



## **Effects Of Boko Haram Insurgency On Crop Production In Northern Adamawa, State Nigeria**

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The study sought to assess the effects of Boko Haram insurgency on crop production in Northern Adamawa State, Nigeria. The specific objectives were to; describe the socio-economic characteristics of the respondents and to determine the pre and post insurgency crop production levels of the respondents. Multi stage, random sampling technique was employed to select 278 respondents for the study. Primary data was used for the study and frequencies and Percentages were used to analyse the data. Result revealed that majority (80.22%) and (71.22%) were male and married respectively. The mean age of the respondents was 42.13 years. Majority (79.14%) of the respondents had one form of formal education or another. More (65.83%) respondents were engaged in farming as primary occupation engaging in crop production. The results showed that before the onset of insurgency; the farmers who obtained outputs within the range of 1100 – 2000 Kg of Maize, Sorghum, Groundnuts, Cowpea and Rice were 80, 125, 20, 27 and 30 respectively. The results also showed that the number of farmers who got farm output after the insurgency were within the range of 100-10 00 Kg for Maize, Sorghum, Groundnuts, Cowpea and Rice during this period were 115, 138, 135, 80, and 76 respectively. This was far greater number of the farmers now producing fewer numbers of Kg of crops which have eventually result to lower output when compared with what was achieved before the insurgency attack in the study area. The study recommends that farm input like fertilizer, agrochemicals, machineries, and improved seeds should be made affordable and accessible, favourable environment for doing business in the North east and Nigeria at large should be provided. Farmers and members of the community need to be sensitized on the importance of being security conscious, financial assistance in any form should be given to these farmers who have suffered insurgency attack and now back at home in order to boost their productivity.

**Keywords:** Boko Haram, Family size, Socio-economic, production, Adamawa north

### **INTRODUCTION**

In contemporary Nigeria especially in the north eastern and between 2009 and the year 2021, Boko Haram insurgency has become an unpleasant reality in today's Nigeria society; it has come in different forms of manifestations of kidnapping, suicide attacks, self-suicide bombing, corruption, armed robbery and the like.

Farming is an ancient activity practiced by man from days immemorial. Today, farming at all levels of human development is practiced as economic activity. Farming is one of the economic activities around the world that experienced various challenges resulting from the activities of armed conflicts with devastating humanitarian consequences. Boko Haram sect was founded by Mohammed Yusuf in 2002 who led the organisation to 2009, under the name Taliban; where he established a training complex called Markas, in the markas, he preached his ideology and recruit followers. Many people from across Nigeria

and other neighbouring countries enrolled their children into the school. The unemployed and children of the poor in the society are targeted for enrolment Imam, (2013).

The organisation officially changed its name from Taliban to *Jama'atu Ahlis Sunna Lidda'awati wal-Jihad* which translates into „People Committed to the Propagation of the Prophet's Teachings and Jihad. The people in Maiduguri and environs name the organisation Boko Haram due to their strong opposition to western education. The word Boko is a Hausa word meaning western education while Haram is an Arabic word meaning forbidden, therefore, joining them together will give Boko Haram the term “Western education is forbidden”.

Activities of Boko Haram sects in the north eastern Nigeria cost more than 4,000 lives (Adeolu, 2015), Ibrahim (2015), in a study on the activities of Boko Haram revealed that Boko haram activities in the North eastern Nigeria, has led to the death of seven hundred thousand (700,000) lives. While two million two hundred thousand (2.2million) people displaced from their localities, where they all abandoned their farms. United Nations Children’s Fund UNICEF (2015) in a report also indicated that Boko Haram activities led to the closure of more than two thousand (2000) schools across Nigeria, Cameroun, Tchad and Niger Republic while hundreds of others have been attacked, looted, or burnt by Boko haram sect. The impacts of Boko Haram insurgency are so numerous and cut across all aspects of life especially in the North Eastern part of Nigeria (Beatrice, 2015).

The group also forced eight hundred thousand (800,000) children of the farming communities out of their homes in the affected zone (Sam 2015). Joda, (2015) indicated that the activities of the Boko Haram sect in the north eastern Nigeria, Cameroun, Niger Republic, and Chad Republic have seriously damaged the socio-economic nerves which stimulate growth and development in the regions. Conflicts and insurgencies of different nature and causes prevail in many parts of the African continent. Some of these conflicts have sadly led to a massive loss of lives and property and to environmental destruction with dire consequences for agricultural production and food shortages.

Northern part of Adamawa State, Nigeria where agriculture is the predominant occupation of the people is also grossly affected by the insurgency (Maiha, Mubi North, Mubi South, Michika and Madagali Local Government Areas of Adamawa State, Nigeria) in the north eastern Nigeria. The zone contributes greatly to crop production such as maize, cowpea, ground nut, Bambara nut, bean seed, sugar cane, tomato, banana among other crops. The study area is also known for the production of animals such as cattle, goats, sheep, pigs and poultry among other livestock.. The zone is also known for effective and conducive environment for marketing of agricultural products that are produced in the zone especially the Mubi cattle market which is one of the major cattle markets in Nigeria. Agricultural products produced in the study area is being consumed and supplied within the country and even outside the country because of the magnitude of their agricultural production.

According to Abubakar, Salihu and Alheri (2017) more often than not, insecurity constituted by Boko Haram in Adamawa state of Nigeria has to a large extent tampered with tens of thousands of people whom major activities is farming. Perhaps, the most important insurgency related socioeconomic impact that could lead to the greatest humanitarian crises in the world was its impacts on food security. It is unfortunate that populations across the world have faced various degrees of food shortages, some with very damning humanitarian consequences. The World Bank defined food security as a condition where everyone has access to sufficient food to live a healthy and productive live (World Bank 1986 cited in Henry, 2017). The Africa Bureau of the United States Agency for International Development (USAID 2015 cited in Henry, 2017) defines it as a situation when everyone has physical, social and economic access to sufficient food to meet their dietary needs, produce and stay healthy. In fact, food security is when there is food sufficiency with no hunger or fear of starvation. Several indicators are associated with food security. These include availability, access, adequate utilization and stability of food supply at all times (Dubagat 2013 cited in Henry, 2017).

The main objective of the study was to assess the effects of Boko Haram insurgency on crop production in Northern Adamawa State, Nigeria. The specific objectives were to; describe the socio-economic

characteristics of the respondents and to determine the pre and post Boko Haram insurgency on crop production levels of the respondents.

## **METHODOLOGY**

### **Study Area**

The study was conducted in Adamawa State, Nigeria. Adamawa State is located at the North Eastern part of Nigeria. It lies between Latitudes 7° and 11°N of the equator and between Longitudes 11° E and 14° E of the Greenwich Meridian. It shares boundary with Taraba State to the south and west, Gombe State in its northwest and Borno State to the north. Adamawa state shares an international boundary with the Cameroun Republic along its eastern border. (NPC, 2006; Adebayo & Zemba 2020).

### **Data Collection and Sampling Technique**

Data was collected from primary sources. The primary data was collected with the use of questionnaire and interview schedule which was administered to the selected farmers in the study area. The target population for this study was all the registered farmers in Maiha, Mubi North, Mubi South, Michika and Madagali Local Government Areas of Adamawa State. Multi stage, simple random sampling technique was employed in selecting 278 respondents for the study. Adamawa State is divided into four agricultural zones of Agricultural Development Programme

(ADP) namely Mubi Zone (Zone 1) which is also known as Northern Adamawa State, Gombi Zone (Zone 2), Mayo-Belwa Zone (Zone 3) and Guyuk Zone (Zone 4). In the first stage, a block from each of the five local governments in Mubi Zone (Zone 1) was selected (Maiha, Mubi North, Mubi South, Michika and Madagali Local Government Areas). In the second stage three cells was selected from each of the five blocks. Finally, 278 rural farming household were randomly selected from the fifteen cells proportionate to the number of the registered farmers in each cell.

### **Data Analysis**

Data collected were analyzed using a descriptive statistics such as frequency distribution, means and percentages.

## **RESULTS AND DISCUSSION**

### **Socio-economic Characteristics of the Respondents**

The result of the socio-economic characteristics of the respondents is presented in Table 1. Age has been found to affect the ability of individual's food security, which in turn affect their productivity and general wellbeing (Adegbenga, 2014 and Muhammad, 2016). It revealed that the age classes 20 – 29, 30 – 39 and 40 – 49 constituted 21.22%, 26.26% and 24.46% % of the respondents respectively. The respondents in this age categories constituted majority (71.94%) which are less than 50 years of age with the mean age of 42.13 years.

Majority (80.22%) of the respondents were male. This is an indication that most of the farmers in the study area were male. This study corresponds to that of Abimbola *et al.* (2016), out (2017) and Salisu (2017) who posited that most of the farmers in the rural areas of Nigeria are of male folks.

The study revealed that most (71.22%) of the respondents were married, 16.19% were single, 9.35% were widowed and 3.24% were divorced (Table 5). This indicates that married people constituted bulk of the respondents. The result agrees with the study conducted by Idrissa (2013) and Mamman *et al.* (2011) which revealed that most of the farmers in northern Nigeria were male.

No formal education constituted 13.31%, 7.55% attained adult education, while majority (79.14%) of the respondents had one form of formal education or another. The result revealed that majority of the respondents were literate and this can enhance the level of adoption of improved farm practices by the respondents. This agrees with the observation by Ahmad (2010) and Babatunde (2015) that education plays a vital role in adoption of improved farm practices and innovations.

Majority 65.83% of the respondents were engaged in farming as their primary occupation which include both arable cropping and rearing of livestock for sales. Only 17.99% were engaged in trading and 16.18% of them were civil servants. This implies that farming was the major occupation of most of the household

heads in the study area. This finding corroborates Adekoya (2014); Babatunde(2015);Ike and Uzokwe (2015) and Odoh and Nwibo (2016) who all posited that most rural family in Nigeria are engaged in farming as primary occupation.

Table 1 also shows that majority (83.81%) of the respondents had farm size of between 1 – 3 hectares, while 10.79% had farm size of 4 – 6 hectares and 5.40% had less than 1 hectare of farm respectively. The mean farm size of the respondents was 2.40 hectares. This is an indication that the farmers in the study area were small-scale farmers, hence food production will be at subsistence level which could lead them to diversify into non-farm livelihood activities. This finding corroborates with the finding of Oni and Fashoghan (2013) and Fadipe *et al.* (2014) that majority of rural farmers in Nigeria are small-scale farmers who cultivate less than 5 hectares of land.

The result indicates that 29.14% of the respondents had between 16 – 20 years farming experience, while 21.58%, 14.39% and 13.67% had between 11 – 15 years, 6 – 10 years and 21 – 25 years of farming experience respectively. This indicates that the farmers had farming experience that can help them improve their productivity on the farm by knowing the correct practices. This agrees with the finding of Ume and Ochiaka (2016) who posited that long number of years of farming equip farmers in making rational decision in among others efficient resource use for high farm productivity and increased income.

Table 1 also, revealed the result on household size that 43.52%, 27.34%, 15.83% and 5.04% had household size of 6-10 persons, 1-5 persons, 11-15 persons, 16-20 persons and 21 or more persons respectively. The mean household size was eight persons. This finding is an indication that a large household size was part of the culture practice among farmers in the area. This conclusion is in line with the result of studies carried out by Adegbenga, (2014); Babatunde *et al.* (2017); Otu, (2017) and Salisu, (2017) who observed most of the farmers in rural communities in Nigeria have large family size.

**Table 1. Socio-economic Characteristics of the Respondents**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Age (Years)</b>		
20 – 29	59	21.22
30 – 39	73	26.26
40 – 49	68	24.46
50 – 59	55	19.78
60 – 69	19	6.84
70 – 79	4	1.44
Total	278	100
<b>Mean Sex</b>	42.13	
Male	223	80.22
Female	55	19.78
Total	278	100
<b>Marital Status</b>		
Single	45	16.19
Married	198	71.22
Widowed	26	9.35
Divorced	9	3.24
Total	278	100
<b>Educational Level</b>		
No Formal education	37	13.31
Adult education	21	7.55
Primary education	48	17.27
Secondary education	75	26.98
NCE/ND	64	23.02
University education	33	11.87
<b>Primary Occupation</b>	278	100
Farming	183	65.83
Trading	50	17.99
Civil Service	45	16.18
Total	278	100
<b>Farm Size (Ha)</b>	15	5.40
1 – 3	233	83.81
4 – 6	30	10.79
Total	278	100
<b>Farming Experience (Years)</b>	2.40	
1 – 5	26	9.35
6 – 10	40	14.39
11 – 15	60	21.58
16 – 20	80	29.14
21 – 25	38	13.67

26 – 30	25	8.99
31>	9	3.24
Total	278	100
Mean	35.06	
<b>Household Size (Number)</b>		
1 – 5	76	27.34
6 – 10	121	43.52
11 – 15	44	15.83
16 – 20	23	8.27
21 – 30	14	5.04
Total	278	100

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Mean 8

Source: Field Survey, 2021

### Pre Insurgency Level of Production of food Crops

Results in Table 2 revealed that the farming activities in the area were appreciable prior to the onset of Boko Haram attacks, because farmers operated under conducive atmosphere. The study revealed that large numbers of farmers in the area were able to obtain high outputs of between 100 – 4000 Kg of the various crops during the pre-insurgent periods. The results in Table 2 showed that before the onset of insurgency; the farmers who obtained outputs within the range of 100 – 1000 Kg of Maize, Sorghum, Groundnuts, Cowpea and Rice were 35, 60, 22, 13 and 20 respectively. Few farmers recorded outputs above 4100 Kg in the selected food crops during the same period. This indicates that most farmers in the area were still operating at a subsistent level. Adebayo (2001) also observed that most Nigerian rural farmers were producing on subsistent scale and holding small plots of farmland. Moreover, the impact of Boko Haram insurgency in the North-east Nigeria not only led to the decline in food supply; but also deteriorated the food security in the country because the traders from the North-eastern Nigeria are finding it extremely difficult to transport their commodities to other parts of the country as stressed by Nkwede *et al* (2015).

**Table 2: Pre Insurgency Level of Production of food Crops**

Qty (Kg)	Maize	Sorghum	Groundnuts	Cowpea	Rice
100 – 1000	35 (12.89)	60 (21.68)	22 (7.91)	13 (4.68)	20 (7.19)
1100 – 2000	80 (28.70)	125 (44.96)	20 (7.19)	27 (9.71)	30 (10.79)
2100 – 3000	120 (43.17)	80 (28.78)	115 (41.37)	23 (8.27)	123 (44.24)
3100 -4000	30 (10.79)	10 (3.60)	80 (28.78)	120 (43.47)	75 (26.99)
4100>	13 (4.68)	3 (1.08)	41 (14.74)	95 (34.17)	30 (10.79)
Total	278 (100)	278 (100)	278 (100)	278 (100)	278 (100)

Source: Field Survey 2021, values in parenthesis is percentages

### Post Insurgency Level of Production of food Crops

The findings in Table 3 revealed the extent to which the activities of insurgency affected the farming activities in the study area. The volumes of production of food crops in the study area as observed at the post insurgency period had drastically declined. The results showed that the number of farmers who got farm output within the range of 100-1000 Kg for Maize, Sorghum, Groundnuts, Cowpea and Rice during this period were 115, 138, 135, 80, and 76 respectively. This was a far greater number of the farmers now producing fewer numbers of Kg which will eventually result to lower output when compared with what was produced before the insurgency attack in the study area. The few farmers who managed to return to their farming activities after the Boko Haram insurgency could not operate at a maximum level of production.

**Table 3: Post Insurgency Level of Production of food Crops**

<b>Qty (Kg) 100</b>	<b>Maize</b>	<b>Sorghum</b>	<b>Groundnuts</b>	<b>Cowpea</b>	<b>Rice</b>
– 10 00	115 (41.37)	138 (49.64)	135 (48.56)	80 (28.78)	76 (27.34)
1100 – 2000	95 (34.17)	60 (21.58)	74 (26.62)	140 (50.36)	164 (58.99)
2100 – 3000	40 (14.39)	40 (14.39)	38 (13.67)	28 (10.07)	20 (7.19)
3100 -4000	23 (8.27)	18 (6.47)	31 (11.15)	20 (7.19)	15 (5.40)
4100>	5 (1.80)	0 (0.00)	0 (0.00)	10 (3.60)	3 (1.08)
Total	278 (100)	278 (100)	278 (100)	278 (100)	278 (100)

Source: Field Survey 2021, values in parenthesis is percentages

### CONCLUSION AND RECOMMENDATION

Boko Haram insurgency in Nigeria and some of its neighbouring countries had adverse consequences on agricultural productivity. The agricultural business environment has been affected seriously by the activities of the of Boko Haram insurgency. This has been evidenced by the reduction of valued added to the economy between the periods under investigation.

The study concludes that before the onset of insurgency; the farmers who obtained outputs within the range of 1100 – 2000 Kg of Maize, Sorghum, Groundnuts, Cowpea and Rice were 80, 125, 20, 27 and 30 respectively. The results showed that after the Boko Haram insurgency the number of farmers who got farm output within the range of 100-1000 Kg for Maize, Sorghum, Groundnuts, Cowpea and Rice during this period were 115, 138, 135, 80, and 76 respectively. This was a far greater number of farmers now producing fewer numbers of Kg which will eventually result to lower output when compared with what was achieved before the insurgency attack in the study area.

The study recommends that farm inputs like fertilizer, agrochemicals, machineries, and improved seeds should be made affordable and accessible to farmers w so as to improve their production levels. Financial assistance in any form should be given to the farmers who have suffered insurgency attack and are back at home in order to boost their productivity and consequently to improve their food production levels.

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