ABSTRACT

Objective: The study was carried out to identify measures for preventing conflicts between farmers and cattle herdsmen in rural communities of Benue State, Nigeria. The specific objectives were to: Describe the socioeconomic characteristics of the respondents; ascertain the causes of conflict between farmers and cattle herdsmen in the study area; and identify measures required for preventing conflicts between farmers and cattle herdsmen.

Methods: Data were collected from a sample of one hundred and eighteen (118) respondents in four communities in the study area using a well-structured questionnaire. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used for data analysis.

Results: Majority (90.7%) of the respondents had farming as a major source of livelihood, 55.1% were male while 62.7% were married. Damage to crops by cattle (x̄=2.72), uncontrolled grazing (x̄=2.52), herders claiming the land as common property (x̄=2.40), and destruction of farmland (x̄=2.30) were the major causes of conflicts. Measures required for preventing conflicts between farmers and cattle herdsmen include herdsmen education on the effects of the conflict (x̄=2.21), signing of a peace accord by both parties (x̄=2.06), establishment of ranches (x̄=2.00), implementation of law prohibiting open grazing (x̄=2.05), and disarming both parties (x̄=1.87).

Conclusion: Educating farmers and herdsmen on the effects of the conflict, signing of a peace accord agreement by both parties, establishment of ranches, implementation of law prohibiting open grazing, and disarming both parties were measures required for preventing conflicts between farmers and cattle herdsmen. It is recommended that law enforcement agencies should enforce law on open grazing to avoid conflicts between farmers and cattle herdsmen in the area.

Keywords: Measures, Conflicts, Farmers, Cattle herdsmen, Rural communities, Nigeria.

INTRODUCTION

Agriculture is fundamental to life sustenance and economy of Nigeria, providing employment for 70% of the population. It provides food for human consumption and raw materials for export and manufacturing industries. The sector is being transformed by commercialization at the small, medium, and large-scale enterprise levels. Some of the major crops produced in Nigeria include soya beans, sesame, cassava, cocoa, beans, groundnuts, guinea corn, maize, melon, and yams. Livestock reared includes sheep, goat, cattle, pig, rabbit, and poultry [1].

According to Adisa and Adekunle [2], destruction of crops by cattle and property such as irrigation equipment and infrastructure by the herdsmen has resulted in conflicts between the two groups of people especially in Nigeria. Adamu stressed that the conflict between these two groups has led to loss of properties worth millions of naira and the death of hundreds of thousands of people. The frequency and scale of these conflicts have become alarming [3].

Farmers and herdsmen conflicts in Nigeria have spread and intensified over the past decade which poses a threat to national survival and integration. Thousands of people have been killed, communities have been destroyed, and so many farmers and herdsmen have lost their lives and property in an extended orgy of killings and destruction that is not only continuously destroying livelihoods but also affecting national cohesion [4].

Conflict resolution between the farmers and herdsmen should be prioritized in line with the roles of traditional rulers, community village heads, and religious leaders who are likely to be more informed on the root causes of the clashes [1]. There should be equitable distribution of power, wealth, status, and responsibilities among all ethnic communities in the country. Equality must be re-installed in our traditional institutions and judiciary system. Individuals must shun undesirable elements that could capitalize on insecurity to attack innocent citizens. Various social traditional institutions in the community should always encourage their members on attitudinal change in their mind sets and proper orientation toward others. This can be achieved through proper education and enlightenment [1].

The role of traditional and community leaders in dispute resolution needs not to be emphasized. The traditional community leaders are products of people’s consensus, customs, and cultures. Traditional and community leaders are well respected because they play major role in settling disputes among members of the community. They are also engaged in resolving conflicts between farmers and herdsmen in rural communities of Nigeria where clashes usually occur.

Grassroots community-based activities, good governance, collaborations, negotiation, reconciliation, mediation, arbitration, adjudication, and crisis management are some of the strategies which can be used in resolving crisis between farmers and herdsmen.

The strategies if used properly can significantly reduce conflicts between farmers and herdsmen, enhance pastoralism and bring about economic, ecological, and political stability in not only Nigeria but also in sub-Saharan Africa at large [5]. It has therefore become necessary to carry out this research to answer the following pertinent questions. What are the socioeconomic characteristics of the respondents? What are the causes of conflict between farmers and cattle herdsmen in the
study area? What are the measures required to bring an end to conflicts between farmers and cattle herdsmen?

The specific objectives were to:

1. Describe the socioeconomic characteristics of the respondents;
2. Ascertain the causes of conflict between farmers and cattle herdsmen in the study area; and
3. Identify measures required for preventing conflicts between farmers and cattle herdsmen.

METHODS

The study was carried out in Benue state, Nigeria. The state derived its name from River Benue, the largest river in Nigeria. It was created on February 1976 along with six other states of the federation. It lies between latitude 8°- 10° N and longitude 6°- 8° E. It has a land mass of 6.575 million hectares [6]. Benue state has a total population of 4,219,244 (National Population Census [NPC], 2006) which is made up of 413,159 farm families [6].

The state is bounded by Nasarawa State in the north, Taraba State in the east, Cross-River State in the South, Benue State in the west, and south east by Cameroon Republic. The state is administratively divided into three zones, namely, Zone A (Eastern Zone), Zone B (Northern Zone), and Zone C (Central Zone) and has 23 local government areas. There are three prominent ethnic groups in the state, namely, Tiv, Idoma, and Igala. Other smaller ethnic groups are Etalo, Abakpa, and Jukun. Even though there are variations in norms, language, and festivals, the entire population is predominantly farmers. The predominant occupation of inhabitants of Benue State is farming with over 80% engaged in the occupation and highly noted for substantial cultivation of arable crops such as yam, cassava, rice, soybean, maize, and other staples. Livestock especially small ruminants are reared extensively in this area.

The study area comprised 30 heads of households in each of the communities selected, totaling 120 heads of households. The population for the study comprised farmers in Benue State, Nigeria. The predominant occupation of the population is predominantly farmers. The predominant occupation of farmers is farming, with over 80% engaged in the occupation and highly noted for substantial cultivation of arable crops such as yam, cassava, rice, soybean, maize, and other staples. Livestock especially small ruminants are reared extensively in this area.

RESULTS AND DISCUSSION

Socioeconomic characteristics of the respondents

Sex

Table 1 showed that 55.1% of the respondents were male while 44.9% of them were female. This implies that male farmers were mostly heads of their households in the study area. This conforms to the findings of Ochokwunu [7] who reported that male dominating occupations are more rampant than the female kind of occupation especially tedious occupation like farming.

Age (years)

The age distribution of the respondents showed that 50% were aged 26-35 years and 12.7% were between the age of 15 and 25 years, among others (Table 1). The mean age was 38 years. This shows that majority of the respondents were middle-aged and in their productive years. It is interesting to note that middle-aged farmers are more motivated, innovative, and adaptable which is a good prospect for agriculture.

Marital status

Results in Table 1 also showed that 62.7% were married, 21.2% of the respondents were single, 11% were widowed, and 2.5% were divorced while 2.5% were widower: This indicates that the majority of the people were married. This is understandable because of needed labor in the farm among other responsibilities. This conforms to the finding of Ochokwunu [7] which stated that majority of the farmers in the rural areas were married.

Number of years spent in school

About 36% of the respondents spent 1-5 years in school, 31.4% of the respondents did not go to school at all, and 2.5% of them spent 11-15 years in school while 2.5% spent 6-10 years, among others
(Table 1). This indicates that most of the respondents were educated. This collaborates with a study carried out by Adebayo and Olaniyi [8] who stated that education is another factor which could lead to conflict because education enlightens people about their rights and they have access to information as regards their existence and treating them as inferior could lead to conflict.

Household size
About 42% of the respondents have household size of between 7 and 10 people. The mean household size was 7 persons (Table 1). This implies that the respondents have considerable large family size. This finding is supported by the a study done by Akujobi et al. [9] which noted that most crop farmers believed that it is better to have more children who would work on the farm than hiring external labor. The polygamous nature of the community which allows a man to marry more than one woman could be another reason why they have more children.

Major occupation
Majority (90.7%) of the respondents were farmers while 2.5% were engaged in trade, teaching, artisan, and among other type of occupation (Table 1). This is clear that majority of the people were farmers in the area. This conforms to the assertion of Achetu [10] which stated that majority of the rural dwellers are farmers.

Farm size (hectares)
Entries in Table 1 showed that a greater percentage (52.5%) of the respondents have farm size of 11 hectares and above. The mean farm size was 5.57 hectares. This implies that the respondents were mostly subsistence farmers. This corroborates to the finding of Aliku [11] which indicated that low farm size may be due to high pressure on land as a result of increase in population vis-à-vis the traditional land tenure of inheritance, whereby the land is usually divided into pieces and shared among several family members. The implication is an increase in the tendency of the farmers to encroach more land reserves and cattle tracts, thereby creating room for conflict.

Farming experience (years)
Majority (81.4%) of the respondents had farming experience of 11 years and above, 13.6% had farming experience of between 6 and 10 years while 3.4% had farming experience of between 1 and 5 years (Table 1). The mean farming experience was 23.25 years. This implies that most of the farmers have been farming for a long period of time. It could be understood that majority were born into farming and they continued in the occupation.

Annual income (Naira)
Results in Table 1 showed that 33.9% of the respondents obtained between N100,000 and N500,000 in a year, 25.4% got N500,001 and above, about 6.8% of the respondents obtained less than N10,000.00. The mean annual income was N163,998.64. This implies that farmers in the study area are subsistence farmers and lack the necessary resources to produce for a commercial purpose.

Land ownership system
A greater percentage (74.6%) of the respondents acquired their lands for farming through inheritance, 19.5% acquired theirs as community property while 4.2% had theirs by lease. The implication of the inherited land means that most of the respondents are indigenes of the study area and such places are their ancestral homes and will resist any opposition that comes against it. This is in agreement with Tenuche and Ifatimehin [12] who pointed out in their separate studies that land in most communities that comes against it. This is in agreement with Tenuche and Ifatimehin [12] that most of the respondents are indigenes of the study area are subsistence farmers and lack the necessary resources to produce for a commercial purpose.

Causes of conflict between farmers and cattle herdsman
Table 2 showed the causes of conflict between farmers and cattle herdsman which include damage to crops by cattle (x̄=2.72),

| Causes of conflict                                      | Mean score | Standard deviation |
|--------------------------------------------------------|------------|--------------------|
| Damage to crops by cattle                               | 2.72       | 0.52               |
| Sexual harassment of women and girls                   | 2.14       | 0.91               |
| Pollution of stream water in the community             | 2.34       | 0.81               |
| Uncontrolled grazing of cattle                          | 2.52       | 0.73               |
| Cultural difference                                     | 1.74       | 1.07               |
| Language barrier                                        | 1.78       | 1.05               |
| Non-compliance to traditional grazing custom           | 1.62       | 1.11               |
| Destruction of farmland by cattle                      | 2.34       | 0.83               |
| Unaccepted grazing of herders on farm land without permission | 2.19   | 0.88               |
| Non-compliance with laid down rules                    | 1.99       | 1.02               |
| Pillage from the farmers                                | 1.91       | 0.91               |
| Herders giving grazing right by community heads without the consent of the farmers in the area | 2.13       | 0.89               |
| Destruction of irrigation equipment by herders          | 2.04       | 1.02               |
| Burning of rangeland                                   | 2.34       | 0.85               |
| Herders claiming the land as common property           | 2.40       | 0.75               |
| Damage to ecosystem                                    | 2.01       | 1.03               |
| Rustling of cattle                                     | 2.07       | 1.01               |

uncontrolled grazing (x̄=2.51), herders claiming the land as common property (x̄=2.40), pollution of stream water in the community by cattle (x̄=2.34), destruction of farmland (x̄=2.34), burning of rangeland (x̄=2.34), unacceptable grazing of farmland without permission (x̄=2.19), sexual harassment of women and girls (x̄=2.14), herders giving grazing right by community heads without the consent of the farmers in the area (x̄=2.12), rustling of cattle (x̄=2.07), destruction of irrigation equipment by herdsman (x̄=2.04), damage to ecosystem (x̄=2.01), non-compliance with laid down rules (x̄=1.99), pillage from the farmers’ farms (x̄=1.91), language barrier (x̄=1.78), cultural difference (x̄=1.74), and non-compliance to traditional grazing custom (x̄=1.62). The standard deviation indicated the disparities on the responses of the respondents having a standard deviation of more than 1. The findings of this study agree with Okoli and Atelhe [13] who observed that unauthorized encroachment into farmlands have led to serious conflicts between the farmers and herdsmen in recent times because of the damage they cause to crops and fallow lands left to replenish the nutrients after long years of use. The findings of this study also conform to the assertion of Aliku [14] who reiterated that the attitude of the herdsmen on foreign land encroachment in no doubt provokes farmers to unneeded responses.

Measures required for preventing conflicts between farmers and cattle herdsmen
Findings in Table 3 indicated measures for preventing conflicts between farmers and cattle herdsmen which include herdsmen education on the effects of the conflict (x̄=2.21), signing of a peace accord by both parties (x̄=2.12), farmers education on the effects of the conflict (x̄=2.11), establishment of ranches (x̄=2.06), implementation of law prohibiting open grazing (x̄=2.05), establishment of grazing reserves (x̄=1.95), use of traditional leaders as mediators (x̄=1.90), equitable distribution of power (x̄=1.90), disarming both parties (x̄=1.87), amicable resolution (x̄=1.86), control and regulation of possession of arms and ammunition (x̄=1.84), equitable distribution of wealth (x̄=1.71), establishment of free toll call and distress centers (x̄=1.62), allocation of land to non-indigenous (x̄=1.51), verbal warning to herdsmen on areas to graze (x̄=1.47), and payment of compensation by herdsmen to farmers (x̄=1.45). The standard deviation was more than 1 which indicates
Table 3: Mean scores of measures required for preventing conflicts between farmers and cattle herdsmen

| Measures                                                               | Mean score | Standard deviation |
|------------------------------------------------------------------------|------------|--------------------|
| Payment of compensation by herdsmen to farmers                        | 1.45       | 1.27               |
| Verbal warning to herdsmen on areas to graze                           | 1.47       | 1.34               |
| Amicable resolution                                                    | 1.86       | 1.04               |
| Implementation of law prohibiting open grazing                         | 2.05       | 1.00               |
| Establishment of ranches                                               | 2.06       | 0.95               |
| Establishment of grazing reserves                                      | 1.95       | 0.94               |
| Farmers education on the effects of the conflict                       | 2.11       | 0.80               |
| Herdsmen education on the effects of the conflict                      | 2.21       | 0.81               |
| Signing of a peace accord by both parties                              | 2.12       | 0.82               |
| Disarming both parties                                                 | 1.87       | 0.98               |
| Establishment of free toll call and distress centres                   | 1.62       | 1.03               |
| Control and regulation of arms ammunition posses                       | 1.84       | 1.03               |
| Use of traditional leaders as mediators                               | 1.90       | 0.95               |
| Equitable distribution of power                                        | 1.90       | 0.99               |
| Allocation of land to non-indigenes                                    | 1.51       | 1.09               |
| Equitable distribution of wealth and responsibility                     | 1.71       | 1.04               |

The disparities on the responses of the respondents. This finding also conforms to the study carried out by Abbass [15] which emphasized that the better way to keep check of farmers and cattle herdsmen conflicts is to constitute community security outfit for amicable resolution and law enforcement. The authors also reiterated the importance of law prohibiting open grazing and establishment of grazing reserves.

CONCLUSION

A greater percentage of the respondents were male, married, and had farming as a major source of livelihood. Major causes of farmers and cattle herdsmen conflicts were damage to crops by cattle, uncontrolled grazing, herdsmen claiming the land as common property, and destruction of farmland. Educating herdsmen on the effects of the conflict, signing of a peace accord agreement by both parties, establishment of ranches, implementation of law prohibiting open grazing, and disarming both parties were measures required for preventing conflicts between farmers and cattle herdsmen. The study recommends that farmers and herdsmen should adhere strictly to lay down rules to avoid conflicts between the two groups. It also emphasized the need for law enforcement agencies to ensure that anti-open grazing law is obeyed to avoid conflicts between farmers and cattle herdsmen in the area.

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