



## RESIDENTS' ASSESSMENT OF FARMERS-PASTORALISTS CONFLICT IN ENUGU STATE, NIGERIA

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### ABSTRACT

This study focussed on residents' assessment of farmers-pastoralists conflict in Enugu State Nigeria. Multistage sampling procedure was used to select 120 farmers from three Local Government Areas in Enugu State. Data were collected using structured questionnaire, focus group discussion and in-depth interview. Data were analyzed using descriptive statistics while the hypothesis was tested using Chi-square and PPMC. The mean age of the respondents was 46 years. The majority (79.2%) of the farmers were married and 86.7% were male. The average household size of the respondents was 7 persons. Most of the respondents were involved in reporting conflict situation ( $\bar{x}=1.62$ ). Major perceived cause of conflict was destruction of crops by cattle ( $\bar{x}=1.97$ ) and the method mostly used in resolving conflicts was dialogue between the two parties (85.0%) while the predominant consequences of such conflict were displacement of farmers ( $\bar{x}=1.95$ ) and reduction in farm output ( $\bar{x}=1.94$ ). The socioeconomic characteristics of respondents and the consequences of conflict were not significantly related (sex ( $\chi^2=18.147$ ,  $p>0.05$ ), religion ( $\chi^2=9.172$ ,  $p>0.05$ ), age ( $r=-0.710$ ,  $p>0.05$ ), level of education ( $r=-0.005$ ,  $p>0.05$ )). The study concludes that farmer pastoralist conflict in the study area has resulted in insecurities in terms of food, lives and properties. It was recommended that farmers should be educated by extension agents and other professionals on conflict management strategies and the implications of embarking on conflicts on their livelihood activities.

**Keywords:** Farmers, Pastoralists, Conflict, Enugu State

### INTRODUCTION

The agricultural sector is the backbone of many economies and it provides the basic needs to mankind and raw materials for industrialization. Agriculture has made a significant contribution to the economic prosperity of advanced countries and its role in the economic development of developing countries is vital. Agricultural production in any country requires an enabling environment to reach its maximum potential. Sustainable development in agriculture, among other things demands a peaceful co-existence of producers within the communities (Adelakun, Adurogbangba and Akinbile, 2015). Farmer-herdsmen conflict remains the preponderant resource-use conflict in Nigeria (Ajuwon, 2004; Fasona and Omojola, 2005) and it has had adverse effect on agricultural production of affected communities. The necessity to provide food of crop and animal origins, as well as raw materials for industry and export in order to meet ever-growing demands, has led to both "intensive and extensive" land use (Nyong and Fiki, 2005). The competition between these two agricultural land user-groups, however, has often times turned into serious overt and covert manifestation of hostilities and social friction in many parts of Nigeria. The conflicts have demonstrated high potential to exacerbate the insecurity and food crisis particularly in rural communities where most of the conflicts are localized, with reverberating consequences nationwide (Adisa, 2011). Sustainable development in agriculture and rural infrastructure cannot be fully actualized if the target communities continually experience conflicts in different dimensions and magnitude. The

expected outcome of most of the interventions for agricultural development will be impaired if the benefitting communities do not have enabling environment to fully implement all the improved production practices and innovations introduced to them which is geared towards maximising their output and improving their wellbeing.

It is worrisome that Nigerians continually experience rising conflicts over livelihood, especially the incidents and associated fatalities between pastoralists and farming communities. According to Blench (2003), farmers-pastoralists' conflicts are increasing both in terms of occurrence and intensity. Over the years, the intensity, frequency and geographical scope of these incidents have risen sharply and rapidly. Thousands have been killed; many have been displaced; properties, crops and livestock worth billions of naira destroyed (Odinkalu and Tukur, 2016). The escalating tension, blood-letting and wanton losses of resources in the affected communities create unfavourable environments for sustainable agricultural production. Hence, continued co-existence as a united country, food security, economic and political stability is as well threatened. The continual massive loss of food materials due to farmer-pastoralist conflicts leaves the teeming population of the host communities to experience malnutrition and even death due to food scarcity and starvation. This has claimed a lot of lives in the host communities especially children. The government of Nigeria has taken several measures to end conflict within her territories. For instance, there are 415 government designated grazing reserves throughout the country. Also,

there is an establishment of farmer-pastoralist reconciliatory committees to look into resources related conflicts among farmers and pastoralists in those states in the country prone to farmer-pastoralist conflicts. Furthermore, various non-governmental organisations have been responding to conflict issues though they are more notable for their proximity to amiable donors than for any long-term progress in the field (Blench, 2003). But all these efforts and interventions have not yielded the expected result.

Although some studies have been carried out relating to farmer-pastoralist conflicts in some other states across the country, there is divergence in their findings as regards the causes and consequences of these farmer-pastoralist conflicts. For instance, Ingawa, Ega and Erhabor (1999) reported that the key underlying cause of farmer-herdsmen conflict in Nigeria is due to inadequacy of grazing resources, as increasing crop cultivation and poor management of the existing grazing reserves have resulted in a significant reduction in available livestock feed resources particularly in the Northern States. Also, Ofuoku and Isife (2009) conducted a study on causes, effects and resolutions of farmers-nomadic cattle herders' conflict in Delta State, Nigeria and identified that the major cause of conflicts between farmers-nomadic cattle herders was disregard for the host traditional authority. Until there is an agreement on the causes of conflict, reaching an agreement on how the divided society reconcile may be unattainable (Adisa 2011). Hence, this incongruence in their findings necessitated the conduct of this study to ascertain residents' perspective of the major causes of farmer-pastoralist conflicts; knowing the exact causes of these prevailing conflicts will enhance more understanding on farmer-pastoralist conflicts which will aid in managing future farmer-pastoralist conflicts. The study will be helpful to all stakeholders in agricultural and rural development as it will bring out clearly the major causes and consequences of these conflicts. Hence, stakeholders involved in resolving conflicts will be able to proffer strategies to mitigate them permanently. The specific objectives of the study were to:

- i. describe the socioeconomic characteristics of the respondents.
- ii. assess the level of involvement of the respondents in the farmer-pastoralist conflicts.
- iii. ascertain the causes of farmer-pastoralist conflicts.
- iv. ascertain the level of effectiveness of various methods used in resolving farmer-pastoralist conflicts and;
- v. investigate the perceived consequences of farmer-pastoralist conflicts.

Hypotheses of the study; there is no significant relationship between the socioeconomic characteristics of the respondents and the perceived consequences of farmer-pastoralist conflicts in the study area.

## METHODOLOGY

The study was carried out in Enugu State. Enugu State is one of the states in South-eastern Nigeria. Its capital is Enugu. The state shares borders with Abia and Imo States to the South, Ebonyi State to the East, Benue State to the Northeast, Kogi State to the Northwest and Anambra State to the West. Enugu State has 17 Local Government Areas (LGAs) and had a total population of 3,267,837 people at the census held in 2006 (estimated at over 3.8 million in 2012), with total area of 7,161 km<sup>2</sup> and population density of 460/km<sup>2</sup>. The population of this study comprised of all farmers operating in areas that have experienced farmer-pastoralist conflict at one time or the other in Enugu State. Multi-stage sampling procedure was used to select respondents for the study area. The first stage involved the purposive selection of three Local Government Areas (LGAs) on the basis of areas that recently experienced farmer-pastoralist conflicts. The LGAs selected were; Uzo-Uwani, Nkanu West and Enugu East. The second stage involved the purposive selection of two farming communities from each of the selected LGAs to get a total of six farming communities which are; Ekwulu-nimbo and Ukpabi from Uzo-uwani LGA, Attakwu and Amodu from Nkanu west LGA, Ibagwa Nike and Umuchigbo from Enugu East LGA. Twenty arable crop farmers were purposively selected on the basis of those affected by the conflict in the selected farming communities, thus giving a total of 120 respondents interviewed for this study. Data were collected from primary sources through a structured questionnaire, focused group discussion (FGD) and in-depth interview (IDI).

Respondents were asked to indicate their level of involvement in the farmer-pastoralist conflicts from a list of activities provided on a 3-point rating scale scored as regularly =2, occasionally =1 and never = 0. Items with scores from mean and above were regarded as areas where respondents were actively involved in conflicts while those with scores below mean were areas they were not actively involved. Perceived causes of farmer-pastoralist conflicts were measured by asking respondents to indicate the frequency of occurrence of each of the causes of conflict on a three point rating scale using scores of 0 = not at all, 1= occasionally, 2 = always. The grand mean was calculated and used as a benchmark to categorise the causes as severe or not severe. Respondents were also asked to indicate the level of effectiveness of the various methods used in



resolving conflicts on a three point rating scale scored as large extent = 2, lesser extent = 1, not at all = 0. The grand mean was calculated and used to categorise the methods as effective and not effective. Consequences of conflicts were measured using a three point rating scale scored as not at all = 0, to a lesser extent = 1, to large extent = 2. The grand mean was calculated and used to categorise the consequences as severe or not severe. Data were analyzed using descriptive statistics while the hypothesis was tested using Chi-square and PPMC.

## RESULTS AND DISCUSSION

### Personal characteristics

Table 1 shows that more (44.2%) of the respondents were between 41 and 50 years with an average age of 46 years. This implies that the farmers are still in their productive and active years and may respond violently to conflict behaviour of pastoralists each time they encounter each other in a conflict situation. Majority (86.7%) of the respondents were male while 13.3% were female. This finding agrees with the study of Oladele (2011) that males are dominating agricultural

sector as compared to female. Also, majority (79.2%) of the farmers were married, 29.2% had no formal education while 70.8% had formal education and could be described as literate. The average household size was 7 persons; a relatively large family size which may be as a result of the need for more hands to work on the farm. Also, majority (83.3%) of the respondents were Christians while the remaining 16.7% were traditional worshippers. A greater proportion (74.2%) of farmers had less than 5 hectares of farm land with a mean farm size of 4 hectares. This implies that a greater proportion of the respondents were small scale farmers. This finding is in congruent with the findings of Oladele (2011) who reported that small scale farmers in Nigeria owned 1 – 5 hectares of farm land. The average annual income of the respondents was approximately ₦376,000. This implies that majority of the farmers may not be financially capable to expand their enterprise through procurement of improved seed varieties and other innovative agro-technology that could have help them address rural poverty and ensure food security for the people.

**Table 1: Personal characteristics of the respondents (n = 120)**

Variables	Frequency	Percentage	Mean
<b>Age (Years)</b>			
≤30	6	5.0	46
31 – 40	26	21.7	
41–50	53	44.2	
51–60	25	20.8	
61–70	9	7.5	
>70	1	0.8	
<b>Sex</b>			
Male	104	86.7	
Female	16	13.3	
<b>Marital Status</b>			
Single	15	12.5	
Married	95	79.2	
Divorced	1	0.8	
Widowed	9	7.5	
<b>Educational level attained</b>			
No formal education	35	29.2	
Primary education attempted	27	22.5	
Primary education completed	19	15.8	
Secondary education attempted	18	15.0	
Secondary education completed	13	10.8	
Tertiary education	8	6.7	
<b>Household size</b>			
1 – 5	50	41.7	7
6 – 10	49	40.8	
> 10	21	17.5	
<b>Farm size (in hectares)</b>			
< 5	89	74.2	4
5 – 10	30	25.0	
.>10	1	0.8	

Variables	Frequency	Percentage	Mean
<b>Annual income (in Naira)</b>			
< 300,000	71	59.2	376,000
300,000 – 599, 999	22	18.3	
600,000 – 899,999	17	14.2	
900,000 – 1,199,999	7	5.8	
≥ 1,200,000	3	2.5	

Source: Field survey, 2017

### Involvement of Respondents in Farmers-Pastoralists Conflicts

Table 2 shows that the respondents were actively involved in four out of the nine areas of involvement listed. Respondents were mainly involved in reporting conflict situation ( $\bar{x}=1.62$ ), attending reconciliation meeting ( $\bar{x}=1.36$ ) and donation of money for logistics when organising reconciliation meetings and supporting conflict

victims ( $\bar{x}=1.06$ ) while purchase of ammunition ( $\bar{x}=0.48$ ) and use of ammunition ( $\bar{x}=0.58$ ) were the areas they were least involved. It could be observed from the result that the farmers involvement were mainly in areas that can lead to reduction in conflict situations and not in the main conflict itself. This implies that the respondent involvement in the actual conflict is relatively minimal.

**Table 2: Distribution of respondents according to involvement in farmer-pastoralist conflicts**

Involvement of respondents	Mean	Rank
Reporting on conflict situation	1.62*	1 <sup>st</sup>
Use of ammunition	0.58	8 <sup>th</sup>
Attending reconciliation meeting	1.36*	2 <sup>nd</sup>
Purchase of ammunition	0.48	9 <sup>th</sup>
Transportation of warriors	0.74	6 <sup>th</sup>
Formulation of strategies to confuse enemies,	0.95*	4 <sup>th</sup>
Donation of money	1.06*	3 <sup>rd</sup>
Removal of bullets from injured people	0.63	7 <sup>th</sup>
Supply of food to the warriors	0.80	5 <sup>th</sup>
<b>Grand mean</b>	<b>0.93</b>	

\*Active involvement ( $\bar{x} \geq 0.93$ )

Source: Field survey 2017

### Perceived Causes of Conflict between Farmers and Pastoralists

Result in Table 3 shows that the respondents considered 9 out the 19 possible causes of conflict as major causes of conflict between farmers and pastoralists. The main causes of conflicts identified were; destruction of crops by cattle ( $\bar{x}=1.97$ ), competition for land and water ( $\bar{x}=1.88$ ) and sexual harassment of women ( $\bar{x}=1.88$ ), while stealing of cattle by farmers/family members ( $\bar{x}=0.13$ ) and low awareness of stock routes by farmers ( $\bar{x}=0.22$ ) were identified as the least causes of conflict. The perception of respondents that destruction of crops by cattle is the most severe cause of conflict between farmers and pastoralists is not surprising. This is because crop products are the main source of income for farmers and any attempt to tamper with their crop yield will be promptly resisted. This finding is in agreement with the findings of Olaleye *et. al* (2010) who opined that crop damage and competition for land and water were the predominant factors causing farmer-herder conflict. Also, Olabode and Ajibade (2010) stated that frequent causes of Fulani/farmers' conflict were the destruction of crops by cattle in the study area.

In one of the FGD sessions among farmers in Ekwulu – Nimbo, participants pointed out that;

*“...the pastoralists carry their animals into our farms and destroy our crops and when we complain they attack us and overpower us. This has made our people not to make use of very fertile land far from home that our forefathers handed over to us and currently we only make use of the farmland around our houses which are not as fertile as the former farm land...”*

In another FGD session among farmers in Attakwu, participants revealed as follows;

*“...These pastoralists carry their animals to our streams and make the streams unhealthy for drinking and unfit for domestic use, they also allow their animals to eat up our vegetables grown close to those streams and because they are heavily armed than us on several occasions that we confronted them, we just have to stop accessing those streams they have hijacked from us...”*

IDI session with the leader of the neighbourhood at Attakwu revealed thus;



“...Our women and daughters have been raped on several occasions on their way to farms and even streams and sometimes killed having been raped, we are not happy about that...”

These concerns raised are capable of constantly causing conflicts; but if they are properly addressed, conflict between farmers and pastoralist will be drastically reduced.

**Table 3: Perceived causes of conflict between farmers and pastoralists**

Perceived causes of conflicts	Mean	Rank
Destruction of crops by cattle	1.97*	1 <sup>st</sup>
Indiscriminate bush burning by pastoralists	1.86*	4 <sup>th</sup>
Low awareness of stock routes by pastoralists	0.23	17 <sup>th</sup>
Low awareness of stock routes by farmers	0.22	18 <sup>th</sup>
Ethnic rivalry	1.00	11 <sup>th</sup>
Stealing of crops by pastoralists	1.16	10 <sup>th</sup>
Stealing of cattle by farmers/family members	0.13	19 <sup>th</sup>
Sexual harassment of women	1.88*	2 <sup>nd</sup>
Contamination of streams by cattle	1.78*	5 <sup>th</sup>
Over grazing of fallow land	1.64*	6 <sup>th</sup>
Harassments of pastoralists by the youths	0.77	15 <sup>th</sup>
Competition for land and water	1.88*	2 <sup>nd</sup>
Deliberate hostility by both parties	0.53	16 <sup>th</sup>
Low level of compliance to stock routes	1.00	11 <sup>th</sup>
Depleting soil fertility	0.93	13 <sup>th</sup>
Indiscriminate defecation of cattle on the roads	1.34*	9 <sup>th</sup>
Disregards for traditional authority	1.64*	6 <sup>th</sup>
Blockage of major roads	1.49*	8 <sup>th</sup>
Poisoning of farm	0.83	14 <sup>th</sup>
<b>Grand mean</b>	<b>1.17</b>	

\*Major cause of conflict ( $\bar{x} \geq 1.17$ )

Source: Field survey, 2018

**Methods used in resolving farmer – pastoralist conflicts**

Table 4 shows that 5 out of the 11 listed methods were identified as effective methods for conflict resolution. The respondents considered dialogue between parties involved ( $\bar{x}=1.83$ ), praying for peace to reign ( $\bar{x}=1.73$ ) and seeking the intervention of the traditional leaders in fostering peace between the parties involved ( $\bar{x}=1.18$ ) as the methods mainly used in resolving conflict. The least used methods were; payment of compensation to victims ( $\bar{x}=0.09$ ) and establishment of grazing routes ( $\bar{x}=0.09$ ). Although, dialogue between parties, praying for peace and seeking the intervention of the traditional leaders among others have been frequently used in resolving conflict in the study area, the parties have not experienced

harmonious co-existence. As a result, sustainable development in agriculture and improvement in the normal livelihood activities of the residents have been jeopardized. In one of the FGD sessions among farmers in Ekwulu – Nimbo, participants revealed as follows;

“...we have adopted several conflict resolution methods but all amount to futility. How do you explain a situation when after dialogue between both parties, intervention by our traditional leaders and even local government chairman, the pastoralists will continue to destroy our crops, hijack our streams and even claim lives of our people and if they are challenged they will attack us? Currently, we live in fear and our mind is not at rest at all...”

**Table 4: Methods used in resolving farmers – pastoralists conflicts**

Methods of Conflict Resolutions	Mean	Rank
Dialogue between parties involved	1.83*	1 <sup>st</sup>
Payment of compensation to victims	0.09	10 <sup>th</sup>
Intervention by traditional leaders	1.18*	3 <sup>rd</sup>
Establishment of grazing routes	0.09	10 <sup>th</sup>
Sought court verdicts	0.78*	5 <sup>th</sup>
Educating farmers and pastoralist by person or bodies responsible for conflict resolution	0.38	6 <sup>th</sup>
Intervention by NGOs	0.28	8 <sup>th</sup>

Methods of Conflict Resolutions	Mean	Rank
Local community crop farmers/pastoralists intervention	0.30	7 <sup>th</sup>
Intervention by law enforcement agents	0.91*	4 <sup>th</sup>
Prayed for peace	1.73*	2 <sup>nd</sup>
Punishment of offender	0.13	9 <sup>th</sup>
<b>Grand mean</b>	<b>0.7</b>	

\*frequently used methods ( $\bar{x} \geq 0.7$ )

Source: Field survey, 2017

**Perceived consequences of farmer-pastoralist conflicts**

The mean distribution of the consequences of farmer-pastoralist conflicts by the respondents as shown in Table 5 indicates that the main consequences of farmer-pastoralist conflict as perceived by the residents were; displacement of farmers ( $\bar{x}=1.95$ ), reduction in output/yield ( $\bar{x}=1.94$ ), reduced access to land ( $\bar{x}=1.93$ ), loss of lives ( $\bar{x}=1.92$ ) and scarcity of food items ( $\bar{x}=1.86$ ). As a result of these consequences, some farmers in the affected communities have abandoned the cultivation of some crops and farm land to avert conflicts with herdsmen. In a similar vein,

agricultural labour which is usually supplied by the rural youths has been seriously affected as most of the youths migrate to more peaceful locations and thereby creating labour scarcity in the conflict prone zones. During a session of FGD among farmers in Ekwulu-nimbo, participants reported as follows;

*“... We are afraid of going far from our surroundings to carry out our farming activities for fear of attacks by the pastoralists. They sometime rob us of our belongings and at the same time rape our wives and daughters...”*

**Table 5: Perceived consequences of farmer-pastoralist conflicts**

Perceived causes of conflicts	Mean	Rank
Destruction of crops by cattle	1.97*	1 <sup>st</sup>
Indiscriminate bush burning by pastoralists	1.86*	4 <sup>th</sup>
Low awareness of stock routes by pastoralists	0.23	17 <sup>th</sup>
Low awareness of stock routes by farmers	0.22	18 <sup>th</sup>
Ethnic rivalry	1.00	11 <sup>th</sup>
Stealing of crops by pastoralists	1.16	10 <sup>th</sup>
Stealing of cattle by farmers/family members	0.13	19 <sup>th</sup>
Sexual harassment of women	1.88*	2 <sup>nd</sup>
Contamination of streams by cattle	1.78*	5 <sup>th</sup>
Over grazing of fallow land	1.64*	6 <sup>th</sup>
Harassments of pastoralists by the youths	0.77	15 <sup>th</sup>
Competition for land and water	1.88*	2 <sup>nd</sup>
Deliberate hostility by both parties	0.53	16 <sup>th</sup>
Low level of compliance to stock routes	1.00	11 <sup>th</sup>
Depleting soil fertility	0.93	13 <sup>th</sup>
Indiscriminate defecation of cattle on the roads	1.34*	9 <sup>th</sup>
Disregards for traditional authority	1.64*	6 <sup>th</sup>
Blockage of major roads	1.49*	8 <sup>th</sup>
Poisoning of farm	0.83	14 <sup>th</sup>
<b>Grand mean</b>	<b>1.17</b>	

\*major consequences ( $\bar{x} \geq 1.52$ )

Source: Field survey, 2017

**Relationship between the socioeconomic characteristics of the respondents and the perceived consequences of farmer-pastoralist conflicts**

Result in Table 6 shows that there is no significant relationship between the socioeconomic

characteristics of respondents and the consequences of farmer-pastoralist conflicts in the study area. This implies that the socioeconomic characteristics of the farmers had no influence on the perceived consequences of farmer-pastoralist conflicts in the study area.



**Table 6: Relationship between the socioeconomic characteristics of the respondents and the perceived consequences of farmer-pastoralists' conflicts in the study area**

Variable	$\chi^2$	df	r-value	P-value	Decision
Sex	18.147	15		0.255	Not Significant
Religion	9.172	15		0.868	Not Significant
Marital status	37.629	45		0.774	Not Significant
Age			-0.710	0.443	Not significant
Level of education			0.005	0.563	Not significant
Household size			0.000	0.997	Not significant
Farm size			0.015	0.869	Not significant
Annual income			0.054	0.557	Not significant

### CONCLUSIONS AND RECOMMENDATION

Based on the findings of the study, it could be affirmed that farmer-pastoralist conflicts in Enugu state weakened the agricultural production capabilities of farmers due to farmers' displacement resulting in continual insecurities in terms of food, lives and properties.

Therefore, the following recommendations were made:

1. The farmers should be educated by extension agents and other professionals on conflict management strategies, the implications of embarking on conflicts on their livelihood activities/general wellbeing and better approaches of addressing conflict situations when they arise.
2. The offenders should be seriously punished by the state government to serve as a caution to others that may have tendency of promoting conflicts or indulging in conflicts themselves.
3. The state government being the owner of the land should demarcate grazing reserves for pastoralists along their grazing tracks in each state of the federation to avoid destruction of crops by cattle.
4. Victims of farmer-pastoralist conflicts who lost their crops, family members and properties should be adequately compensated by the government. This will help to eliminate already existing anger among the people that experienced losses during the conflicts thereby reducing the rate of reprisal attacks.

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