

Herdsmen-farmers conflicts and mitigation measures in Sabon Daga, Niger State, Nigeria

¹Ahmed, I. I., ²Odojin, A. J. and ^{3*}Musa, J. J.

¹Niger State Emergency Management Agency, Minna, Nigeria

²Department of Soil Science, Federal University of Technology, Minna, Nigeria

³Agricultural and Bioresources Engineering, Federal University of Technology, Minna, Nigeria

*Corresponding Author Email: johnmusa@futminna.edu.ng

Other Author(s) Email: ibrahimigaahmed@gmail.com; odofin.ayodele@futminna.edu.ng

ABSTRACT

This study aims to analyse the causes of farmer-herder conflicts and the roles played by the various institutions towards the resolution of the conflicts in Sabon Daga, Niger State. This study focused on the effect of these conflicts on the socio-economic characteristics of the respondents, establishing possible factors responsible for the herdsmen-farmer conflict and demonstrating best management practices in the resolution of such disputes employed by various institutions. The study adopted a case study design whereby a sample size of 400 for both the farmers and herders was used to get information. Primary and secondary data were used, whereby interviews and questionnaires were abused in primary data, while in secondary data, the documentary source was used. Data were analysed quantitatively and qualitatively. The result reveals that only 1.4% of the respondents have acquired tertiary education, while primary education (37.7%) accounted for most respondents. Most farmers owned at least 2-4 hectares of farmland, while 22% owned between 5 and 6 hectares of farmland. 29.6 % of the farmers reported experiencing farmer-herdsmen clashes on a seasonal basis, while 18.8% and 27.5% accounted for the bi-annual and annual farmer-herdsmen clashes, respectively. The study revealed that the root cause of the conflicts lies mainly in the lack of security of tenure on land for which smallholder producers depend. Finally, the study recommended that government should establish grazing reserves establish land tenure laws and procedures governing land ownership.

Keywords: Cattle rearers, conflict, farmlands, farmers, herdsmen

INTRODUCTION

Agriculture plays a significant role in the process of economic growth and development. It contributes significantly to the provision of food and industrial raw materials. Agriculture is the market for the inputs of the industrial sector and provides employment opportunities for the people. In the late 1960s, before discovering crude oil, over 60% of the Gross National Product (GNP) was earned from the agricultural sector. Over 80% of the labour force of the Nigerian population was employed in agriculture and agro-allied industries. Consequently, many researchers consider agriculture a priority sector for development planning (Chemura *et al.*, 2014). Agriculture is

also considered where the battle for long-term economic development will be won or lost.

Over time, there have been constant clashes between farmers and herders across Nigeria, leading to the loss of lives and properties. These clashes, centred on water and grazing rights, have been between pastoral Fulani herders and agrarian farmers. Such conflicts have left scores of innocent victims injured or dead and properties destroyed in the affected communities. In the search for clean water and green fields, the herders move their herds on foot from one part of the country. During the dry season, when herds are short of water and

green pastures, the Fulani herders move their herds from the extreme north of Nigeria to areas where pastures are available to feed their flocks, during which they graze on farmlands and share domestic water sources to meet the flocks' needs, thus in most cases resulting into conflicts.

Conflicts in life are not uncommon or unnatural in communities. However, according to Moore (2005), they become a thing of worry when they degenerate into violent, destructive clashes, becoming unhealthy, counter-productive, and progress-threatening. According to Idowu (2017), humans cannot do without interacting with one another; thus, the herders migrate from the north to the western and eastern parts of the country to find fresh pastures for their cattle. The herders travel with their flocks from one point to another in search of grazing pasture and clean water, thus moving into local communities or farms along the way. Idowu (2017) also noted that the increase in cattle population could not be stopped, likewise the increase in the human population. Still, the available landmass is not increasing as it is fixed, causing tension between the various categories of people using the limited resources. As a result of this movement, the cattle trample on and eat up crops and grass along their path, thus destroying the livelihood of farm owners in the process. In an attempt to resist these, clashes ensue between herders and farmers as herders often invade community farms and livelihoods at night or on market days. These have accounted for about a 12 percent decline in per capita food production in sub-Saharan Africa (Nyong and Fiki, 2005). The competition-driven conflicts between arable crop farmers and cattle herders have become common occurrences in many parts of Nigeria. In these conflicts, the Fulani herders are usually well armed with every form of arms and ammunition, thereby giving them an upper hand as they raid such communities, killing the people, setting the huts, houses, and other properties ablaze, sometimes abducting innocent victims from such communities (Tenuche and Ifatimehin, 2009).

In an attempt to solve the incessant conflicts between farmers and Fulani herders over commonly available resources, the government at various levels has not been able to address

the issues of grazing reserves and routes to accommodate the interest of herders who are constantly on the move from the north to the south and back to secure food and water for their herds (Dimelu *et al.*, 2016). To maintain peace, law and order in some violence-prone areas, the government has introduced some form of policies to bring about peace by introducing military presence in and around possible areas prone to attack or areas that had been affected before. However, this has not been helpful as it has not addressed the root cause of these conflicts.

Constitutional laws in Nigeria have not been beneficial as the herders' state that their cattle have freedom of movement, interaction, and association with any green grass they come across during the movement process. At the same time, the farmers say their farmlands are not a feeding ground for animals and thus an infringement on their personal and communal properties. The farmers and herders clash basically because of this, and the clashes have increased in recent times. These conflicts were most common in the north and north-central part of Nigeria, but it has now extended to the other parts of the country. This type of crisis has cost the country considerable resources in terms of socio-political and economic stagnation; fertile lands are left behind because of the invasion of cattle on tender crops, thus wasting the farmers' efforts and resources. This has also led to cattle rustling and the killing of trespassing animals by farmers. At the same time, the herders invade communities to kill every living soul as a possible retaliatory measure. This study aims to analyze the causes of farmers-herders conflicts at Sabon Daga, Niger State and the roles played by various institutions (heads of households, village or community heads, local government authorities, the different arms of security agencies) towards the resolution of the conflicts.

MATERIALS AND METHODS

The Study Area

Niger State is believed to have the largest land area located in the North-Central part of Nigeria. It is situated between latitude 8° to 11°:30' North and Longitude 03° 30' to 07° 40' East. The State comprises 25 Local Government Areas with a total landmass of about 76,363 km². The estimated population

for the State is put at 3,950,249 (NPC, 2006). The State is bordered to the North by Zamfara State, West by Kebbi State, South by Kogi State, Southwest by Kwara State, North-East by Kaduna State and Southeast by FCT. The State also has an international boundary with the Republic of Benin along Agwara and Borgu LGAs to the Northwest (<https://www.nigerstate.gov.ng/about.php>). The State consists majorly of Nupes, Gwaris, Hausas, and Kadaras. Niger State is

characterized by two distinct rainy and dry climatic seasons. The southern part of the State has an average annual rainfall of 800-1000mm, while the Northern region has an average rainfall of 600-900mm, with minimum and maximum temperature of 21° - 38°. Niger State is situated on the upper part of the River Niger, which forms the watersheds of other major rivers that drain into it. Such tributaries include Rivers Kaduna and Gbako.

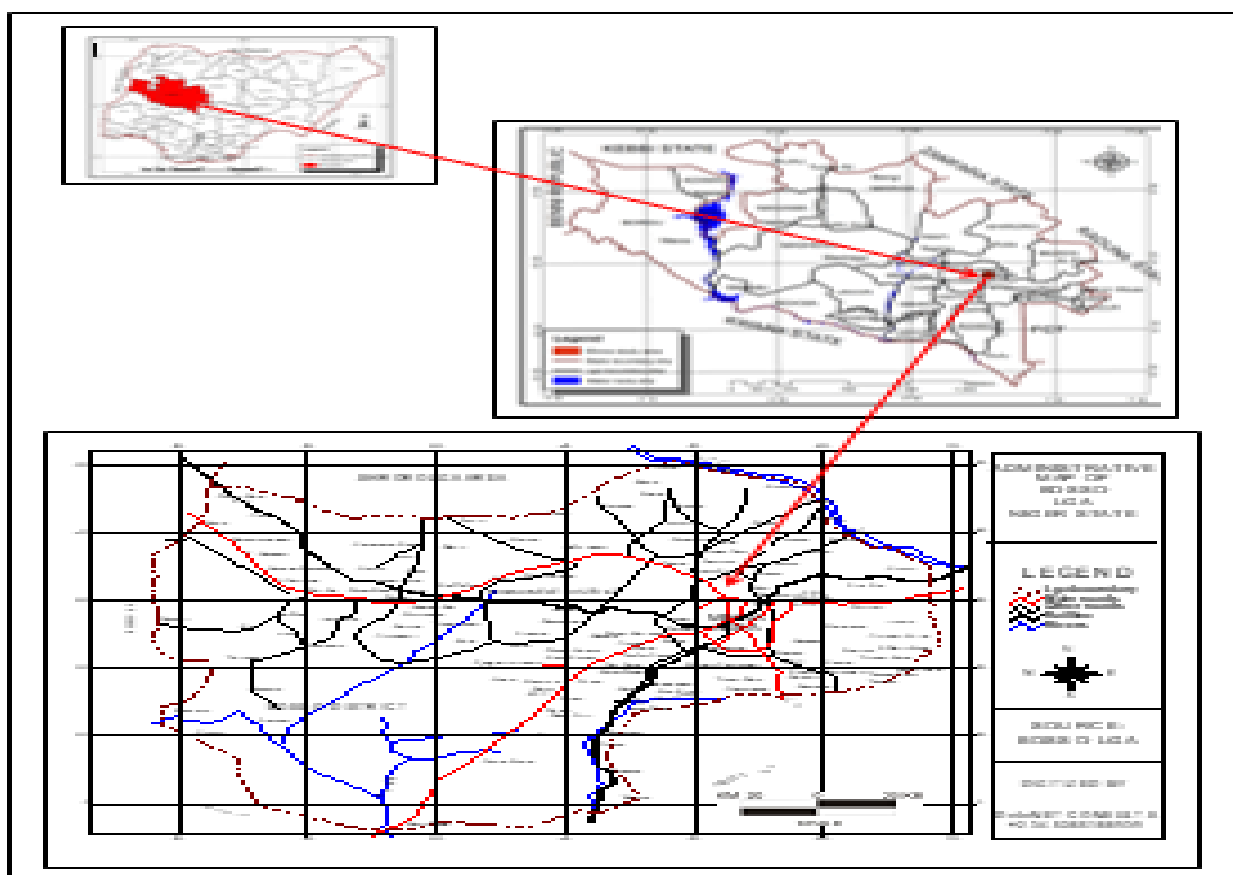


Figure 1: Map of Nigeria shows the extract of the map of Niger State, which shows the extracted map of the study location.

METHODOLOGY

During this study, a combination of primary and secondary data was collected. In addition, qualitative data were collected on the field using questionnaires and focused group discussions that covered every area of rural sociology and the environmental impact of current and proposed farming activities such as arable cropping and domesticated rearing of animals.

Sampling Procedure and Sample Size

The targeted populations within the study area of Sabon Daga are the herdsman and crop farmers for this study. Respondents were randomly selected using the multistage sampling process in selecting farmers and herders to be interviewed. The first stage involved the identification of the affected farmers and herders. This selection was based on the frequency of occurrence of farmer-herder conflict in the State. The second stage

involved purposive sampling of neighbouring villages (farming communities) within the study area, based on commonly used properties by the farmers and the herders. In the case of the herders, due to the nature of their settlement pattern and economic activities, their grazing places, markets, and extended family settlements (*Rugage*) were identified. Finally, 200 farmers and 200 cattle herders from the study area were chosen using the random selection method. The snowball method was used by placing one respondent that helps the researcher to identify the other, on and on. Finally, 400 respondents were selected for questioning using structured questionnaires.

Sources of data collection

Data for the study were collected from both primary and secondary sources. Primary data were collected using structured questionnaires to generate data for the study. In addition, focus group discussions (FGD) were conducted with separate groups of the herdsman and farmers to corroborate the findings from the quantitative result. The questionnaire focused mainly on causes of conflict, losses during conflicts, methods used to resolve conflicts, and agencies involved in settling conflicts.

Statistical analysis

All information/data collected were analyzed using descriptive statistics, specifically, the mean, rating, frequency counts, ranking method, and percentages. In addition, the likert scale of 5 was employed to establish the rate and causes of clash between the farmers and herders.

RESULTS

Socio-demographic characteristics of respondents

Table 1 shows the socio-demographic characteristics of respondents for the study. The result indicates that male respondents from most of the respondents for the survey account for 79.9% of the respondents. On the other hand, female respondents account for 20.1% of the respondents. The occupation of the respondents included farmers (50.1%). Traders account for 23.2%, artisans 18.1% and herders 3.2%. Only 1.4% of the respondents had acquired tertiary education. Respondents who acquired primary education (37.7%) accounted for most of the respondents and followed closely by respondents with no formal education (35.7%). Only 25.2% of the

respondents had attained secondary education. The proportion of respondents with no formal education and primary education accounted for 72.4% of the respondents, which shows a low literacy level among the respondents. About 39.4% of the respondents have stayed in the area between 21 and 30 years, while 32.8% have stayed for 11-20 years. Respondents whose length of stay in Sabon Daga is between 31-40 years and those above 40 years account for 13% and 7.5% of the respondents, respectively. Majority of the respondents, 30.1% were within the active working-age group of 36-45 years, while those within the age group of 26-35 years account for 27.2% of the population. Most of the respondents were married (74.2%), while singles accounted for 14.2%, widow/er (8.1%) and divorced/separated accounted for 3.5%. The size of farmland owned by the farmers ranges from less than one hectare to as much as 6 hectares and above. Majority of the respondents (67.2%) had experienced at least one form of a clash between the herders and farmers in Sabon Daga using mostly dagger/cutlass (31.9%), while 32.8% of the respondents have not experienced any form of a clash between herders and farmers in Sabon Daga before the last incidence. The result further shows that most of the respondents (48.4%) experienced this clash bi-annually, especially during the rainy season, and mostly at the evening (71.9%) period.

Table 1: Socio-demographic characteristics of respondents (N = 345)

Variables	Frequency	Percentage
Gender		
Male	276	79.9
Female	69	20.1
Occupation		
Farmers	173	50.1
Traders	80	23.2
Artisans	63	18.1
Herdsman	11	3.2
Others	18	5.4
Educational attainment		
No formal education	123	35.7
Primary Sch. Education	130	37.7
Secondary Sch. Education	87	25.2
Tertiary Sch. Education	5	1.4
Years of residence		
Less than 10 years	25	7.2
10-20 years	113	32.8

21-30 years	136	39.4
31-40 years	45	13.0
Above 40 years	26	7.5
Age		
18-25	46	13.3
26-35	94	27.2
36-45	104	30.1
46-55	68	19.7
Above 55	33	9.7
Marital Status		
Single	49	14.2
Married	256	74.2
Widow/er	28	8.1
Divorced/separated	12	3.5
Farm size		
< 2.5 acres	57	16.5
2.5-10 acres	163	47.2
10.1-15 acres	76	22.0
Above 15 acres	49	14.2
Herdsmen and farmers clash		
Yes	232	67.2
No	113	32.8
Frequency of clash occurrence		
Monthly	47	13.6
Quarterly	36	10.4
Bi-annual	167	48.4
Annual	95	27.6
Type of weapons used		
Hand/Fist	75	21.7
Stick/Stone	87	25.2
Daggers/Cutlass	110	31.9
Gun	43	12.5
Others	30	8.7
Duration		
Within 24 hours	141	40.9
1-6 days	132	38.3
1 week or more	72	20.8
Time of occurrence		
Morning	31	9.0
Afternoon	66	19.1
Evening	248	71.9

Causes of Fulani Herdsmen and Farmers Clash in Sabon Daga

The study assessed the root causes of Fulani herders and farmers clash in the study area. The

analysis result is presented in Table 2 which shows the extent to which the identified causes influence or triggers clash between the herdsmen and farmers in the Sabon Daga community.

Socio-economic Impact of Herdsmen and Farmers Conflict/crisis in Sabon Daga

The study identified the various items lost because of herders and farmers conflict in Sabon Daga, and the things are houses, farm produces, properties in the form of cars, motorcycles, livelihood means, and social ties (Fig. 2). The impacts of the herders and farmers crisis on the people's livelihood. It can be observed from the result that the Fulani herders and farmers conflicts have impacted negatively on the people's means of livelihood (Fig. 3). The conflict between the farmers and the herders in the study area hurt the socio-economic activities of the community. The effects as identified by the respondents are presented in Table 3.

Institutions involved in Conflict Resolution and their Effectiveness

Over the years, the study identified seven major institutions involved in crisis resolution between herdsmen and farmers in Sabon Daga. The institutions are presented in Fig. 4. Table 4 shows the various institutions' effectiveness in managing and resolving farmers-herders conflict in Sabon Daga.

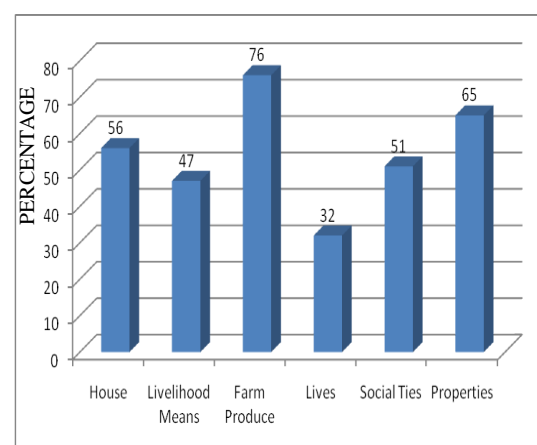


Figure 2: Types of Properties Lost During the Crisis

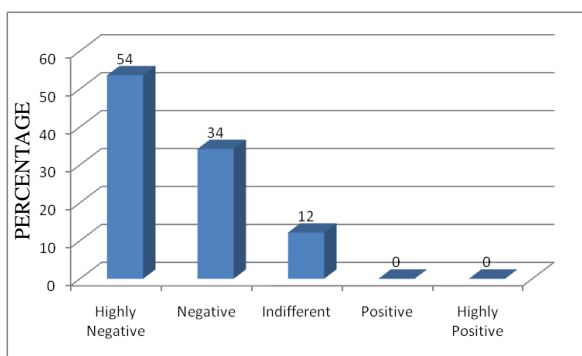


Figure 3: Impact of Herdsmen and Farmers Crisis on Livelihood

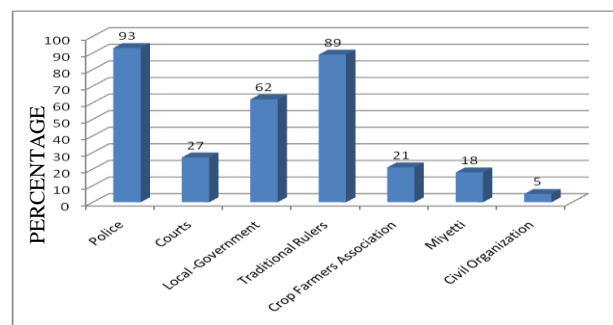


Figure 4: Institutions Involved in Herdsmen and Farmers Resolution

Table 2: Causes of Herdsmen and Farmers Clash in Sabon Daga

Causes	Very Low	Low	Fair	High	Very High	Mean	Rank
Destruction of Crops	0	25	62	118	140	4.08	1 st
Killing of Cattle	5	47	79	100	114	3.79	3 rd
Domestic Violence	30	49	73	87	106	3.55	7 th
Ethnicity	27	36	88	93	101	3.59	6 th
Politically Motivated	55	86	100	59	45	2.86	9 th
Inadequate Grazing Reserve	16	56	64	101	108	3.66	5 th
Religion	95	83	75	65	27	2.55	10 th
Pollution of water Point	32	51	46	79	137	3.69	4 th
Stealing of farm Produce/Cattle	15	34	69	100	127	3.84	2 nd
Indiscriminate Bush Burning	45	69	120	57	54	3.02	8 th

Table 3: Socio-economic Effect of Herdsmen and Farmers Crisis

Causes	Total Score	Mean	Rank	Remark
Reduction in farm output	1432	4.15	1 st	Major effect
Displacement of farmers/herdsmen	1305	3.78	2 nd	Major effect
Loss of lives	1185	3.43	5 th	Major effect
Reduce job opportunity	1240	3.59	4 th	Major effect
Increased crime rate	988	2.86	6 th	Minor effect
Reduction in Income	1254	3.63	3 rd	Major Effect
Encourage Distrust	952	2.76	7 th	Minor effect

Table 4: Performance of Institutions Involved in Resolving Farmer- Herder Conflicts

Causes	Total Score	Mean	Rank	Remark
Police	587	1.70	6 th	Ineffective
Traditional Rulers	1277	3.71	1 st	Effective
Courts	966	2.83	3 rd	ineffective
Government committee	897	2.61	4 th	ineffective
Crop farmers Association	759	2.20	5 th	ineffective
Miyetti Allah	1104	3.20	2 nd	Effective
Civil Organization	428	1.24	7 th	ineffective

DISCUSSION

The wide margin in the distribution of male and female respondents may be due to the religious and cultural affiliation of the people, which do not allow for direct interaction of their women with strangers, especially men. This is common from the north-central part of Nigeria to the extreme northern part. This is in conformity with the works of Hoffman *et al.* (2008). It was observed that most of the residents of Sabon Daga are either farmers or traders. Therefore, Sabon Daga can be said to be an agricultural community. The level of education of the people in Sabon Daga showed that most of the people involved in the crises were not educated as the rules governing conflict management led to so much destruction of properties and lives. This implies that if most of the population had gone beyond the primary school level, the crises encountered would have been minimal.

Only 7.2% of the respondents have stayed for less than ten years in the study area. The long duration of respondents in the area indicates harmonious cohabitation between the herders and the farmers in the past years. The active age bracket observed within the study area was between 18 and 45 years which constituted the significant population of the area. Respondents aged 46-55 years and those above 55 years account for 19.4% and 9.6% of the respondents, respectively. This is an indication the population is an active population that is in conformity with the works of Adisa (2012). These age brackets were active ages involved in the crisis within the study area. The marital status of the functional age groups within the community was very important. Most of those involved in the crises were not married or had broken homes and were observed to be more involved in the crisis than the other age brackets. This is similar to Adebo and Olotu (2018) study the assessment of consequences of pastoralists and crop farmers' conflicts on rural livelihoods in Oyo State, Nigeria.

The marital status corroborates the findings of Dimelu *et al.* (2016) in his study on socio-economic and environmental factors

influencing farmer-herder conflict in Kabba/Bunu Local Government Area of Kogi State. The result reveals that the majority of the farmers owned at least 2.5-10 acres of farmland, 22% owned 10.1-15.0 acres, 16.6% owned less than 2.5 acres, while 14.2% owned more than 6 hectares of farmland. The implication is an increase in the tendency of the farmers to encroach more land reserves and cattle tracts, thereby creating room for conflict. Most of the farmers and herders interviewed based their responses on their encounter as regards crisis between the herdsman and farmer crisis indicated that majority of the respondents have had a meeting with the Fulani herders, which was a near-death experience. This is an indication that friction between the herders and farmers in Sabon Daga had been on for about a decade, even though the last incidence of 2017/2018 was the most devastating

Respondents that report having experienced herders and farmers clash on an annual basis account for 27.6% respectively. While 13.6% say the clash on a monthly basis and 10.4% on a quarterly basis. This indicates that the Fulani-herdsmen and farmers clash is expected during the farming season but may also come at any time of the year. Figure 5 presents the frequency of clashes between the Fulani herders and the farmers. Guns and other forms of weapons account for 12% and 9% of the weapons used. The study also revealed that 22% of the clash involves using physical fists among both parties. This analysis implies that the impact of such a clash will be fatal (that taking of lives and destruction of properties) since it consists of the use of dangerous weapons like guns and cutlass. According to the result, the destruction of crops and farm produce (4.08) is the most prevalent cause of crisis between the herders and the farmer. This variable ranked first amongst all other reasons identified; followed by stealing cattle/farm produce (3.84) and killing cattle (3.79) to rank 2nd and 3rd positions, respectively. Religious factor (2.55) and political influence (2.86) are the least ranked causes with a rank of 10th and 9th, respectively. This is similar to the works of Moore *et al.* (2005). They studied the conflict

and agro-pastoral development in the Sahel region of West Africa, while Ingawa (1999) looked closely at the farmer-pastoralist conflict in core fadama states of the National Fadama project. It can also be observed from the result that all the causes identified have a high influence on the crisis development between herders and farmers, except for political and religious factors with moderate or fair impact.

Most of the respondents (87%) thought that destruction of crops/farm produce would be a significant concern for the crisis between both parties in the nearest future if not curtailed, followed by an absence of scarce grazing land (84%), which is occasioned by population growth. In comparison, 78% of the respondents thought that future crisis might be just as a reprisal or revenge attack of the previous crisis. Other likely causes of future crisis identified are stealing of farm produce (63%), population growth (59%), and Domestic crisis (56%). This is similar to Audu (2013) works who studied the conflicts among farmers and pastoralists in Northern Nigeria induced by freshwater scarcity. The result of the analysis, as presented in Figure 8, shows that the most significant proportion of the respondents (76%) lost their farm produce, another 65% lost valuable properties (cars, motorcycles, and other electronics), while 56% lost their houses. Other items lost because of the crisis as identified by respondents include loss of social ties (51%), Livelihood means (47%), and loss of lives (32%) is, similar to the works of Tenuche and Ifatimehin (2009). The result of the herders and farmers crisis on the livelihood of the people shows that the conflict has highly negatively impacted the livelihood of 54% of the respondents. In comparison, 34% have experienced negative impact. However, only 12% of the respondents were indifferent because of the crisis. The high negative impact on livelihood is not unconnected with the burning of residents' farm produces and the destruction of farm produce and input. This is in conformity with Tukur (2013) works who studied conflicts between transhumant pastoralists and farmers in Nigeria.

Reduction in farm output (4.15) was the first significant socio-economic effect experienced by the respondents. Displacement of farmers/herdsmen (3.78) was also a remarkable effect as it ranked second among other

identified impacts. Reduction in income generation (3.63), decreased job opportunities (3.59), and loss of lives (3.43) were amongst the significant effects of the crisis. The minor effects recorded were increased crime rate (2.86) and distrust (2.76). This is in line with the report of Governor Ortom of Benue as reported by Premium Times of 5th July 2017, which stated that from January 2015 to February 2017, at least 62,000 people were displaced in Kaduna, Benue, and Plateau states because of herders and farmers crisis. This is in accordance with the works of Adebayo and Olaniyi (2008), who studied the factors associated with pastoral and crop farmers conflict in the derived savannah zone of Oyo State, Nigeria.

The most prominent among the institutions identified was the police (93%), followed by traditional rulers (89%) government committees (62%), while the courts accounted for 27%. The contribution of the crop farmers association (21%), Miyetti Allah (18%), and civil organizations (5%) was minimal compared to that of the police and traditional rulers in the area. Abbas, in 2009, declared a no retreat, no surrender conflict, statuesque for the survival of herdsmen and the farmers in Northern Nigeria. The result of the performance of institutions involved in resolving farmer-herder conflicts shows that only two of three institutions were deemed adequate by the respondents, including traditional rulers (3.71) and Miyetti Allah (3.20). The results show that all other institutions identified were ineffective in managing farmers-herders conflicts in Sabon Daga. Police identified as the most prominent institution involved in resolving the herders-farmers crisis was ineffective (1.70) as reported by the respondents. This is similar to the study carried out by Adamu (2007), who studied the colonial origins of post-colonial conflicts between cattle rearers and farmers in the Kastina State of Nigeria and traced the conflict of herders and farmers to initial banditry activities of the 19th century.

CONCLUSIONS

This study focused on the conflict between the farmers and herders in the Sabon-Daga community of Niger State. The study described the demographic characteristics of respondents

in the study area, the socio-ecological framework of analysis, and the relative importance index, to investigate socio-ecological variables that sustained the long-time association between farmers and herders but whose transformation is leading to tension and conflicts. It was concluded that the major cause of conflict between the farmers and herders was the green grass and the on-farm agricultural waste. The findings further established the lack of understanding between the farmers and herders to agree or the lack of coordinated land use changes as to when the herders can bring in the herds into the farm to graze on the agricultural waste on the farmland which was the root cause of the conflict in the study area. The study established the various conflict resolution channels (family, clan, community, ward, local government, and state levels) were not followed before the emergence of the crises in the study area. Thus, ignoring the cultural norms of grazing by herders due to marginalization, herdsmen engaging in alternative occupations, and the need for domestic fuel energy by farmers which causes the cutting down of barrier plants were found to have the least degree of influence.

RECOMMENDATIONS

It is therefore recommended to farmers and herders to follow established legal to resolve their problems and may only involve politicians for assistance on correct procedure and entirely rely on them.

- i. The issue of education is also vital, especially on laws, regulations and procedures governing land ownership. The people of the Sabon Daga community need to have basic education on procedures required to own a piece of land and officially document lands inherited from the parents.
- ii. It is also recommended that all the arms of government should ensure that they put in place boundary demarcation of land use in every village to prevent such conflicts from occurring.

- iii. Designated government officials and political leaders should be in front line to manage land conflict in time and should avoid corruption and self-interests.

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