

CONFLICT IN NIGERIA'S AGRICULTURAL COMMUNITY. THE HERDERS' PERSPECTIVE IN NORTH CENTRAL NIGERIA

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Abstract. The crop farmer-herder conflict has taken a toll on the agricultural development of Nigeria. The violent conflict between these two major players in the Nigerian agricultural sector, constitute a threat to their livelihood strategy. As a result of these conflicts, fortunes have been lost in terms of crops and livestock. Our study investigated conflict between herders and crop farmers in Kogi State, Nigeria. In general, a herdsman is responsible for the conflict experienced on the agricultural scene in Nigeria. This work presents the herders' perspective to the lingering dispute. For the purpose of the study, purposive sampling method was used to select 3 locations in the state. Furthermore, we applied snowball sampling to select 40 herder respondents from each of the three locations; consequently, a total of 120 herders were sampled for the study. Data were collected through the use of structured interview schedules. Descriptive statistics, the 5 point Likert scale and Chi square test were used for the analyses. Among the identified causes of conflict this presentation conveys the intent of the authors better are crop damage by cattle (72.5%), crop farmers encroachment onto cattle routes (47.5%), inadequate grazing reserves for cattle (70.0%), lack of access to water points (64.2%), pollution of water points leading to death of livestock (47.5%), intentional bush burning (66.7%), maiming/killing of stray cattle (74.2%), and blockade of stock route by farms (80.8%). Resolution of conflict situations was found to be carried out mostly by traditional institutions, the police, local authorities, courts and cattle breeders association through legal means and payment of compensation among others. Furthermore, the herdsman also have strategies to prevent such conflicts; these are restriction of cattle, awareness of the existence of a stock route among members and use of the stock route. Therefore, we recommend the use of traditional institutions and support of the cattle breeders association to manage such conflicts in any case.

Keywords: conflict, herder- crop farmer, conflict-resolution, stock route

INTRODUCTION

The prevalence of conflict slows down or completely hinders economic development (Bagwitz et al., 2008). Furthermore, it destroys the achievements that have already been attained through loss of lives and property. A conflict is an existing state of disagreement or hostility between two or more people (Nicholson, 1992). This is when two or more parties are not in accord and, as such, are on different parallels on the same issue. Moreover, when groups or individuals struggle over values, claims to status, power and or resources with the intent to neutralise, injure or eliminate the rival, conflict is said to be happening (Jeong, 2000). However, conflict situations may bring about development; this is because resolving a conflict situation may result in a more effective execution of tasks or a new approach to various challenges. The conflict between herders (also referred to as pastoralists) and farmers within the agricultural terrain in Nigeria has defied the efforts aimed at creating and sustaining harmony between the two major players. The conflict has been recurring over the years with no seeming end (Tonah, 2006). While not underestimating the contribution of crop farmers to the Nigerian economy, herders are responsible for the provision of

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72.5 million goats, 41.3 million sheep, 19.5 million cattle, 975,000 donkeys and 28,000 camels to the Nigerian livestock market (Federal Ministry..., 2011).

Herders, also referred to as pastoralists keep livestock and usually practice transhumance while crop farmers have rather permanent settlement and cultivate the land. However, crop farmers may also migrate to new environment when arable land becomes challenging. The aggression between herders and crop farmers has deteriorated to violent confrontation over the years, mainly as a result of dwindling land resource for cultivation of crops and grazing (Aliyu, 2015). However, coexistence between those two groups has been cordial for a long period of time, with mutually beneficial relationship. Such a union include the possibility for herders to camp with their livestock on farms with the aim to restore soil fertility, while on the other hand, the crop farmer grants grazing rights to the herder or pays in kind (grains). The casualties from such conflicts has resulted in over two thousand deaths and tens of thousands of displaced persons in Benue, Kaduna and Kogi states (International Crisis Group, 2017; Dimelu et al., 2017). Also, Nweze (2005) reported that many herders and crop farmers have lost their lives while others have experienced declining productivity in their herds and farm produce, as well as destruction of properties. Many studies have reported causes and effects of the conflict between these two major players in the agricultural sector (Ofuoku and Isife, 2009; Musa et al., 2016; Dimelu et al., 2017; Blench, 2017); but none of the studies have explored the relationship between the causes of the conflicts and the remedial measures adopted. That is to ascertain the suitability of the remedial measure taken to resolve a conflict situation. Against this backdrop, this study examined the causes of the conflict and suitability of remedial measures employed to resolve disputes between herders and crop farmers; determined the damages suffered by herders from such disagreements and identified the management measures adopted by the herders.

METHODOLOGY

Study Area

The study was carried out in Kogi State, Nigeria. Kogi State was found to be suitable for the study because it is among three North central states (namely: Kwara, Kogi and Benue States), strategically located at the gateways to the southern Nigeria greenery during the dry season.

Furthermore, the state has witnessed incidences of conflict with respect to 2 major players in the agricultural sector. The state is situated between latitudes 6°33'1" and 7°49'1"N and longitudes 6°45'1" and 7°49'1" E. It has a population of 3,278,487 people (National Population Commission, 2006). The territory has a large expanse of lowlands in the river basins and stretches of tropical rainforest which makes it suitable for grazing. Within this area, farmers predominantly cultivate crops such as cassava, cocoyam, maize, yam and tree crops. Other occupations in the area include fishing which is practiced by communities living along the river banks (Onucheyo, 1999; Dimelu et al., 2017).

Sources of Data and Sampling Procedure

The study utilised primary data. Data were collected using survey method with the aid of a structured questionnaire. Information on the causes of the conflicts, damage incurred, and the role that formal and informal institutions play in resolving disputes were elicited. Purposive multistage sampling technique was used to draw samples from the area being the subject of the study. The selection was carried out in three stages. The first stage was the selection of two municipalities affected by the incidences of conflicts; namely Dekina and Omala. Thereafter, three communities were selected for the administration of the questionnaire. According to the Nigerian Population Commission (2006), the populations of two municipalities are 260,312 and 108,402 for Dekina and Omala respectively. A total number of 120 respondents constituting 85 individuals from Dekina and 35 from Omale municipalities, were sampled for the study respectively.

Analytical Techniques

Descriptive statistics was used to describe the socio-economic characteristics of the herders, categorise the economic damages caused by conflict events that had influence on herder activities and to identify preventive measures adopted by the herders to forestall confrontation with crop farmers.

A five (5) points Likert scale using the following gradation: strongly disagree (SD), disagree (D), undecided (U), agree (A), and strongly agree (SA) was used to ascertain the agreement or the lack thereof amongst the herders with regard to the causes and incidences of herder – crop farmer conflicts, as well as suitability and effectiveness of the methods used in resolving the conflicts in the study area.

Chi-Square goodness of fit test was further used to statistically analyse the result of the Likert scale, in order to determine the association between the competence of particular institutions engaged in resolving conflicts and their specific types, as well as the relationship between the perceived effectiveness of the conflict resolution and institutions involved. Hence, following Bwala et al, (2018) the test was carried out using the equation below (1).

$$x^2 = \frac{\sum(O_i - E_i)^2}{E_i} \quad (1)$$

Where:

O = observed frequency

E = expected frequency

Hypothesis

The hypothesis, whether or not, there is a relationship between the competence and effectiveness of institutions resolving conflicts and type of conflict was tested. This is because not all institutions may be competent for the resolution of disputes due to certain characteristics of such authorities and the level of trust of the parties involved in the disagreement. Hence, the null and alternate hypothesis are stated below:

Hypothesis I:

H_0 : there is no association between the competence of institutions resolving conflict and type of conflict.

H_1 : there is association between the competence of institutions resolving conflict and type of conflict.

Hypothesis II:

H_0 : there is no relationship between the effectiveness of conflict resolution and institutions involved

H_1 : there is a relationship between the effectiveness of conflict resolution and institutions involved

RESULTS AND DISCUSSIONS

Socioeconomics characteristics of herders in the study area

The results, as presented in Table 1, show that, all (100%) of the sampled pastoralists are males. An explanation for this finding may be associated with the role of a woman at home and the hazard of the job. Herding involves moving around in the wild for days, which may not be ideal for women. Furthermore, may not be comfortable with women going into the bush alone without

protection. This is consistent with the findings of Adisa (2012) who reported that all herders in the area that were the subject of his analysis were males. As it results from the findings, cattle herding seems to be a male-dominated enterprise in the area being analysed. It may result from the cultural barrier imposed on women, as it is the case in most part of Northern Nigeria where women are restricted from taking certain occupations that are basically considered to be male-oriented. By implication, a tendency to be involved in conflict is higher in males who may be more energetic, and therefore regarded as the protectors of the community. The result also indicates that, majority of the respondents were within the age range of 50-59 years old (54.2%).

Table 1 provides more details on the above-mentioned group. Majority of cattle herders interviewed had no formal education at all (48.3%), while only 29.2% of them were educated up to the primary school level. Further observations revealed that about 16.7% of the cattle herders had Quranic education, while 3.3% attended nomadic school; additionally, 2.5% of the respondents attended secondary level of education. According to Ofuoku and Isife (2009), education is likely to establish proper understanding of issues; therefore educated persons are likely to be more open to dialogue during conflict. Hence, it can be deduced that a great number of herders within the area being the subject of analysis, would be able to comprehend particular issues and be open to dialogue. This is because about 52% of the respondents in this study were educated. According to the results, all the respondents belong to Fulani tribe (Table 1), what this implies is that the tribe are the cattle herders within the area. It is therefore evident that ethnicity may play a significant role in the conflict, as noted by Tonah (2006), who stated that, herder-farmer differences are not only seen as resource conflict but also as ethnic struggle involving two groups. Since herders and farmers may have very different values, customs and cultural characteristics, disputes between them are often characterised as ethnic conflict.

Further analysis shows that all the respondents were married. This means that majority of the cattle herders had at least one dependent, making them the bread winners of the family. Therefore, they have a greater tendency to challenge all kind of occupational threats. The finding corroborates the conclusions of Kehinde (2011) who reported that majority of herders in Kabba/Bunu Local Government Area of Kwara State were married.

Table 1. Distribution of respondents according to socioeconomic characteristics

Cattle herders	Frequency	Percentage (%)
Sex		
Male	120	100.0
Age		
20–29	2	1.7
30–39	8	6.7
40–59	28	23.3
50–59	65	54.2
>60	17	14.2
Total	120	100.0
Educational level		
Quranic	20	16.7
Nomadic/primary	39	32.5
Secondary	3	2.5
Non-formal education	58	48.3
Total	120	100.0
Ethnicity		
Fulani	120	100.0
Marital status		
Married	120	100.0
Years of residency		
6–10	4	3.3
11–15	25	20.8
Above 16	91	75.8
Total	120	100.0
Herd size		
1–100	92	76.7
101–200	28	23.3
Total	120	100.0
Occupation		
Cattle rearing	73	60.8
Farming and cattle rearing	47	39.2
Total	120	100.0

Source: field survey, 2018.

With regard to the place of residence, majority (75.8%) of respondents had been living in the area in question for more than 16 years. Additionally, 20.8% of the cattle herders spent 11-15 years there, while 3.3% of them had been living in this territory for above 6 years. These results show that majority of the respondents within the middle aged group grew up in the analysed area. According to the findings of Kehinde (2011), herders that lived in the community for 1-4 years were found to be in conflict with crop producers, while those that lived in the area for more than 8 years had the least tendency of conflict with crop farmers. As a consequence, it can be concluded that the length of stay of herders in a particular location plays a role in minimizing conflicts with the host community. It results from the fact that when the parties dwell together, they tend to build relationships and hence respect one another through avoiding acts that may violate their rights.

Majority of the cattle herders (76.7%) keep a herd size at the level below 100 cattle, while 23.3% of them have more than 100 cattle (Table 1). The largest herd size recorded for an individual in this study lies between a hundred cattle, which is confirmed by the work of Iro (2004). The small herd size may be explained by the fact that, the activities of cattle rustlers, pose serious threat to their livelihoods. One of the challenges faced by cattle herders in Nigeria is the prevalence of rustlers. The rustlers rob the herders of their cattle who are maimed or killed during the process, leaving them in a state of despair. According to the observations, it can be stated that majority of the studied group (60.8%) are solely cattle herders, while about 39.2% of them practice mixed farming; that is they rear cattle and cultivate crops as well (Table 1). Therefore, it can be concluded that the activity of rustlers depletes the cattle held by the native Fulani herders. Consequently, the cattle stock constituting the family wealth is in jeopardy; and with time, the family may be left without traditional means of livelihood, thus endangering the sustenance of future generation. Taking into consideration the aforementioned conclusions, there can be a connection between the depletion of cattle holding in herder households and the rise in the delinquent behavior of the herder youths.

Triggers of conflict between cattle-herders and crop farmers

Respondents were requested to identify what they perceived to be the trigger of the conflict between cattle

herders and crop farmers. According to observations, majority of the respondents (80.83%) strongly agree that stock route blockade by crop farmers constitute a cause of herder-farmer conflict, while 2.5% remain undecided. Additionally, a significant proportion of the respondents strongly agree that killing of stray cattle leads to conflict between the groups (74.17%), while 25.0% agree with this statement (Table 2). Similar finding was reported by Dimelu et al. (2017), Ofem and Bassey (2014), and Musa et al. (2016). Further analyses show that majority of the respondents (72.5%) strongly agree that crop damage by cattle is one of the cause of their mutual conflict.

Table 2 also indicates that a significant number of the respondents agree that inadequate grazing reserves is one of the triggers of the conflict (70.0%). This is confirmed by Aliyu (2015), who reported inadequate grazing reserves as one of the factors causing conflict between crop farmers and cattle herders. As regards bush burning, majority of the respondents agree that indiscriminate bush burning is among the triggers of crop farmer – herder conflict (66.67%), while only 17.5% of individuals disagree and 8.33% of them remain undecided. It is in compliance with the findings of Musa et al. (2013), Ofem and Bassey (2014) and Dimelu et al. (2017). Similarly, according to the result presented in Table 2, a high number of the respondents (47.5%),

have indicated that crop farmers encroachment onto cattle routes also triggers conflict between the groups in question. On the contrary, only a few herders disagree (3.3%). It is confirmed by Aliyu (2015) who reported that the above mentioned encroachment was one of the major factors of clash between cattle herders and crop farmers in Katsina state, Nigeria.

Additionally, a large number of cattle herders agree that land use policy that vests control of land to government also contributes to the disputes (58.33%) , while 32.5% of individuals remain undecided, and 5.83% disagreeing.

According to the study, it can be also concluded that a simple majority of the respondents agree that lack of access to water points is among the triggers of conflict in the area in question (64.17%), although few individuals remained undecided (24.17%), and 0.83% of them disagreed. With regard to the pollution of water point, a simple majority of the respondents were undecided (47.5%) however, 29.17% of individuals agreed that it triggered conflict. Ofuoku and Isife (2009), Musa et al. (2016) reported that contamination of water/stream by cattle were amongst the major triggers of conflict in Delta state and Guma Local Government area of Benue state, Nigeria. According to the analysis it is indicated that 37.5% of the respondents agreed that perceived hatred could be one of the triggers of herder-farmer

Table 2. Causes of conflicts between cattle herders and crop farmers

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	Mean
Stock rout blockade	1 (0.83)	0	3 (2.5)	19 (15.83)	97 (80.83)	120	4.7
Maiming and killing of cattle	0	1 (0.83)	0	30 (25)	89 (74.17)	120	4.7
Crop damage by cattle	0	1 (0.83)	2 (1.67)	30 (25)	87 (72.5)	120	4.6
Inadequate grazing land	1 (0.83)	0	2 (1.67)	84 (70)	33 (27.5)	120	4.2
Bush burning	0	21 (17.5)	10 (8.33)	80 (66.67)	9 (7.5)	120	3.6
Land encroachment	3 (2.5)	4 (3.33)	35 (29.17)	57 (47.5)	21 (17.5)	120	3.6
Land use policies of government	1 (0.83)	7 (5.83)	39 (32.5)	70 (58.33)	3 (2.5)	120	3.5
Lack of access to water points	5 (4.17)	1 (0.83)	29 (24.17)	77 (64.17)	8 (6.67)	120	3.6
Water point pollution	4 (3.33)	17 (14.17)	57 (47.5)	35 (29.17)	7 (5.83)	120	3.5
Perceived hatred	30 (25)	9 (7.5)	25 (20.83)	45 (37.5)	11 (9.17)	120	2.9

Values in parenthesis are percentages.
Source: field survey, 2018.

conflict, 25.0% strongly disagreed, while 20.8% of individuals remained undecided.

Damages caused cattle herders due to the conflict

Observation shows that majority of cattle herders (63.3%) lose less than 10, while 22.5% lose more than 10 of their cattle (Table 3). Consequently, the reduction in the number of cattle may result in a decline in the overall production of milk and beef. In turn, this will have a negative impact on the turnover of the herders in terms of income. With regards to injuries sustained by cattle during such conflicts, a simple majority of the respondent (58.3%) reported that less than 10 cattle were injured, while 29.2% reported that the number of injured animals was between 11 and 20. A further 4.2% of the respondents reported more than 20 injured cattle. According to the results, all of the respondents reported that farmer attack on herders caused deaths and loss of properties. Herder families depend on their livestock

Table 3. Damages incurred by herders from conflicts with crop farmer

Variables	Frequency	Percentage (%)
Missing cattle		
1–10	76	63.3
11–20	27	22.5
21–30	1	0.8
41 and above	2	1.7
None	14	11.7
Total	120	100.0
Injured cattle		
1–10	70	58.3
11–20	35	29.2
21–30	5	4.2
41 and above	1	0.8
None	9	7.5
Total	120	100.0
Loss of life and properties		
Yes	120	100.0

Source: field survey, 2018.

and products derived from the animals for sustenance. Losses from conflicts can be avoided when parties reach an agreement, however, the damages suffered by herders from conflicts are making them vulnerable to economic hazards in a longer perspective.

Management strategies adopted by cattle herders to minimize the effect of conflict

As it is presented in Figure 1, 100% of the respondents restrict their cattle from invading farmlands during grazing. Additionally, 99.2% of the respondents know about stock route while just 0.8% claim unawareness of stock routes. According to the results, majority of the respondents (98.3%) do not encroach on the stock route while just a few individuals (1.7%) do enter the stock route.

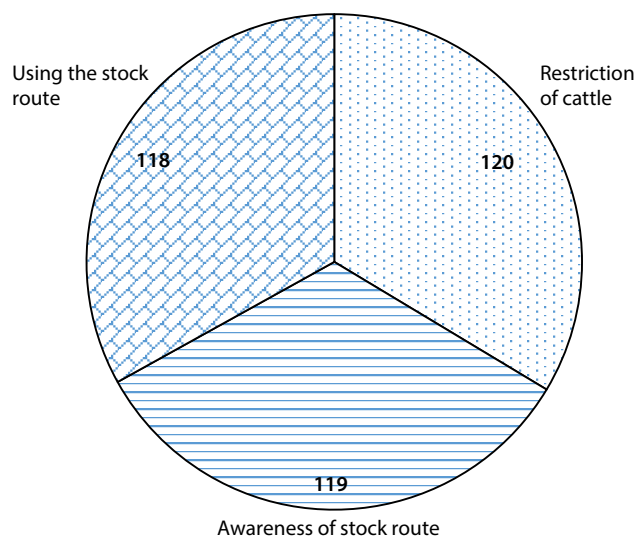


Fig. 1. Management strategies adopted by cattle herders to minimize effect of conflict
Source: field survey, 2018.

Non adherence to the stock routes suggests that cattle are moved through areas that may be cropped or cultivated by farmers. This increases the likelihood of accidental encroachment onto cultivated lands which may lead to escalation of tensions.

Identification of institutions involved in managing and resolving herder–crop farmer conflicts

As it is presented in Table 4, 100% of cattle-herders acknowledge the involvement of traditional rulers, local government committee, and police in conflict management and resolution in the area. Other institutions involved in the management of conflict include the court (50.0%), as well as local government committees (85%) which are ad-hoc committees set up to resolve conflicts as they may arise. Such an ad-hoc committee usually is composed of representative from the state and local government, representatives of each of the District councils, police, representatives from each farmer's association, Cattle Breeders Association, immigration and customs authorities, and sometimes military. According to the results of the study, the involvement of the crop farmers' association seems to be very minimal (15.8%), as indicated in Table 4. In most cases, conflicts were resolved by the institutions mentioned earlier. Crop farmers' Association was indicated by a small portion of respondents. It may be due to the fact that in the opinion of the people questioned, the National Farmers' Association such as All Farmers Association, True Farmers Association, have no official representation in most of the villages covered by the study.

Table 4. Institutions involved in managing and resolving herder-farmer conflict in the study area

Institution	Frequency	Percentage (%)
Traditional rulers	120	100.0
Police	76	63.3
Local Government Committee	102	85.0
Court	60	50.0
Crop Farmers Association	19	15.8

Multiple responses were allowed.
Source: field survey, 2018.

Table 5 presents various methods of conflict resolution commonly employed in managing/resolving the herder-farmer conflict in the area being the subject of analysis. The amicable resolution was indicated by a great number of respondents (43.3%), as the most

Table 5. Method of conflict resolution used by institutions

Resolution	Frequency	Percentage
Payment of compensation	41	34.2
Verbal warning	27	22.5
Amicable resolution	52	43.3
Total	120	100.0

Source: field survey, 2018.

popular method of managing/resolving conflict followed by Payment of compensation with a score of 34.2%. Verbal warning (22.5%) was less popular in the area, as well as re-allocation of a new plot which was hardly experienced. The pattern of obtained results may be attributed to the leading role played by the informal institutions in resolving conflicts.

Cross tabulation of causes of conflict and the competence of management institutions

The causes of conflict between the crop farmers and the herders are numerous, so are the institutions engaged in resolution of arising conflicts. The competence of the institutions involved in resolving a particular conflict may vary, thus for the purpose of this study, a cross tabulation of the institutions involved in the resolution of conflicts and the causes of the conflicts was prepared. The responses given based on the five 5 points Likert scale i.e. strongly disagree, disagree, undecided, agree, and strongly agree were analysed using cross tabulation and Chi Square (Table 6). The analysis shows that with regards to land encroachment, the police and local government councils are more suitable to handle such cases followed by courts, which are estimated to be at the significance level of 5%. For the crop damage by cattle, all the institutions, except for local government councils, are suitable for settling such conflicts, with the level of significance of 1% (Table 6). Only the courts seem to be suitable to manage/resolve conflicts concerning grazing areas. However, with regard to the access to water points, all the institutions are regarded as significantly competent in resolving such conflict. Disputes arising from the killing of stray cattle are considered to be well-resolved by all the institutions, except for local government councils. The same applies to bush burning.

Table 6. Cross tabulation of suitability of management strategy with causes of conflicts

	Traditional Rulers	Courts	Police	Local Government	Crop Farmer Association
Land encroachment	11.12	25.08*	36.32**	32.83**	10.89
Crop damage by cattle	33.162***	38.451***	44.95***	11.79	49.14***
Grazing area	2.09	22.52*	18.41	7.107	3.89
Access to water point	30.19**	33.81**	32.64**	26.29*	22.62*
Killing of stray cattle	42.72***	24.14**	41.62***	12.77	31.59***
Pollution of water point	18.84*	39.42**	34.73**	31.40*	12.94
bush burning	26.19**	45.87***	37.66***	11.80	14.10
Stock route blockade	21.50*	30.81**	45.96***	21.02	19.07

***, **, * Significant at 1%, 5% and 10% respectively.

Source: field survey, 2018.

The absence of grudges or grievances between major stakeholders in the agricultural sector of any society facilitates trust building, cohesive interaction and economic prosperity. This is because the parties concerned will carry out their livelihood strategy unhindered, devoid of any fear of animosity from the other party. Conflicts between the herders and crop farmers in the study area, as well as in other locations in Nigeria are real, and therefore destructive to nation building and economic development. Agricultural development is hindered by incidences of such conflicts, and therefore detrimental to economic growth in Nigeria. Free access to land and land resources by both groups is vital to peaceful coexistence, however, when some disputes arise, the competent institutions should bear the responsibility to settle such a conflict amicably. The analysis presented in Table 6 above, shows that not all the institutions are equally appropriate to resolve a particular conflict situation. Hence, attention should be given to the competence of institutions in managing disagreements when assigning such responsibility. The null hypothesis that there is no relationship between the perceived competence of institutions in resolving conflicts and type of conflicts is hereby rejected.

Effective resolution of conflict situation is a key to lasting peace, this is because when the aggrieved party feels that justice has been served, there would not be any reprisal attack. An action/effort can be efficient but not effective in resolving a dispute. The respondents

were asked to state which of the identified institutions are effective in resolving the conflicts experienced using the five point Likert scale. The responses obtained were analysed based on the respondent's perception on the effectiveness of institutions involved in the resolution of disputes between two groups. The results presented in Table 6 show that according to the respondents, the courts are neither effective nor ineffective. However, police is regarded inefficient in resolving conflicts between the herders and crop farmers according to a majority of the respondents. This is because the sum of positive residuals for and against the effectiveness of the courts in resolving the conflicts are 3 and 4 at a significance level of 1%, while as regards the police, the positive residuals are 11 and 7 at a significance level of 5% respectively (Table 6).

For the traditional rulers, the analysis shows the sum of positive residuals as far as the effectiveness is concerned to be 51 with none for ineffective, at the level of significance of 1%. The same applies to the cattle breeders association with a positive sum of 55 in total for residuals at a significance level of 1% (Table 6). However, for the local government institution, the sum of positive residuals amounts to 14 compared to 9 for negative responses. The chi square values are significant for all the institutions involved in resolving conflicts, hence for the hypothesis on effectiveness, the null hypothesis is rejected, thus there is a relationship between the effectiveness in conflict resolution and the institution involved in the process.

Table 7. Chi-square analysis of institutions effectiveness in resolving farmer-herder conflicts

Institutions	Observed	Expected	Residual	Chi-square
Courts				28.08***
Strongly Disagree	36	24.0	12.0	
Disagree	15	24.0	-9.0	
Undecided	17	24.0	-7.0	
Agree	40	24.0	16.0	
Strongly Agree	12	24.0	-12.0	
Police				8.53**
Strongly Disagree	44	24.0	20.0	
Disagree	15	24.0	-9.0	
Undecided	6	24.0	-18.0	
Agree	49	24.0	25.0	
Strongly Agree	6	24.0	-18.0	
Traditional Ruler				177.80***
Strongly Disagree	-	-	-	
Disagree	2	30.0	-28.0	
Undecided	5	30.0	-25.0	
Agree	21	30.0	-9.0	
Strongly Agree	92	30.0	62.0	
Cattle Breeders Association				210.33***
Strongly Disagree	-	-	-	
Disagree	1	30.0	-29.0	
Undecided	4	30.0	-26.0	
Agree	17	30.0	-13.0	
Strongly Agree	98	30.0	68.0	
Local Government Committees				58.80***
Strongly Disagree	3	24.0	-21.0	
Disagree	12	24.0	-12.0	
Undecided	43	24.0	19.0	
Agree	50	24.0	26.0	
Strongly Agree	12	24.0	-12.0	

***, **, * Significant at 1%, 5% and 10% respectively.

Source: field survey, 2018.

CONCLUSIONS AND RECOMMENDATIONS

For Nigeria, to achieve its economic development goal, agriculture has to develop at a steady rate, which cannot be achieved with the prevalence of disagreements in the

agricultural sector. The conflict between the herders and crop farmers is real and has taken a toll on the herders' livelihood strategy. The losses incurred by herders as a result of disputes with crop farmers are colossal. The causes of such conflicts vary and may require different approaches in tackling the situation. Sources of conflicts

identified by this study include stock route blockades, maiming and killing of stray cattle, crop damage by cattle, lack of access to water points and inadequate grazing lands. Such disputes have a huge impact on Nigeria's food security status, considering the fact that the bulk of animal protein consumed in the country comes from the livestock sector. Therefore, it is crucial to reduce the threats in order to ensure a continued existence of the livelihood strategy of the herder families. Moreover, the herders should take precautions against provoking the crop farmers towards conflict situations. Nevertheless, sometimes conflicts cannot be avoided. In such a case, the appropriate peace making institutions must ensure a settlement. Therefore, it is recommended to provide enhanced public information and to educate people on the need to respect the law with regard to restricted areas such as grazing and forest reserves. Furthermore, crop farmers and herders should form a forum where contending interests may be resolved by both parties. Also proper guidelines regarding the use and observance of stock routes may be a strategy for addressing the incidence of conflicts between the two agricultural land-users. Finally, traditional institutions, the national association of crop farmers and the cattle breeders association should be engaged in the management of conflicts situations in the agricultural environment in Nigeria.

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