



EFFECT OF FARMER-HERDER CONFLICTS ON FOOD SECURITY IN ARABA STATE, NIGERIA

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ABSTRACT

The study examined the effects of farmer-herder conflicts on food security in Taraba State, Nigeria. Multi-stage sampling technique was adopted for the selection of 400 respondents. Primary data were collected using structured questionnaire and analyzed using both descriptive and inferential statistics. The finding from the study showed that majority of the crop farmers and herders were within the mean ages of 41.1 and 35.5 years, respectively. The findings revealed that the mean years of experience of crop farmers and herders were, 13.6 and 12.5 years, respectively. On the other hand, crop farmers and herders had a mean annual income of ₦130,655.91 and ₦143,308.1 respectively. Most (99.5% and 77.4%) of the herders and crop farmers were male, while majority (67.7% and 64.1%) of the crop farmers and herders were married with a mean household size of 8.7 and 7.9 persons, respectively. Factors such as age ($P<0.05$ and $P<0.01$), household size ($P<0.05$ and $P<0.01$), annual income ($P<0.01$), land size ($P<0.01$), and conflict involvement ($P<0.01$) had significant influence on food security status of crop farmers and herders, respectively. The major constraints to conflict resolution strategies were insecurity (93.5%), poor peace building strategy (91.9%) and lack of implementation of livestock development plan (91.4%). The study concluded that age, household size, annual income, land size and conflict involvement significantly influence crop farmers and herders food security status. The study recommends that crop farmers and herders should form community task force to reduce level of insecurity and Government should implement and monitor livestock development plan. In addition, institutions should use bottom up approach in peace building strategies.

Keywords: Farmers, Herders, Conflicts and Food Security

INTRODUCTION

Nigeria has been bedeviled with many violent and armed conflicts that span from intra-ethnic to inter-ethnic, intra-religion to inter-religious, intra-groups to inter-groups, intra-community to inter-community conflicts, etc. (Garba *et al.*, 2018). The violent conflicts have resulted in devastating social, political, economic and environmental losses. This makes Nigeria battle field-field where ethnic, religious, social, economic and political crises are staged. This can be witnessed in the increasing level of fierce confrontations that clearly depict that the state of insecurity in the political spheres has assumed different dimension (Garba *et al.*, 2018). Wariboko (2021) observed that the saga of religious wars, political violence and terrorism in Nigeria is becoming next to none as it keeps increasing in magnitude and intensity by the day. Conflict is refer to as a disagreement between two or more individuals, parties or groups who perceived that they have incompatible goals, conflict is considered part of life but sometimes escalates to violent, resulting in the loss/destruction of lives and properties. Conflict has been one of the stumbling blocks and a major threat to world peace today. Conflict is



generally considered to be originated from a serious disagreement or argument on sensitive issues that leads to the breaking of law and order in a given community or group of people (Collins, 2016). Despite the growing body of literatures on farmer-herder conflicts in Taraba State, only few studies by Oruonye *et al.* (2020) and Solomon *et al.* (2021) were conducted on the effect of farmer-herder conflicts on food security in Taraba State. However, several efforts have also been made by governments at different levels, Non-governmental Organizations (NGOs) and individuals to find out the problems and solutions to farmer-herder conflicts especially on food security, hence the need for further studies on the effect of these conflicts on food security among crop farmers and herders in the State. The study was carried out to describe the socio-economic characteristics of crop farmers and herders, determine the factors influencing food security among crop farmers and herders and identify the constraints to conflict resolution strategies among crop farmers and herders

METHODOLOGY

The Study Area

This study was conducted in Taraba State, Nigeria. Taraba State lies between Latitude 8⁰30' North and 9⁰30' North of the Equator and Longitude 8⁰30' East and 10⁰30' East of the Greenwich meridian. The State covers landmass of 14,099km² (TADP, 2019). The State had 2,300,736 people (National Population Commission [NPC], 2006) and a projected 3,552,344 people as at 2023 based on 3.2% annual population growth of the State. The State has annual rainfall of between 1,000mm to 1,250mm and maximum temperature ranges of between 21.1⁰C to 26.7⁰C. The mean annual rainfall ranges from 800mm to over 1800mm in Southern Taraba.

The State shares boundary with Nasarawa and Plateau State to the North-west, Benue State to the South-west and Republic of Cameroun to the Southeast (Taraba Agricultural Development Programme [TADP], 2010; TADP, 2019). The State has a tropical climate marked by dry and rainy seasons. The mean minimum daily temperature recorded is 14.8⁰C and the mean maximum daily temperature recorded is 34.4⁰C (TADP, 2010). The vegetation of the zone is Guinea savannah type. The study area is predominantly agrarian with about 80% of its inhabitants depending on subsistence agriculture practices mainly in food and cash crops like rice, cassava, yams, benni seed and maize (TADP, 2010; TADP, 2019). The vegetation of Taraba State is the Guinea Savannah type with the State being predominantly agrarian and some of the major crop produced are cassava, yam, maize, rice, soybeans, oil palm, cocoa, coffee, mangoes, citrus, and banana, dry season production of maize, rice sugarcane and vegetable. Other economic activities include: livestock rearing, fishing, trading and tailoring. The ethnic groups include: Fulani, Mumuye, Chamba, Mambila, Jukun, Wurkum, Jenjo and the Tiv among others (Taraba Diary, 2014). TADP (2019) revealed that as at 2019, the number of farm families in Taraba State was 230, 000 and is projected 0.5% annual growth to be 1,265,000 as at 2021 (Taraba Diary, 2014).

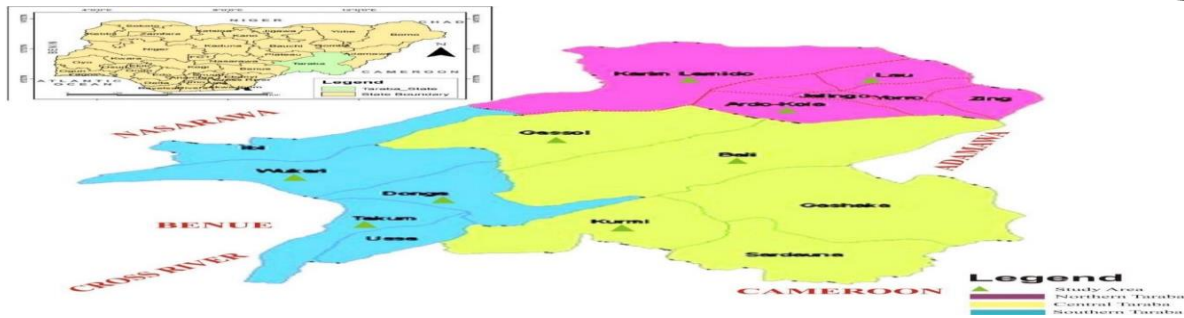


Figure 1: Map of the Study Area

Source: Department of Survey and Geo-informatics, ATBU, Bauchi, 2021

Sampling Procedure and Sample Size

Multi-stage sampling procedure was adopted for the selection of respondents. The first stage was purposive selection of four (4) LGAs; Ardo-Kola, Bali, Jalingo and Sardauna out of the 16 LGAs in the State this is due to the frequent occurrence of farmer-herder conflict in the above LGAs. In the second stage two (2) villages were selected randomly from each of the selected LGA giving a total of eight (8) villages. In the third stage a sample size was determined from the eight selected villages using Yamane (1967) simplified formula;

$$n = \frac{N}{1} + N(e)2 \quad \dots (1)$$

Where;

n= Sample size

N= Population size (56,000)

e= Level of precision or error margin = 5% (0.05)

1= Constant

$$n = \frac{56,000}{1} + 56,000(0.5)2$$

$$n = \frac{56,000}{1} + 56,000(0.25)$$

$$n = \frac{56,000}{1} + 14000$$

$$n = \frac{56,000}{14001}$$

$$n = 400$$

As expressed in the above Yamane simplified formula, a sample size of 400 respondents was use for the study and 384 questionnaires (186 crop farmers and 198 herders) were retrieved, 5% level of precision implies that 95% of the result is free of error. Finally a proportionate stratified sampling was used to determine number of respondents in each of the selected villages/communities in each of the selected LGAs in the study area,



Table 4: Sampling Frame and Sample Size

| LGAs | Villages/communities | Sampling frame | Sampling size (5%) |
|--------------|----------------------|----------------|--------------------|
| Ardo Kola | Sunkani | 5,000 | 36 |
| | Iware | 5,000 | 36 |
| Bali | Bali | 10,000 | 71 |
| | Garbachede | 6,000 | 43 |
| Jalingo | Wuro Boto | 9,000 | 64 |
| | Wuro Sembe | 3,000 | 21 |
| Sardauna | Leme | 9000 | 64 |
| | Mayo Ndaga | 9000 | 64 |
| Total | | 56,000 | 399 |

Source: Author’s computation

Method of Data Collection

Primary data were used for the study. The data were collected through the administration of structured questionnaire.

Data Analysis

Descriptive statistics such as frequency, percentage, mean score, and ranking were used to achieve objective i and iii. On the other hand, inferential statistics such as logit regression was used to achieve objective ii.

RESULTS AND DISCUSSION

Socioeconomic Characteristics of the Crop Farmers and Herders

Quantitative socioeconomic characteristics of the crop farmers

The result from Table 2 shows that 40.3% and 34.4% of the crop farmers were within the ages of 44-49 years and 38-43 years, while 12.4% of the crop farmers were within the age bracket of 32-37 years. Only 8.6% and 4.3% of the crop farmers were within the ages of 20-25 years and 26-31 years. The result also shows that crop farmers had a mean age of 41 years which implies that most of the crop farmers were within their active ages of production in agriculture. This is in contrast with the finding of Dimelu *et al.* (2017), who found that crop farmers were predominantly male married and with mean age of 51 years.



Table 5: Distribution of Crop farmers According to their Quantitative Socioeconomic Characteristics (n=186)

| Variables | Frequency | Percentage | Mean |
|------------------------------------|------------------|-------------------|-------------|
| Age | | | |
| 20-25 | 16 | 8.6 | |
| 26-31 | 8 | 4.3 | |
| 32-37 | 23 | 12.4 | |
| 38-43 | 64 | 34.4 | 41 |
| 44-49 | 75 | 40.3 | |
| Household size | | | |
| 1-5 | 64 | 34.4 | |
| 6-10 | 63 | 33.9 | 9 |
| 11-15 | 51 | 27.4 | |
| 21-25 | 8 | 4.3 | |
| Years of farming experience | | | |
| 3-7 | 66 | 35.5 | |
| 8-12 | 34 | 18.3 | |
| 18-22 | 61 | 32.8 | 14 |
| 23-27 | 25 | 13.4 | |
| Land size (ha) | | | |
| 0.5-1.5 | 101 | 54.3 | |
| 1.6-2.6 | 38 | 20.4 | 2 |
| 2.7-3.7 | 12 | 6.5 | |
| 3.8-4.8 | 27 | 14.5 | |
| 4.8 and Above | 8 | 4.3 | |
| Annual income (₦) | | | |
| 50,000 – 140,000 | 138 | 74.2 | 130,655.91 |
| 141,000 – 231,000 | 40 | 21.5 | |
| 414,000 and Above | 8 | 4.3 | |
| Crop yield in bags | | | |
| 4-23 | 28 | 15.1 | |
| 24-43 | 89 | 47.8 | 40 |
| 44-63 | 57 | 30.6 | |
| 84-100 | 12 | 6.5 | |

Source: Field Survey, 2024

The result further shows that 34.4% and 33.9% of the crop farmers had a household size of 1-5 persons and 6-10 persons, while 27.4% of the crop farmers had a household size of 11-15 persons. Only 4.3% of the crop farmers had a household size of 21-25 persons. The finding shows that crop farmers had a mean household size of 9 persons which implies that most of the crop farmers had relatively small household size. This is similar to the finding of FAO (2015), which found that wheat farmers' had an average family size of six people in Egypt. Adejoh *et al.* (2017), also found that majority of male and female rice farmers had household size of 1-5 persons with an average household size of 7 and 5 persons respectively. The finding further shows that 35.5% and 32.8% of the crop farmers had 3-7 years and 18-22 years of farming experience, while 18.3% and 13.4% of the crop farmers had 8-12 years and 23-27 years of farming experience. The result also shows that crop farmers had 14 years mean



farming experience implying that most of the crop farmers had a good number of years in farming. Firafis, (2016), reported that almost half of the participants had 21 and above years of farming experience.

The result further reveals that more than half (54.3%) of the crop farmers had a farm size of 0.5-1.5ha, while 20.4% and 14.5% of the crop farmers had a farm size of 1.6-2.6ha and 3.8-4.8ha. Only 6.5% and 4.3% of the crop farmers had a farm size of 2.7-3.7ha and 4.8-5.8ha. The finding further shows that crop farmer had a mean farm size of 2ha which implies that most of the crop farmers were small scale farmers who produce basically for their family consumption. Similarly, they were small scale farmers with average farm size of 2.9ha (Dimelu *et al.*, 2017). The result also shows that majority (74.2%) of the crop farmers had an annual income of ₦50,000-₦140,000, while 21.5% of the crop farmers had an annual income of ₦141,000-₦231,000. Only 4.3% of the crop farmers had an annual income of ₦414,000 and above. The mean annual income of the crop farmers was ₦130,655.91 which implies that most of the crop farmers were small scale farmers and had good annual income from farming. The result further reveals that 47.8% and 30.6% of the crop farmers had a crop yield of 24-43 bags and 44-63 bags, while 15.1% of the crop farmers had a crop yield of 4-23 bags. Only 6.5% of the crop farmers had a crop yield of 84-100 bags in the study area. The mean crop yield of 40 bags implies that crop farmers had a good harvest in the study area.

Quantitative Socioeconomic Characteristics of the Herders

The result from Table 3 shows that 32.3% and 30.3% of the herders were within the ages of 28-35 year and 20-27 years, while 16.2%, 10.1% and 11.1% of the herders were within the ages of 44-51 years, 52-59 years and 36-43 years respectively. The result shows that herders had a mean age of 36 years which implies that most of the herders were within their active ages of production in agriculture.. This is in contrast with Dimelu *et al.* (2017), who found that crop farmers were predominantly male married and with mean age of 51 years. This agrees with Olobatoke and Amusain (2017), farmers are males, married and were within their productive age.



Table 6: Distribution of Herders According to their Quantitative Socioeconomic Characteristics (n=198)

| Variables | Frequency | Percentage | Mean |
|---------------------------------|-----------|------------|-----------|
| Age | | | |
| 20-27 | 60 | 30.3 | |
| 28-35 | 64 | 32.3 | 36 |
| 36-43 | 20 | 10.1 | |
| 44-51 | 32 | 16.2 | |
| 52-59 | 22 | 11.1 | |
| Household size | | | |
| 1-5 | 93 | 47.0 | |
| 6-10 | 58 | 29.3 | 8 |
| 11-15 | 32 | 16.2 | |
| 21-25 | 15 | 7.6 | |
| Years herding experience | | | |
| 3-7 | 76 | 38.4 | |
| 8-12 | 47 | 23.7 | 13 |
| 13-17 | 1 | .5 | |
| 18-22 | 44 | 22.2 | |
| 23-27 | 30 | 15.2 | |
| Land size (ha) | | | |
| 1.0-1.9 | 69 | 34.8 | |
| 3.0-3.9 | 33 | 16.7 | 3 |
| 4.0-4.9 | 87 | 43.9 | |
| 5.0-6.9 | 9 | 4.5 | |
| Annual income (₦) | | | |
| 15,000-512,000 | 196 | 99.0 | 143,308.1 |
| 2,016,000 and Above | 2 | 1.0 | |
| Herd size | | | |
| 28-34 | 78 | 39.4 | |
| 35-41 | 76 | 38.4 | 38 |
| 42-48 | 8 | 4.0 | |
| 49-55 | 29 | 14.6 | |
| 56-62 | 7 | 3.5 | |

Source: Field Survey, 2024

Similarly Dilek *et al.* (2018), reveal that more than half of his respondents were over 40 years of age. Adejoh *et al.* (2017), revealed that majority of the rice farmers were within 30-39 years for male and female rice farmers, respectively. The result further shows that 47% and 29.3% of the herders had a household size of 1-5 persons and 6-10 persons, while 16.2% of the herder had a household size of 11-15 persons. Only 7.6% of the herders had a household size of 21-25 persons. The result also shows that herders had a mean household size of 8 persons which implies that most of the herders had relatively small household size. This similar to the finding of FAO (2015), which found that wheat farmers' had an average family size of six people in Egypt. Adejoh *et al.* (2017), also found that majority of male and female rice farmers had household size of 1-5 persons with an average household size of 7 and 5 persons respectively.



The result further shows that 38.4%, 23.7% and 22.2% of the herders had a herding experience of 3-7 years, 8-12 years and 18-22 years respectively, while 15.2% of the herder had a herding experience of 23-27 years. Only 0.5% of the herders had a herding experience of 13-17 years. The result also shows that herders had a mean herding experience of 13 years which implies that most of the herders had a good number of years in herding. Firafis, (2016), reported that almost half of the participants had 21 and above years of farming experience. The result further reveals that 43.9% and 34.8% of the herders had a land size of 4.0-4.9ha and 1.0-1.9ha, while 16.7% of the herders had a land size of 3.0-3.9ha. Only 4.5% of the herders had a land size of 5.0-6.9ha in the study area. The result also shows that herders had a mean land size of 3ha which implies that most of the herders had relatively large land to graze their animals. This is in line with (Dimelu *et al.*, 2017), who reported that maize farmers were small scale farmers with average farm size of 2.9ha.

The result further reveals that almost all (99%) of the herders had an annual income of ₦15,000-₦512,000. Only 1% of the herders had an annual income of ₦2,016,000 and above in the study area. The finding shows that herders had a mean annual income of ₦143,308.1 which implies that most of the herders had good annual income, this is attributed to the fact that each hired herder (*Gainako*) is given a minimum token of ₦15,000 per month. The result also shows that 39.4% and 38.4% of the herders had a herd size of 28-34 animals and 35-41 animals, while 14.6% of the herders had a herd size of 49-55 animals. Only 4% and 3.5% of the herders had a herd size of 42-48 animals and 56-62 animals. The result also shows that herders had a mean herd size of 38 animals which implies that most of the herders were small scale herders in the study area.

Factors Influencing Food Security Status among Crop Farmers and Herders

Factors influencing food security status among crop farmers

The result in Table 4 shows that land size (2.796) was found to be positive and significant at ($P < 0.01$) in influencing food security status of crop farmers, which implies that increase in land size will lead to increase in food security status of crop farmers. On the other hand, age (.266) and household size (.772) were found positive and significant ($P < 0.05$) in influencing food security status of among crop farmers, which implies that increase in age and household size will lead to increase in food security status of crop farmers, this could be attributed to the fact that as age increases household size also increase either by marrying more wives or increase in children per household which comes with cheap labor sources and increase in food consumption per household in the study area. This is similar to the findings of Ajibefun (2017), conducted a study on economic and social effects of the menace of herdsmen crisis in Nigeria.

Table 4: Logit Regression Result Showing Socioeconomic Factors Influencing Food Security Status of Crop farmers

| Variables | Coef. | Std. Error | z | P> z |
|-------------------------------|-------------------|------------|-------|----------|
| Age | .2658341 | .1353863 | 1.96 | 0.050** |
| Sex | 2.229033 | 2.206167 | 1.01 | 0.312 |
| Marital status | 1.754565 | 1.707117 | 1.03 | 0.304 |
| Household size | .7720177 | .3893828 | 1.98 | 0.047** |
| Educational level | -.9322047 | .5728265 | -1.63 | 0.104 |
| Secondary occupation | -3.238305 | 1.671668 | -1.94 | 0.053 |
| Years of farming experience | .5528165 | .3490556 | 1.58 | 0.113 |
| Method of land acquisition | 1.825948 | 1.150247 | 1.59 | 0.112 |
| Cooperative membership | 5.076548 | 8.223682 | 0.62 | 0.537 |
| Years of membership | -2.779217 | 1.101592 | -2.52 | 0.012** |
| Time devoted to production | -1.225761 | 1.97917 | -0.62 | 0.536 |
| Land size | 2.795663 | .8950583 | 3.12 | 0.002*** |
| Annual income | -.0000795 | .0000262 | -3.03 | 0.002*** |
| Access to extension | 3.069689 | 2.533024 | 1.21 | 0.226 |
| Conflict involvement | -5.027231 | 1.679995 | -2.99 | 0.003*** |
| Crop ownership | -5.149956 | 2.752157 | -1.87 | 0.061 |
| _cons | -6.822567 | 17.3638 | -0.39 | 0.694 |
| LR chi²(16) | 132.31 | | | |
| Log likelihood | -56.507413 | | | |
| Pseudo R² | 0.5393 | | | |

Source: Field Survey, 2024 **Significant at 5%, ***Significant at 1%

On the other hand the finding shows that annual income (-.000076) and conflict involvement (-5.027) were negative and significant at ($P < 0.01$) in influencing food security status among crop farmers, this implies that increase in annual income and conflict involvement will lead to decrease in food security status of crop farmers. The result also shows that years of membership (-2.779) was negative and significant at 5% which implies that increase in years of cooperative membership will lead to decrease in food security status of crop farmers in the study area. This implies that as crop farmers' involvement in secondary occupation increases they tends to abandon farming. This is in line with findings of Ajibefun (2017), conducted a study on economic and social effects of the menace of herdsmen crisis in Nigeria.

Factors influencing food security status among herders

The result in Table 5 shows the socioeconomic factors influencing food security status of the herders in the study area. The finding reveals that age (1.412) was found to be positive and significant ($P < 0.01$) in influencing food security status of the herders, which implies that increase in age of the herders will lead to increase in food security status. The result further shows that household size (6.855) was found to be positive and significant ($P < 0.01$) in influencing herders food security status, which implies that increase in household size will result to increase in food security status of the herders which could be attributed to the facts that as number of children and wives increase there is increase in cheap labor for raising animals and cultivation of arable crops in the study area.

Table 5: Logit Regression Result Showing Socioeconomic Factors Influencing Food Security Status of Herders

| Variables | Coef. | Std. Error | z | P> z |
|-------------------------------|-------------------|-------------------|----------|-----------------|
| Age | 1.412472 | .3783141 | 3.73 | 0.000*** |
| Marital status | -41.40722 | 18.09811 | -2.29 | 0.022** |
| Household size | 6.855463 | 1.889519 | 3.63 | 0.000*** |
| Educational level | -7.247506 | 2.480507 | -2.92 | 0.003*** |
| Secondary occupation | 29.5016 | 7.640088 | 3.86 | 0.000*** |
| Years of herding experience | -1.667344 | .4369298 | -3.82 | 0.000*** |
| Method of land acquisition | -27.09088 | 9.245628 | -2.93 | 0.003*** |
| Cooperative membership | -26.93366 | 14.28598 | -1.89 | 0.059 |
| Years of membership | -7.833565 | 2.45037 | -3.20 | 0.001*** |
| Land size | 18.97074 | 4.817227 | 3.94 | 0.000*** |
| State of origin | 3.048476 | 1.984907 | 1.54 | 0.125 |
| Annual income | -.0002355 | .0000652 | -3.61 | 0.000*** |
| Conflict involvement | 110.8982 | 29.6254 | 3.74 | 0.000*** |
| Livestock ownership | 42.76406 | 14.51622 | 2.95 | 0.003*** |
| Herd size | -1.03753 | .3116852 | -3.33 | 0.001*** |
| _cons | -195.1895 | 59.85465 | -3.26 | 0.001 |
| LR chi²(15) | 169.88 | | | |
| Log likelihood | -14.889411 | | | |
| Pseudo R² | 0.8509 | | | |

Source: Field Survey, 2024 **Significant at 5%, ***Significant at 1%

The result further shows that secondary occupation (29.50) of the herders was found to be positive and significant ($P < 0.01$) in influencing food security status of the herders, which implies that increase in secondary occupation will lead to an increase in food security status of the herders. This is attributed to the increase in income of the herders from secondary occupation. The result further reveals that land size (18.97) was positive and significant at 1% influencing food security status of the herders, which implies that increase in land size of the herders will result to increase in their food security status. This agrees with the findings of Ajibefun (2017), conducted a study on economic and social effects of the menace of herdsman crisis in Nigeria. On the other hand the finding shows that conflict involvement (110.8982) was found to be positive and significant ($P < 0.01$) in which implies that increase in conflict involvement will result to increase in food security status of the herders.

The result from the finding also shows that educational level (-7.2476) of the herders was found to be negative and significant ($P < 0.01$), which implies that increase in educational level will lead to decrease in food security status of the herders. The result also shows that years of herding experience (-1.667) was found to be negative and significant ($P < 0.01$) in influencing food security status of the herders, which implies that increase in years of herding experience will lead to decrease in food security status of the herders. The finding also shows that method of land acquisition (-27.091) was found to be negative and significant ($P < 0.01$) in influencing herders' food security status, which implies that increase in method of land acquisition will lead to decrease in food security status of the herders. This result agrees with Ahynet al (2015), which assessed the effect of farmers-herdsmen conflict on national integration in Nigeria. The finding further reveals that years of cooperative membership (-26.934) was found to be negative and significant ($P < 0.01$) in influencing food security status



of the herders, which implies that increase in years of cooperative membership will result to decrease in food security status of the herders in the study area. The result shows that annual income (-.0002355) of the herders was found to be negative and significant ($P < 0.01$), which implies that increase in annual income will result to decrease in food security status of the herders. The result further shows that herd size (-1.0376) was found to be negative and significant ($P < 0.01$), which implies that increase in herd size will lead to decrease in food security status of the herders in the study area. The result also shows that marital status (-41.40722) of the herders was found to be negative and significant ($P < 0.05$) in influencing food security status of the herders. This could be attributed that the more herders increase number of wives they tends to increase number of mouth to feed in the household hence the tendency of been food insecure. This finding disagree with Ahynet al (2015), which assessed the effect of farmers-herdsmen conflict on national integration in Nigeria.

Constraints to Conflict Resolution Strategies by Crop Farmers and Herders

The result in Table 6 shows that the major constraints to conflict resolution strategies faced by crop farmers and herders were insecurity, poor peace building strategy and lack of implementation of livestock development plan which were ranked 1st, 2nd and 3rd, respectively by the crop farmers and herders.

Table 6: Distribution of Crop Farmers and Herders According to their Constraints to Conflict Resolution Strategies (n=186)

| Variables | Percentage * | Rank |
|--|---------------------|-----------------|
| Insecurity | 93.5 | 1 st |
| Poor peace building strategy | 91.9 | 2 nd |
| Lack of implementation of livestock development plan | 90.9 | 3 rd |
| Bias court verdicts | 81.2 | 4 th |
| Crop cultivation on grazing routes | 76.3 | 5 th |
| NGO's | 75.3 | 6 th |
| Late military intervention | 75.3 | 6 th |
| Inadequate righteous religious leaders | 66.7 | 8 th |

Source: Field Survey, 2024 *Multiple response

These were followed by bias court verdicts, crop cultivation on grazing routes, NGOs, late military intervention and inadequate righteous religious leaders which were ranked 4th, 5th, 6th and 8th respectively by the crop farmers and herders in the study area. This implies that most of the crop farmers were aware of the conflict resolution strategies and were willing to adopt and implement such strategies to militate against conflict occurrence but unfortunately some of these constraints hinders the smooth implementation of conflict resolution strategies. This is in line with Nwosu (2017), who found that allegations of cattle rustling are at the heart of some of the clashes as Herdsmen frequently justify their attacks on settled communities with allegations that affected communities steal their cattle and murder their colleagues and children.

CONCLUSION AND RECOMMENDATIONS

From the findings of this study, it can be concluded that socioeconomic factors play significant influence on their food security status, the study shows that institutions plays a vital role in conflict resolutions likewise crop farmers and herders were faced with different forms of constraints to conflict resolution strategies in the study area.



- Based on the findings of the study the following recommendations were made;
- i. Crop farmers and herders should form community task force to reduce level of insecurity in the study area
 - ii. Government should implement and monitor livestock development plan in the study area
 - iii. Institutions should use bottom up approach in peace building strategies rather than the top down approach
 - iv. Crop farmers should avoid cultivating crops on grazing routes and herders should avoid grazing livestock close to farms to avoid crop destruction
 - v. Judges should be fair in delivering judgment among crop farmers and herders in the study area

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