053 deaths.

**Table 1:** Number of Attacks and Death Statistics 2013-2017

Year	No of Attacks	Death figure
2013	9	190
2014	15	242
2015	9	265
2016	8	537
2017	6	549
Total	47	2053

**Source:** Benue State Emergency Agency (2018)

Though the number of attack was on decline since 2014, the death statistics was on increase with the implication that more hands were disengaged from farming and could negatively affect food production and added to the challenges of food insecurity.

Table 2 below revealed the intensity of human security challenges as the initial eight camps were collapsed to seven, given birth to Abagena/Agan.

**Table 2:** Statistics of Internally Displaced Persons

IDP Camp	Total No	Women	Pregnant	Nursing mother	Men	Children	Aged	Disabled
Daudu	16, 072	5,065	304	226	2,644	8,363	82	41
Tse Ginde	13,510	3,404	532	581	2,304	7,847	241	167
Gbajimba	13, 470	5,020	349	131	2,558	5,972	480	68
Abagena/Agan	27,342	8,897	492	616	4,026	14,283	258	234
Anyiin	5845	582	582	776	3630	17,013	1337	664
Abeda	1034	1034	104	165	660	4719	96	38
Ugba	14, 851	5874	79	271	3597	4880	331	35
Total	117,771	33,239	2442	2,766	19,455	63,077	2,852	1,247

**Source:** Benue State Emergency Management Agency (2018)

The dislodgement from home, inability to farm and inadequate supply of needed food items cannot but compound human insecurity for a population of about 117,771 and their inability to be productively engaged. Table 3 revealed that the herdsmen violence didn't seem to affect food production with the number of lives lost and the displacement from farming, their traditional occupation, except between 2015 and 2016 where there was a slight drop but food production experienced growth in 2017.

## 5. Data Analysis and Discussion

The presentation of data set followed the pattern of occurrence and their characteristics as contained on Tables 1-3. Table 1 below contains the number of herdsmen attacks between 2013-2017. It reveals a fluctuation in attacks ranging from 6-15 while the recorded death cases was progressively increasing from 190 in 2013 to 548 in 2017.

Table 2 presents the statistics of internally displaced persons located in eight camps while the total was 117, 711 with women nearly twice the number of men, an indication of the vulnerability.

Table 3 contains the population, budgetary allocation to agriculture and food crop production

**Table 3:** Nigeria's Population, Budgetary Allocation to Agriculture, 1000 Tonnes of food crop production, 2011-2017

Year	Pop.	% Pop. growth rate	% of Fed. Budg. Alloc.	Yam	Maize	Cereal	Cassava	Rice
2011	163.77	2.96	1.8	33.134	8.878	20.699	46.190	4.612
2012	164.75	2.68	1.6	32,318 2.5%	8.694 -2.1%	21.426 3.5%	50.950 10.3%	5.432 17.8%
2013	169.26	2.67	1.7	35.618 10%	8.422 -3.1%	19.617 -0.09%	47.406 -6.9%	4,823 -11%
2014	173.94	2.66	1.4	45.151 27%	10.058 19.4%	24.495 7.5%	56.328 19%	6.002 24.5%
2015	178.94	2.77	0.9	45.677 1.2%	10.562 5%	25.451 1%	57.643 2.3%	6.256 4.2%
2016	183.64	2.65	1.2	44.109 -3.4%	10.414 -1.4%	25.035 -1%	57.134 -0.9%	6.070 -3.1%
2017	<b>188.69</b>	2.63	1.8%	N/A	12.107 16.3%	NA 1.7%	N.A	15.000 147%
%Growth				5.4%	4.9%			

**Sources:** Worldmeters (2018), Statista (2018), Premium Times, (2018), NBC, (2018), FAOSTAT (2017) and World Data Atlas (2017).

While the rate of population growth was between 2.63 to 2.96 per cent, budgetary allocation to agriculture ranged from 0.9 to 1.8 percent contrary to the Maputo Declaration of 2003 that African government should allocate 10% of their national budget to agriculture. In addition, the population growth or budgetary allocation did not significantly related to food production.

Table 4 presents the descriptive statistics of the variables of the study and the tabulation of statistical instruments used in data presentation such as mean, standard deviation, skewness, standard error and kurtosis.

**Table 4:** Descriptive Statistics of the Variables in the Study

	N	Minimum		Maximum	Mean	Std. Dev.	Skewness		Kurtosis	
		Stat.	Stat.				Stat.	Stat.	Std. Error	Statistic
Population	5	169	189	178.89	7.68	.029	.913	-1.19	2.00	
Budgetary allocation	5	.90	92.00	19.44	40.56	2.25	.913	5.00	2.00	
No. Attacks Benue	5	6.00	15.00	9.40	3.36	1.46	.913	2.97	2.00	
No. Death Benue	5	190.00	549.00	356.60	172.37	.496	.913	-3.13	2.00	
Nigeria Yam	4	35.62	45.68	42.64	4.73	-1.89	1.01	3.61	2.62	
Nigeria Maize	5	8.42	12.11	10.31	1.32	-.8	.913	1.64	2.00	
Nigeria Cereal	4	19.62	25.45	23.65	2.72	-1.88	1.01	3.59	2.62	
Nigeria Cassava	4	47.41	57.64	54.63	4.84	-1.94	1.01	3.75	2.62	
Nigeria Rice	5	4.82	15.00	7.63	4.16	2.13	.913	4.66	2.00	
Benue Cassava	5	10.40	13.96	12.74	1.40	-1.60	.913	2.94	2.00	
Benue Rice	5	1.08	2.65	1.60	.732	.92	.913	-1.56	2.00	
Benue Yam	5	12.89	13.00	12.93	.048	1.14	.913	-.14	2.00	

	N	Minimum Maximum		Mean	Std. Dev.	Skewness		Kurtosis	
		Stat.	Stat.			Stat.	Stat.	Std. Error	Statistic
Benue Soya Bean	5	2.15	2.56	2.32	.148	1.01	.913	2.54	2.00
Benue Maize	5	1.58	1.70	1.64	.054	.17	.913	-2.41	2.00
Benue Millet	5	1.31	1.51	1.45	.084	-1.81	.913	3.26	2.00
Benue Sorghum	5	1.69	1.75	1.72	.026	-.36	.913	-2.41	2.00
Benue Beniseed	5	1.28	1.32	1.31	.019	-.76	.913	-2.48	2.00
Benue Cowpea	5	.81	.84	.822	.013	.54	.913	-1.49	2.00
Benue Groundnut	5	1.79	2.10	1.86	.136	2.21	.913	4.93	2.00

\*\*\*Note: Food produce are in 1000 Metric Tons; Population in millions, while budgetary allocation is in Billions of Naira.

The description of the data was based on mean, maximum, minimum and standard deviation of the variables. The descriptive statistics of the data obtained are illustrated in Table 4. It indicates some variations in the variables under consideration in the study in terms of minimum and maximum, which implied that during the period under study (2013 to 2017), the variables considered fluctuated. For example, the number of herdsmen attacks fluctuated between 6 (minimum) and 15 (maximum) in Benue State. In addition, the least amount of Yam produced in Benue State was 12.89 metric tons while the maximum was 13 metric tons. The standard deviation of the indicators under consideration showed that some dispersion existed in the indicators considered. Furthermore, skewness and kurtosis indicated that the data were either positively or negatively skewed, and also had peak or flat distribution.

H1: The violence in Benue state has drastically reduced food production in the State though tagged the “food basket of Nigeria;

The Table 5 presents Pearson Product Moment Correlation Testing the Relationship between Benue Herdsmen Violence Indicators and Food Production in Benue State.

**Table 5:** Pearson Product Moment Correlation Testing the Relationship between Benue Herdsmen Violence Indicators and Food Production in Benue State

		Cassava	Rice	Yam	Soya Bean	Maize	Millet	Sorghum	Beni seed	Cow pea	Ground nut
<b>Number of Attacks</b>	<b>Correlation Coeff.</b>	-0.776	-0.570	-.327	.071	-.843	.523	.822	-.580	.034	-.525
	<b>P-Value</b>	0.123	0.315	.592	.909	.073	.366	.088	.305	.956	.364
	<b>N</b>	5	5	5	5	5	5	5	5	5	5
<b>Number of Death</b>	<b>Correlation Coeff.</b>	.064	<b>.945*</b>	.354	.168	<b>.930*</b>	-.451	<b>-.914*</b>	.752	.271	.633
	<b>P-Value</b>	.919	<b>.016</b>	.559	.787	<b>.022</b>	.445	<b>.030</b>	.143	.660	.252
	<b>N</b>	5	5	5	5	5	5	5	5	5	5

\*. Correlation is significant at the 0.05 level (2-tailed)

It revealed that the number of herdsmen attacks from 2013 to 2017 did not relate significantly with any of the itemized food produced in Benue State ( $p > 0.05$ ). Although, the number of death from herdsmen attacks did not also relate significantly with cassava, yam, soya bean, millet, Benin seed, cowpea and groundnut; it however, had a strong positive significant relationship with rice production in Benue State ( $r = 0.945$ ,  $p < 0.05$ ). This was also the case with maize production ( $r = 0.930$ ,  $p < 0.05$ ). It implies that an increase in the number of death from the violent attacks in Benue State from 2013 to 2017 did not result significantly in reduced production of rice and maize, rather rice and maize production increased during this period.

Conversely, sorghum production had a strong negative relationship with the number of death from the violence ( $r = -0.914$ ,  $p < 0.05$ ); which implies that sorghum production reduced during the period under study as number of deaths from herdsmen attacks increased. From the general standpoint, it was only sorghum that was negatively affected.

The findings negate one of the basic assumptions of this study that herdsmen violence had significantly and negatively affect food production in Benue State. Twelve of the twenty-three local government areas were seriously affected by the violence and according to SEMA (2018), 117,771 were internally displaced from the farming communities. In addition, it contradicts Brinkman & Hendrix (2011: 4, 18 & 19) and FAO (2006) that direct violence affects and has unambiguous

adverse effects on food security and nutrition. Therefore, a combination of other factors not covered by this study might help to explain the phenomenon of food insecurity beyond herdsmen/ native farmers' violence in Benue state alone.

H 2. The effect of Herdsmen/Native farmers' violence in Benue State has negatively affected national food production thereby compounding the challenges of food insecurity from the perspective of food production;

Table 6 revealed that the violence in Benue State didn't significantly relate with yam, maize, cereal, Cassava and rice production in Nigeria between 2013 to 2017 ( $p > 0.05$ ).

**Table 6:** Pearson Product Moment Correlation Testing the Relationship between Benue Herdsmen Violence Indicators and Food Production in Nigeria

		Nigeria_ Yam	Nigeria_ Maize	Nigeria_ Cereal	Nigeria_ Cassava	Rice
<b>Number of Attacks</b>	<b>Correlation Coeff.</b>	.299	-.395	.142	.166	-.542
	<b>P-Value</b>	.701	.510	.858	.834	.345
	<b>N</b>	4	5	4	4	5
<b>Number of Death</b>	<b>Correlation Coeff.</b>	.394	.754	.521	.524	.669
	<b>P-Value</b>	.606	.141	.479	.476	.217
	<b>N</b>	4	5	4	4	5

This suggested that the violence in Benue State did not relate significantly with itemized food produced in Nigeria as the P-Value ranged from 0.141-0.606. There is no doubt that as Azad, & Kaila, (2018: 4, 18 &19) noted that armed conflict has the tendency to affect food security by reducing agricultural production or price escalation which manifested in North East, North Central and South South, Nigeria but that could not be associated to the violence in Benue State alone. The study by Nigeria – Complex Emergency (2015:2) and Imaseun (2015:289) observed that food insecurity crisis was massive in areas of persistent conflicts of Nigeria and that more than 15 million people were contending with food insecurity and about one –third of the figure were in chronic conditions.

The study negated the positions of Azad, & Kaila, (2018: 4, 18 &19), Nigeria – Complex Emergency (2015:2) and Imaseun (2015:289) as the violence didn't significantly affect State or national food production. This could be a resultant effect of the size and complexity of the nation whereby even if there could be shortage of food production in one state, the effects could be absorbed by massive production in other States as there were also massive relocation of farmers from the state to southwestern part of Nigeria for farming purposes though no statistics of those involved are currently available.

Therefore, with specific reference to this study, food production in Benue state was not declining even in the midst of the violence so also for Nigeria with all forms of conflicts and crises (FAOSTAT, (2017). Though conflict led to reduction in human mobility in Mali and Nigeria that could have negative effects on food production and distribution as manifested in 2010 in Nigeria and led to escalation of prices of vegetable and food items produced in the Northern parts of Nigeria (Pugliese, 2014). Also, the same work revealed that 50 percent of crops and 47 per cent of animal reared in the North are consumed in the South; the effect based on this study is insignificant particularly as the production of rice locally recorded an upsurge during the period covered by the study. As rightly argued by Pugliese (2014), it might be that the farmers have developed resilience to the violence and that they might not be other viable means of existence.

H3. The dwindling budgetary allocation to agriculture has been responsible for food production and food insecurity;

The table 7 presents Pearson Product Moment Correlation Testing the Relationship between Budgetary Allocation and Food Production in Nigeria

**Table 7:** Pearson Product Moment Correlation Testing the Relationship between Budgetary Allocation and Food Production in Nigeria

		Nigeria_Yam	Nigeria_Maize	Nigeria_Cereal	Nigeria_Cassava	Nigeria_Rice
Budgetary Allocation	Correlation Coeff.	-0.821	0.758	-0.870	-0.853	<b>0.990*</b>
	P-Value	0.179	0.137	0.130	0.147	<b>0.001</b>
	N	4	5	4	4	5

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 7 shows that budgetary allocation did not significantly relate with yam, maize, cereal and cassava production between 2013 and 2017 ( $p > 0.05$ ). Budgetary allocation, between 2013 and 2017 however had a strong positive significant relationship with rice production in Nigeria ( $r = 0.990$ ,  $p < 0.05$ ). This implies that rice received a special attention in terms of increased budgetary allocation and led to improved rice production between 2013 and 2017 in Nigeria. The implication is that if such attention was given to other farm produce, there could have been improvement in food production and ameliorates the situation of food insecurity.

However, Ugwu and Kanu, (2012) in his statistical analysis demonstrated that “the demand for rice in Nigeria as at 2007 was estimated at 13.5 million tons against the current production level of 3.2 million tons, thus creating a gap of about 10.3 million tons”. The FOA (2015) therefore noted that importation of rice cost the nation US\$1 million in 1970s but has risen to over US\$1 billion in 2014, a manifestation of low domestic production. However, Nigeria is the largest producer of yams in the world, followed by Ghana, Côte D'Ivoire, Benin, Togo, and Cameroon (FAO, 2013).

In another sense, the CAADP's (Comprehensive Africa Agriculture Development Programme) and the Maputo Declaration of 2003 resolved that African government should allocate 10% of their national budget to agriculture. The highest so far under the period in view was 1.8 per cent while the lowest was 0.9 per cent but agricultural production was not responding to budgetary allocation. It could be assumed that loss of confidence in governmental actions by the citizenry might have informed individual struggle for survival with or without government support.

This might have accounted for the position of Adofu, Abula and Agama (2012:2) that “despite the significance of agriculture in Nigeria's economy, the sector is clearly the least productive when compared with other sectors”. In addition, Ihimodu (2007) argued that the slow growth in agriculture could be the resultant effect of macro-economic environment that might not be supportive of efficient allocation of resources

It is therefore imperative that budgetary provision might not translate to physical allocation of fund while it is already noted that the provision has been short of regional expectation, coupled with high-tech corrupt practices with the tendency of slowing down food production and compounding the challenges food security.

H4. Higher percentage growth in population than food production has been responsible for food insecurity.

Table 8 presents Pearson Product Moment Correlation Testing the Relationship between Nigerian Population Size and Food Production in Nigeria as presented below.

**Table 8:** Pearson Product Moment Correlation Testing the Relationship between Nigerian Population Size and Food Production in Nigeria

		Nigeria_Yam	Nigeria_Maize	Nigeria_Cereal	Nigeria_Cassava	Nigeria_Rice
Nigerian Population Size	Correlation Coeff.	0.707	<b>0.928*</b>	0.816	0.810	0.782
	P-Value	0.293	<b>0.023</b>	0.184	0.190	0.118
	N	4	5	4	4	5

\*. Correlation is significant at the 0.05 level (2-tailed).

The result on Table 4 indicates that Nigerian population size did not relate significantly with yam, cereal, cassava and rice production in Nigeria ( $p > 0.05$ ). However, Nigerian population size related significantly with maize production in Nigeria between 2013 and 2017. This implies that population growth from 2013 till 2017 resulted in increased maize production, probably due to increase in

demand or more effort was put to the production. The P-value for all the farm produce ranged from 0.118-0.293 except for maize with 0.023.

The fourth assumption that there was a positive relationship between Nigerian population size and food production was rejected. The result of the analysis indicated that there was no significant relationship between food productions and population growth during the period covered by the study.

## 6. Conclusions and Recommendations

The study concluded that lack of government proactive efforts in conflict management largely led to the violence. Also, the challenges of food insecurity could not be solely attributed to herdsmen/native farmers' violence. Furthermore, there is the possibility that the size of the nation and large number of agrarian population were capable of absorbing shocks given that there was short fall in a section of the nation though the violence could lead to misallocation of and hinderer full capacity utilization of resources.

The study recommended that the government should create enabling environment to engage the teeming population of abled but unemployed youth in modernized farming by creating farm settlements, farm tools and equipment provision, loan facilities and improved storage facilities.

It further recommended that government should modernize animal rearing to meet international standard as desertification and drought are challenges that modern technology could take care of.

The old traditional method of resolving conflict between herdsmen and farmers should be encouraged to meet contemporary need and the traditional institutions responsible must not be compromised. Also, an inclusive peace forum should be organized to find ways of minimizing conflict.

Finally, the study recommended that government should increase the budgetary allocation to agriculture to a minimum of 5 per cent and minimize corrupt practices

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