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Effects of insurgency on traditional cattle feedlot management in maiduguri, nigeria

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ABSTRACT: The outbreak of insurgency in Maiduguri in 2009 and the subsequent targeted attacks on the lives and property of innocent civilians including livestock farmers has had a severe disruptive effect on Agriculture in northeast Nigeria. Efforts aimed at economic recovery and rehabilitation of the conflict ravaged regions requires information and an understanding of how the insurgency affected the communities so that aid aimed at financial inclusion could be appropriately directed. Thus, this study was designed to highlight the traditional feedlot cattle management in Maiduguri. The price of the cattle and feed materials as well as profit in 2008 and 2015 were compared. It was found that the preferred choice of feedlot cattle is the non- indigenous Ambala cattle breed. Compared with 2008, the cost of the bulls and feed materials had significantly increased in 2014 and 2015 but the average profit remained unchanged. The farmers earned up to ₦40,000 profit per head of cattle. It is recommended that financial inclusion strategies intended for post-insurgency socio-economic recovery in Maiduguri and other affected areas of north-eastern Nigeria should include building of secure feedlot cattle enclosures with proper facilities for tethering, feed storage, and waste disposal. Quality assurance and hygienic management of such places should be according to global best practices. In addition, establishment of a meat processing plant as well as provision refrigerated transportation trucks can help the farmers to maintain their profit margin and avoid stress associated with road transport of live animals. The government should design and implement a program to breed Ambala cattle using Assisted Reproductive Technology for the development Nigeria's beef industry.

Keywords: Insurgency; Cattle; Feedlot; Fattening; Management; Maiduguri; Nigeria

1. INTRODUCTION

Maiduguri, the capital of Borno State has suffered from the activities of Boko Haram terrorists since 2009. The immediate and remote causes of the insurgency as well as why it remained intractable has been extensively discussed (Awodola, 2015, Durotoye, 2015, Tukur and Fausat, 2015). Furthermore, the alleged chronological sequence of the atrocities committed by the terrorists as well as the actions of the security forces has been documented (Awortu, 2015, HRW, 2015).

Conflicts are known to have negative effects on socio-economic wellbeing of affected communities (Durotoye, 2015). The myriad of ways through which the Boko Haram insurgency has compounded the developmental challenges of Nigeria through destruction of lives and properties has been described (Awortu, 2015). In addition, there is a consensus of opinion on the detrimental effects of the insurgency on national security (Shuaibu, et al., 2015) and on education (Olowoselu, et al., 2015) among others.

The Agricultural sector of the economy is one of the most adversely compromised sectors during periods of conflict and the attendant disruption on food production and worsened impoverished conditions (Kimenyi, et al., 2014). A survey of the effects of the crisis on Agriculture in Maiduguri by Awodola (2015) revealed that 56.3% of the respondents to the questionnaire survey felt that the agricultural sectors was most affected

Maiduguri, the capital of Borno state, Nigeria has been at the epicentre of the brutal insurgency that has gripped Nigeria since 2009 (Awodola, 2015). Maiduguri was a fast growing commercial hub, strategically located because Borno State had international borders with the republics of Niger, Chad and Cameroun. There was relatively free movement of people and livestock between Nigeria and these countries. Consequently, communities in Nigeria and the neighbouring countries were severely affected by the extreme havoc caused by the Boko Haram insurgency. There were several incidences of the farmers been robbed by the insurgents, murder of the farmers themselves, and even their animals stolen or killed (Durotoye, 2015, Tukur and Fausat, 2015).

Kasuwan Shanu (cattle market in Hausa language) is located near the Gamboru market in Maiduguri. Awodola (2015) stated that the popular Gomboru market is known for its cheap perishable products and it serves as a depot for products like groundnut oil and animal skins which are being exported to Chad, Cameroon, Central African Republic (CAR) and Libya.

The indigenous feedlot cattle types found in north-eastern Nigeria include the Bunaji Rahaji Sokoto Gudali, Adamawa Gudali and Wadara breeds (Blench, 1999). In addition, a non-indigenous breed called Ambala in Maiduguri and Arab or Bahr el Ghazal in other African countries is also popular among livestock farmers (Blench, 1999).

Prior to 2009, thousands of feedlot cattle were fattened in the Kasuwan Shanu area of Maiduguri from October to May (dry season). The cattle fattening business was a major source of employment and livelihood to many people. The fattened cattle were sold locally but most of them were transported by road, to major cities in Southern Nigeria like Lagos, Port Harcourt and Enugu because of the better market prices and returns on investments for the farmers.

Cattle and animal feed that were hitherto brought from the neighbouring country to be fattened in Nigeria to satisfy the very high demand for meat and other animal products were curtailed. Furthermore, targeted attacks on the lives and property of the livestock owners themselves discouraged them from continuing with the fattening programs.

According to (Kimenyi, et al., 2014), livestock production which was particularly disrupted in during the prolonged Boko Haram conflict could be remediated through maintenance of access to veterinary services and products, management of the rebuilding and return of livestock herds and concerted

efforts to address tensions between livestock and sedentary farming communities. On the one hand, these excellent suggestions but which would require a considerable political will and economic resources. On the other hand, a more directed assistance might benefit the livestock farmers in a more immediate manner.

It follows that in an effort to assist in the economic recovery and rehabilitation of the conflict ravaged regions of Nigeria, an understanding of the manner in which the insurgency affected the business of cattle fattening could help direct the much needed assistance to groups and individuals involved with feedlot cattle in Maiduguri and the rest of the north eastern Nigeria. Such assistance should be in the context of financial inclusion. Financial inclusion through provision of financial services to economically disadvantaged members of the society plays an important role in growth and sustainable development of any economy (Singh and Singh, 2015). The Central Bank of Nigeria had set up a Committee to give policy and strategic direction on the implementation of the 'National Financial Inclusion Strategy' tasked with achieving the overall target of 80% financial inclusion of adult Nigerians by the year 2020 (CBN, 2016).

Therefore, the objectives of this study were to:

i. Describe the traditional feedlot cattle management activities practiced in Maiduguri.
ii. Determine the preferred choice of feedlot cattle breed and reasons for the choice
iii. Estimate the approximate unit cost of the cattle and local feed materials traditionally used in the fattening
iv. Estimated profits margin as at 2008, before the outbreak of the Boko Haram insurgency in Maiduguri compared with profits in 2014 and 2015
v. Highlight the potentials of proper management of cattle fattening business as an important tool for financial inclusion and socio-economic recovery in the post insurgency period

2. METHODOLOGY

This study and all information gathered were conducted between January and February 2016 in Maiduguri only. The research was carried out by the author of this paper, who is a native of the state and resident of Maiduguri. In addition, the author had also fattened cattle in the area from 2005 to 2008. Experience and knowledge of the fattening business as well as personal relationship with the stakeholders was used to have detailed interviews on all aspects of the management of feedlot cattle in Maiduguri. Personal records were used and the author had access to the personal records of the interviewees.

The interviews were limited to the owners of the cattle only because only. A total 11 feedlot cattle farmers, who have been in the business, from 2005 (at the minimum) and are still in the business, agree to be interviewed. Questions asked include preferred type of cattle, type of feed materials used and their prices, Cost of the bulls and the profit margin at the end of the fattening process. All the interviews were conducted in confidence and transcribed for data analysis.

3. RESULTS

From the in-depth discussions with respondents and personal observations by the researcher, it was clear that the cattle fattened were almost exclusively bulls. In addition, the breed of choice for the farmers is the Ambala cattle. The farmers claim that these Ambala cattle, imported into Nigeria through the Republics of Chad and Cameroun, responded to fattening regime better than any indigenous breed. Despite having a highest purchase price than any other indigenous breed, the Ambala cattle become ready for the market after only 2 months. Whereas, the indigenous breeds of cattle took up to 4 months to be fattened. Three batches of the Ambala cattle are fattened during the dry season; between October and May each year. They could not fatten in the rainy season (June to September) not because the Ambala cattle were unavailable but because of lack of appropriate shelter, waterlogged environment, disease and ectoparasitic infestations. The farmers pointed out that

only Ambala bulls are imported into Nigeria apparently because of restrictions from the source countries. If any female is found among the animals crossing the border into Nigeria, the cow is confiscated and the owner is fined. The reason for the restrictions was not clear to the livestock farmers interviewed or to this researcher.

The farmers explained that the fattening activity in the Kasuwan Shanu area was hinged on a collective of livestock farmers sharing facilities and minimising cost. The farmers have a system whereby, some businessmen invest in land purchase, sink a borehole for water supply and erect a wall around the land. The livestock farmers seek the consent of the landowners and if approved, secure a space to tether his or her feedlot cattle or secure them in an enclosure. The owner of the land is responsible for provision of water and general security. Payment of a token fee is usually made at the end of the fattening period. The amount paid was ₦500 per head in 2008 and ₦500-700 in 2015, depending on the location and owner. The feed are stored in a nearby warehouse and all farmers are free to store their feed there but pay a token fee per bag anytime the feed is taken out. These arrangements help reduce the overall cost of production for each farmer. However, the farmers needed to employ their own workers to take care of their individual feedlot.

The farmers also stated that they had significantly higher profit margins with the Ambala than with any other cattle breeds. There was a 175% increase in the price of the bulls between 2008 and 2015. Of all the components of the fattening process considered in this study, price of bulls showed least increase (Table 1). This increase was principally due to the much longer routes used to import the cattle as a result of the activities of the insurgents on Nigeria's borders with Chad and Cameroun. The Ambala are imported through the Nigerian border town with Cameroun (Mubi), and through Geidam, a Nigerian border town with Niger Republic. Through Geidam, the cattle have to be transported from Chad to Niger and then from Niger to Nigeria.

Table 1: The approximate price of basic feed materials (Naira) used in cattle fattening before the outbreak of insurgency and past two years in Maiduguri, Nigeria

S/No.	Components of fattening	Year of fattening and cost (₦)			Price increase (₦)	% Increase
		2008	2014	2015		
1	Bull	80000	140000	140000	60000	175
2	Wheat offal	700	2200	2600	1900	371
3	Millet chaff	50	200	200	150	400
4	Millet bran	250	2300	2500	2250	1000
5	Palm kernel bran	300	1100	1200	900	400

The farmers revealed that the average cost of feeding each 'Ambala' bull for 2 months was about ₦20,000. Another ₦20,000 is required for water, labour, security, medication and other miscellaneous expenditure. The farmers spend between ₦5, 000 to ₦10,000 to transport each bull from Maiduguri to southern Nigeria where the fattened Ambala were in high demand and fetch much higher prices. Figure 1 shows the average cost of the Ambala bulls used in the fattening, the cost of the bull at the end of the fattening when they are ready for the market and the average selling price of the cattle. The least profit margin per head of cattle fattened and sold in Maiduguri was ₦10,000 but usually not higher than ₦20, 000. On the other hand, the profit margin could be as high as ₦40, 000 in some circumstances if the live bulls were successfully transported to Lagos, Port Harcourt or Enugu in Southern Nigeria, a distance of over 1500 km.

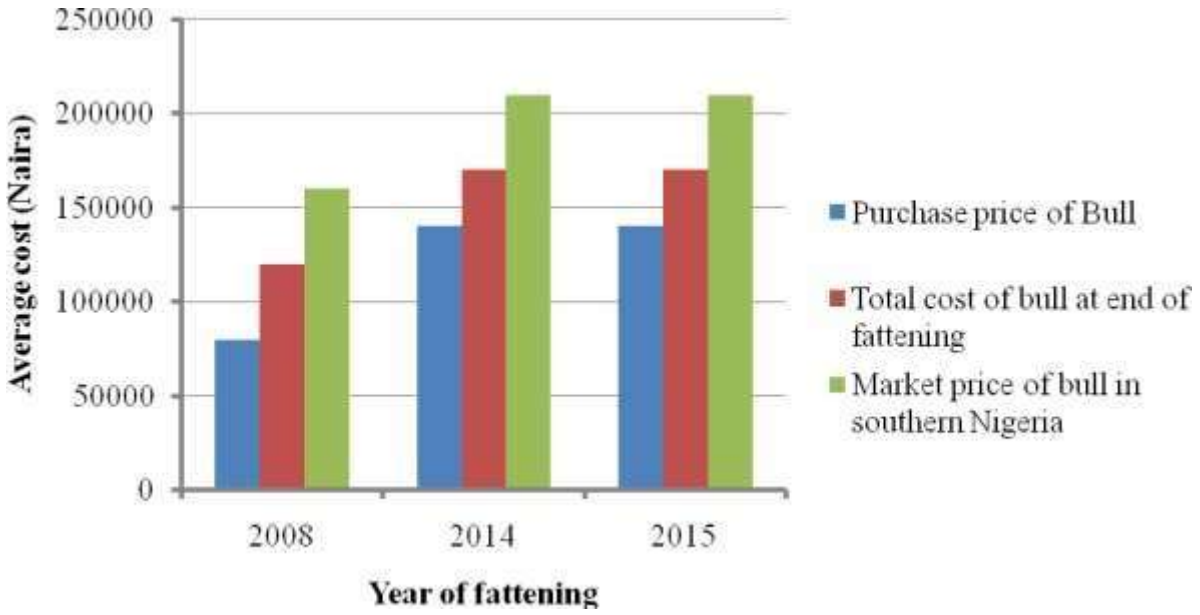

Fig 1: Bar chart showing the average purchase price of Ambala bulls, the total cost of the bull after the fattening and the average price the bulls in markets in southern Nigeria.

4. DISCUSSION

In the course of this study, it was clear that the feedlot fattening area of Maiduguri served as a very important source employment to thousands of youths as well as a source of income to many livestock farmers. The youths were involved in loading and offloading feed materials, storage of the feed materials, providing security for the feed stores, mixing the feed and feeding of the animals, provision of clean drinking water and general cleaning of the environment. Some of them were engaged in transporting the cattle to southern Nigeria. In a study aimed at examining the effects of Boko Haram activities on food security in Maiduguri, Awodola (2015) established a likely threat to food security in Maiduguri and beyond. Awodola (2015) further suggested that the state government and other stakeholders including non-governmental organization should provide employment opportunity for the youths of the conflict ridden areas so as to prevent them from being co-opted into the vicious cycle of violence. Although this researcher did not see any evidence of food shortage in Maiduguri throughout the duration of the insurgency, poverty levels had significantly increased and this could exacerbate the already difficult circumstances of the poor. Thus, strengthening of the feedlot management activities in Maiduguri is one of the obvious economic inclusion efforts that should be considered by the government and non-governmental organisations.

A description of the traditional feedlot cattle management practices and the important role played by Ambala cattle was presented in this paper. Further investigation into the practices can be conducted in the future with the aim of improving them. The restoration of peace and security is pre-requisite to any intervention. The long arduous journey and related additional cost would be eliminated since the Ambala cattle will be imported through the shorter route to Maiduguri via the Gamboru-Ngala road.

The significance of the restrictions imposed by neighboring countries from whence these Ambala cattle are sourced is not clear. Probably it is because those countries wished to maintain their breeding stocks. However, even infertile female culls are not allowed to cross the border into Nigeria. This researcher only saw one smuggled Ambala cow once in 9 years. Assisted Reproductive

Technology (ART) could be used to multiply animals within a short time (Gordon, 2004). Thus,a determined effort is needed for government to fund a national breeding program for Ambala and other beef and dairy cattle breeds.

The highest increase in the cost of feed materials was recorded for millet bran (1000%) increase. This may not be unconnected with the disruptive effects of the insurgency on farming activities in the region reported by other researchers (Awodola, 2015, Tukur and Fausat, 2015). Tukur and Fausat (2015) stated that prior to the insurgency, annual grain flow between Borno and her trade partners was 294,940 tonnes however, the flow of grain decreased to 94,500 tonnes by second quarter of 2014. The magnitude of the decrease in the flow of grain as well as number of death recorded showed that religious insurgency affected all spectrum of the Borno State economy. Millet is a popular food material among the people in Borno. A study by Tukur and Fausat (2015) found that in 2008, 5,040 tonnes of millet was taken out of the Gamboru market alone and transported to neighboring countries. This decreased to 3,600 tonnes in 2014.

However, the wheat offal and palm kernel bran were usually brought in from southern Nigeria and not sourced locally. The main road into Maiduguri remained opened throughout the conflict and the feed material were brought in together with other goods. General increased inflation and economic difficulties experienced in the region and the country might explain the four-fold increase in prices of the feed materials.

It was observed that profit-wise, despite the increased prices of the Ambala bulls and the higher cost of feeds, the profit margin did not change despite the insurgency and general economic difficulty. Due to the depreciation in the value of the Naira, the profit per head of cattle in 2015 (₦40, 000) was 172.1 United States Dollars (USD) at the November 2015 exchange rate of 232.4 Naira to a dollar. Whereas, the same ₦40, 000 was 335.9 USD at November 2008 exchange rate of 119.1 Naira to a dollar (CBN, 2016).

Northeastern Nigeria and Maiduguri in particular has been ravaged by the scourge of the Boko Haram insurgency for the past 6 years. All aspects of the society were adversely affected, the livestock sector inclusive. The cattle fattening business has survived and is now making a slow recovery despite many challenges. The promising prospects of the feedlot cattle business as well as the profit profile shown in this paper supports the suggestion that better support and management of feedlot cattle could be very useful in the post-insurgency socio-economic recovery efforts.

5. CONCLUSIONS

This paper has described the traditional feedlot cattle management activities practiced in Maiduguri. The preferred choice of feedlot cattle is the Ambala cattle breed exclusively imported from neighboring countries because they responded fastest to the fattening regimen than any local breed. The approximate unit cost of the cattle and local feed materials traditionally used in the fattening as well as the estimated profit as at 2008, before the outbreak of the Boko Haram insurgency in Maiduguri compared with profits in 2014 and 2015 was also described. It was concluded that the insurgency has adversely affected the traditional feedlot cattle management in Maiduguri. Compared with 2008, the cost of the bulls and feed materials had significantly increased in 2014 and 2015 but the average profit (in Naira) remained unchanged.

6. RECOMMENDATIONS

Financial inclusion strategies intended for post-insurgency socio-economic recovery in Maiduguri and all the insurgency affected areas of north-eastern Nigeria should include building of secure feedlot cattle enclosures with proper facilities for tethering, feed storage, and waste disposal. Quality assurance and hygienic management of such places should be according to global best practices. In addition, establishment of a meat processing plant as well as provision refrigerated transportation trucks can help the farmers to maintain their profit margin and avoid stress associated with road

transport of live animals from Maiduguri to southern Nigeria. The government should design and implement a program to use assisted reproductive technology to breed Ambala cattle in large numbers to develop Nigeria's beef industry.

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