

## **Impact of Boko Haram insurgency on poultry production in Mubi region of Adamawa State, Nigeria**

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**Target audience:** *Government, Poultry producers, Non-Governmental organisations*

### **Abstract**

*This study was conducted to assess the impact of Boko Haram insurgency on poultry production in Mubi region of Adamawa State, Nigeria. Four local government areas namely: Mubi South, Mubi North, Madagali and Michika were purposely selected. Thirty (30) poultry farmers were randomly selected from each of the local government making a total of one hundred and twenty (120) respondents. One hundred and twenty (120) structured questionnaires were used to collect data through scheduled interview. The outcome of this study revealed that majority of the poultry farmers in Mubi South (56.67%), Madagali (53.33%) and Michika (60%) were males. Some proportion of the poultry farmers (26.67 to 36.67%) and (13.33 to 26.67%) had attained secondary and tertiary education (Colleges and Polytechnics) education respectively. Sizable proportion of the poultry farmers in Mubi South (63.33%), Mubi North (53.33%), Madagali (60%) and Michika (60%) kept poultry as source of income. Significant economic losses as a result of Boko Haram activities were recorded with greater losses recorded from layer chicken farms in Mubi South where the sum of ₦785,000 was lost and ₦895,000 in Mubi North respectively. Problem of finance (23.37 to 40%) and scare of reoccurrence of insurgence attack (23.33 to 43.33%) were observed to be the main constraints affecting poultry farming in Mubi region of Adamawa State. In conclusion, the activities of Boko Haram in Mubi region has negatively affected poultry farming and had led to significant economic losses. It is therefore recommended that government, non governmental organization and wealthy individuals should assist farmers with funds in order to revive the poultry industry in the area. Government should also enhance the security of Mubi area and restore back people's confidence so that they can be encouraged to invest on poultry farming.*

**Key words:** *Impact, Boko Haram, Poultry production, Mubi region*

### **Description of Problem**

The poultry industry is one of the fastest growing agricultural businesses in Nigeria and the demand for poultry products such as meat and eggs is on the increase (1, 2)). (3) further buttressed that the place of poultry in livestock sector of any nation cannot be under rated. The poultry industry is very important in the provision of quality protein that will effectively address the problems of malnutrition prevalent in developing countries

like Nigeria and in this way, put the Nigerian food security on a safer platform.

It is important to note that the poultry industry in the North-eastern part of Nigeria had suffered serious setback as a result of Boko Haram activities. Mubi region is one of the most hit areas by Boko Haram which resulted to huge economic losses particularly in agricultural commodities. (4) further reported that insurgency has led to significant population displacements in Adamawa State

and has kept many farmers away from their usual agricultural activities resulting to escalation in poverty rate, malnutrition, disease outbreak and high death rate.

Huge economic losses have been witnessed in the poultry industry in Mubi region as a result of Boko Haram attacks. Although much studies have been conducted on the effects of Boko Haram insurgency on agricultural activities and food security, much is yet to be done on documentation specifically the impact of Boko Haram insurgency on poultry production in Mubi region of Adamawa State Nigeria. Therefore, this study was conducted to generate relevant information on losses caused by Boko Haram insurgency on the poultry industry in Mubi area. This information will be of benefits to policy makers, non governmental organizations and donor agencies in implementing policies that is targeted at reviving the poultry industry in Mubi.

## **Methodology**

### **Study area**

The study was conducted in Mubi region of Adamawa State. The region comprises of five local government areas namely; Madagali, Maiha, Michika, Mubi North and Mubi South. The region lies between latitudes 9° 30' and 11° north of the equator and longitudes 13° and 13° 45' east of the Greenwich meridian. It has a land area of 4728.77km<sup>2</sup>. The major occupations of the populace in the area are crop and livestock production and are major sources of livelihood (5).

### **Sampling procedure**

Four local government areas namely; Madagali Michika, Mubi North and Mubi South were purposely selected for the study. Random sampling technique was used to select thirty (30) poultry farmers in each of the selected local government areas.

### **Data collection and analysis**

A total of one hundred and twenty (120) structured questionnaires were used to gather information from the poultry farmers using a scheduled interview. Data obtained were analyzed using simple descriptive statistics (Frequency and percentage).

### **Results and Discussion**

The socio-economic characteristics of poultry farmers in Mubi region of Adamawa State was presented in Table 1. The result indicates that majority of the poultry farmers were males. This finding is in line with the report of (6) who reported that 85% of poultry farmers in Adamawa State are males. This means that the males are mostly dependent on poultry farming to carter for their families. Most of the poultry farmers had attained one form of formal education or the other with secondary school and diploma certificate holders having the highest number. This clearly showed that most secondary school leavers and graduates of Colleges and Polytechnics who are not employed by government are engaged in poultry farming.

On the basis of household size, most of the farmers are within the household size of 5 to 10. It is very obvious that most of the poultry farmers are conscious of large family size that they cannot adequately take care of by providing better standard of living. The family size recorded in this study is close to the range of 8 to 12 as reported by (4) for respondents affected by Boko Haram insurgency in Mubi area of Adamawa State.

Chickens are the dominant specie of poultry birds commonly reared in Mubi region of Adamawa State (Table 2). This finding agreed with the report of (7) who reported that chickens are by far the most common poultry specie in Nigeria. This is an indication that the demand for chicken and chicken products such as meat and eggs are high compared to other species of poultry.

**Table 1: Socioeconomic characteristics of poultry farmers in mubi region of adamawa state**

<b>Sex</b>	<b>Mubi South</b>	<b>Mubi North</b>	<b>Madagali</b>	<b>Michika</b>
Male	17(56.07)	11(36.67)	16(53.31)	18(60.00)
Female	13(43.33)	19(63.33)	14(46.67)	12(40.00)
<b>Total</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>
Primary education	5(16.67)	7(23.31)	6(20.00)	5(16.67)
Secondary education	11(36.67)	9(30.00)	8(26.67)	9(30.00)
Diploma/NCE/Certificate	6(20.00)	7(23.33)	4(13.33)	8(26.67)
Degree	3(10.00)	4(13.33)	5(16.67)	4(13.33)
Others	5(16.67)	3(10.00)	7(23.33)	4(13.33)
<b>Total</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>
<b>Household size</b>				
1 – 5	19(63.33)	6(20.00)	8(26.67)	9(30.00)
5 – 10	7(23.33)	17(56.67)	15(50.00)	17(56.67)
10 – 15	2(6.67)	4(13.33)	3(10.00)	2(6.67)
>15	2(6.67)	3(10.00)	4(13.33)	2(6.67)
<b>Total</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>

**Source:** Field survey (2018), values in parenthesis are in percentages

Based on scale of production, majority of the poultry farmers are smallholder farmers with flock size of 1 – 300 birds (Table 2) which is in agreement with the findings of (6) who reported that greater proportion (70%) of poultry farmers in Adamawa State owned poultry farms with flock size of 50 – 249 birds. This therefore revealed that smallholder poultry farming had significant impact on the socio-economic wellbeing of the farmers in Mubi region.

Family labour accounted the major type of labour used in managing birds (Table 2). This might be linked to the small nature of the poultry farms comprising of few birds that can be managed using family labour and also due to inadequacy of funds and resources to hire services. This finding is in consonance with

the finding of (8) who reported that the bulk of poultry meat and eggs are produced by smallholders who adopt different production strategies in line with the little resources available to them.

Sizable number of the poultry farmers in Mubi region kept poultry birds as source of income (Table 2) followed by domestic usage. This therefore revealed that poultry farming is among the major source of employment and income generation to many people in Mubi area which corroborates the report of (9) who reported that poultry industry in Nigeria contributes to the national economy and supply the much needed protein for healthy living and as ready source of income to smallholder poultry farmers.

**Table 2: Types of poultry birds kept, types of feed used and management system adopted in mubi region of Adamawa State**

<b>Types of Birds Kept</b>	<b>Mubi South</b>	<b>Mubi North</b>	<b>Madagali</b>	<b>Michika</b>
Chickens	24(80)	21(70.00)	19(63.33)	18(60.00)
Turkey	2(6.62)	6(20.00)	4(13.33)	3(10.00)
Others	4(13.33)	3(10.00)	7(23.33)	9(30.00)
<b>Total</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>
<b>Sources of labour used in managing poultry Birds</b>				
Family	16(53.33)	13(43.33)	19(63.33)	14(46.67)
Hired	9(30.00)	7(23.33)	6(20.00)	10(33.33)
Both	5(16.67)	10(33.33)	5(16.67)	6(20.00)
<b>Total</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>
<b>Reasons for Keeping Poultry Birds</b>				
Source of income	19(63.33)	16(53.33)	18(60)	17(56.67)
Domestic use	8(26.67)	11(36.67)	7(23.33)	6(20.00)
Others	2(6.67)	3(10.00)	5(16.67)	7(23.33)
<b>Total</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>
<b>Types of feed used</b>				
Commercial feeds	20(66.67)	18(60.00)	16(53.33)	19(63.33)
Locally compounded feeds	8(26.67)	9(30.00)	11(36.67)	7(23.33)
Others	2(6.67)	3(10.00)	3(10.00)	4(13.33)
<b>Total</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>
<b>Management system adopted</b>				
Intensive	14(56.67)	17(56.67)	15(50.00)	18(60.00)
Semi-intensive	9(30.00)	7(23.33)	11(56.67)	10(33.33)
Extensive	7(23.33)	6(20.00)	4(13.33)	2(3.33)
<b>Number of Poultry birds Kept</b>				
10 – 50	6(26.00)	8(26.67)	11(36.67)	9(30.00)
100 – 200	5(16.67)	6(20.00)	4(13.33)	11(36.67)
200 – 300	10(33.33)	7(23.33)	3(10.00)	2(6.67)
300 – 400	4(13.33)	4(13.33)	6(20.00)	4(13.33)
400 – 500	3(10.00)	1(33.33)	4(13.33)	3(10.00)
> 500	2(6.67)	4(13.33)	2(6.67)	1(3.33)
<b>Total</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>

**Source:** Field survey (2018), values in parenthesis are in percentages

Most of the farmers in the study area fed their poultry with commercial feeds (Table 2). This may be due to the inability to formulate and compound local feeds. This revealed that the farmers are deficient in the necessary skills required to compound poultry feeds. This is in line with findings of (6) who reported that majority of farmers in Adamawa State depend on the use of commercial poultry feeds and hence the need to train them on how to compound poultry feed.

It was observed in this study that most of

the poultry farmers in Mubi zone own poultry with flock size ranging from 200 to 300 birds which are managed under the intensive management system. This outcome is in agreement with the findings of (10) who found that 75.63% of poultry farmers in Adamawa State are backyard poultry farmers that intensively housed their birds.

The estimated economic losses as a result of insurgence attack are presented in Table 3. Significant economic losses in broilers, layers and turkey were recorded by

majority of the poultry farmers in Mubi area. However, more losses were encountered by farmers that kept layer chickens. This therefore showed that most of the farmers reared layer chickens which produced eggs that are sold

hence serving as a major source of income. (11) reported similar economic losses encountered by poultry farmers in the North eastern part of Nigeria which had constantly been under insurgency attack.

**Table 3: Estimated economic losses as a result of boko haram insurgency in mubi region of Adamawa State from November 2014 to December 2014**

Losses (₦)	Mubi South	Mubi North	Madagali	Michika	Total
Broiler chickens	540,000	668,000	370,000	590,000	2,168,000
Layer chickens	785,000	895,000	486,000	695,000	2,861,000
Turkey	135,000	100,500	75,000	128,000	438,500
Others	97,000	69,000	48,000	140,000	354,000

**Source:** Field survey (2018)

Problem of finance and the scare of the re-occurrence of attack by the insurgency (Table 4) are major problems affecting poultry production in Mubi region. The losses of properties and investments of people in Mubi area during the insurgency attack had increased the poverty rate consequently affecting investment in poultry farming. The fear of re-

occurrence of insurgency attack had seriously affected the establishment of new farms and expansion of already existing poultry farms. This finding is in line with the report of (12) who reported that the activities of the Boko Haram sect have seriously affected the economic lives of individuals in the Northeastern part of Nigeria.

**Table 4: Some constraints encountered in poultry production after boko haram attack in Mubi Region of Adamawa State**

Constraints	Mubi South	Mubi North	Madagali	Michika
Problem of finance	12(40.00)	10(33.33)	9(30.00)	7(23.33)
Problem of supply of inputs	3(10.00)	5(16.67)	6(20.00)	5(16.67)
Poor marketing of poultry products	2(6.67)	3(10.00)	4(13.33)	5(16.67)
Fear of reoccurrence	9(30.00)	7(23.33)	9(30.00)	13(43.33)
Others	3(10.00)	5(16.67)	2(6.67)	0.00
<b>Total</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>	<b>30(100)</b>

**Source:** Field survey (2018), values in parenthesis are in percentages

### Conclusion and Applications

1. The outcome of this investigation revealed that majority of poultry farmers in Mubi area are smallholder poultry farmers who use family labour to manage their birds which are reared primarily as a source of income.

2. The activities of insurgency in Mubi region had resulted to serious economic losses in the poultry industry of the region. It was observed that financial constraints and scare of re-occurrence of insurgency attacks are among the major constraints militating against the

development of poultry farming in Mubi region.

3. It is recommended that government should enhance the security of Mubi area and restore back people's confidence so as to encourage them to invest in poultry farming. Poultry farmers should be assisted with funds by both government and non-governmental organizations.

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