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Effect of Demographic Characteristics on Conflicts Management in Jigawa State, Nigeria

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Chamo, A.M. [1*]; Abdullahi, A. [2]; Tafida, I. [2]; Karaye A.K. [1]; Mamman B.Y. [3]; Kundiri,M.M. [3]; Sani, U.[2]; Damisa, D.L. [1]; Galadima, M. [1] and Ja'afar, U. [1.]
[1]Jigawa Research Institute Kazaure, P.M.B. 5015, Jigawa State, Nigeria
[2]Department of Agricultural Economics and Extension, Bayero University Kano, Nigeria
[3]Department of Agricultural Economics and Extension Federal University Dutse, Nigeria
*Corresponding Author Mail:abdullahimusachamo@yahoo.com
Phone number: 08065545834

Abstract
The study analysed the effect of demographic characteristics on conflict management in Jigawa State. Multi-stage sampling procedure consisting of purposive, snow ball sampling method, cluster sampling and random sampling were used in selecting 75 crop farmers, 75 sedentary pastoralists and 79 migratory pastoralists who were interviewed using Structured Questionnaire. The analytical tools used include descriptive statistics, logistics regression. The study revealed that farmers believed court verdict (53.3%) and intervention by low enforcement agents (40.0%) were the strategies of conflict resolution. The sedentary pastoralists generally believed that intervention by traditional leaders (52.0%) and local community crop farmers/herders intervention (42.7%) were the strategies of conflict resolution, while the migratory pastoralists opined that intervention by traditional leaders (50.6%) and payment of compensation to victims (49.4%) are the strategies of conflict resolution. The result further revealed that 57.3% of farmers, 65.3% of the sedentary pastoralists and 50.6% of the migratory pastoralists agreed that extension agents play vital roles in conflicts prevention and management. Results of logistic regression for the farmers showed that marital status (0.007), household size (0.100) and nature of the farms (0.010) were statistically significant, while for the sedentary pastoralists' age (0.010), herd size (0.093) and awareness about grazing reserves (0.097) were significant, and for the migratory pastoralists herd size (0.074), herding experience (0.063) and membership of association (0.100) were statistically significant. However, the demographic characteristics associated with conflict should be properly managed by the appropriate institutions involving in conflict resolutions, similarly government should train and empowers extension agents in discharging their duties, and this will help in effective conflict prevention and management.

Keywords: Conflict, demographic characteristics, farmers, sedentary and migratory pastoralists

Introduction
Farmers and pastoralists (sedentary and migratory) conflict has remained the most preponderant resource-use conflict in Nigeria (Rashid, 2012). The necessity to provide food of crop and animal origin, as well as raw materials for industry and export to meet ever-growing demands, has led to both intensification of land use. The competition

between the three agricultural land user-groups, (farmers, sedentary and migratory pastoralists) has often times turned into serious manifestation of hostilities and social friction in many parts of Nigeria. Among competing resources, however, land resources have remained an over whelming source of conflicts among various user's groups as well as individuals at varying thresholds. In particular, conflict between farmers and pastoralists in the use of agricultural land is becoming fiercer and increasingly widespread in Nigeria, largely due to intensification of production activities that are necessitated by increasing human population

The resultant increase in competition for arable land has often times resulted to serious manifestation of enmity and social conflicts among the three opponents in many parts of Nigeria. (Rashid, 2005) pointed out that, the pastoralists arable crop farmers conflicts have not only brought about high level of insecurity but have also demonstrated high potential to the food crisis in Nigeria and other countries because of loss of human lives, animals, crops and other valuable properties.

Umeh and Chukwu (2016), observed that, the causes of crop farmers and pastoralists conflicts were due to lack of consensus among both groups and also not considering their mutual benefits. However, there appears to be no consensus among both groups as to the causes of their mutual conflict. According to Rashid (2012), destruction of crops by cattle and other property (irrigation equipments and infrastructures) by the pastoralists themselves are the main direct causes for conflicts cited by the farmers, whereas burning of rangelands and fadama and blockage of stock routes and water points by crop encroachment are important direct reasons cited by the pastoralists. Rashid (2012), reported that the key underlying causes of farmers-pastoralists conflict in Nigeria are Changing resource access rights, Inadequacy of grazing resources, decline in internal discipline and social cohesion, The farmers and pastoralists conflicts have attracted considerable theoretical and empirical analyses due to their causes and effects; but the demographic characteristics of the farmers and pastoralists have not received adequate and satisfactory attention in literature. Therefore, there is urgent need to critically examine the effect of demographic characteristics of the farmers, sedentary and migratory pastoralists on conflict with a view to reforming co-existence and peace between the three conflicting groups on sustainable basis. The study therefore sought to identify the personal characteristics of the farmers and pastoralists (sedentary and migratory), describe the effect of demographic characteristics of the respondents on conflict in the study area, identified roles of extension agents in conflict prevention and management in the study area.

Methodology

The study was conducted in Jigawa state. It is situated between latitudes 10^0 57' N and 13^0 03' N, longitudes 8º 08 E and 10º 37' E of the equator and has a land area of about 22,210km^2 (2.2 million hectares). The State has a population of 4,348649 people (NPC, 2006), using the annual growth rate of 3.25%, the population of the State in 2017 was projected at 5,903,290 (NBS, Jigawa State, 2016).

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The sample for this study was drawn from farmers, sedentary and migratory pastoralists. Multistage sampling procedure was used for data collection. The first stage involved purposive selection of three (3) Zones from the four (4) administrative Zones of Agricultural Development Programme (ADP) in the state, as a result of occurrences of the conflict in the areas.
The second stage also involved the purposive selection of one (1) LGA from each of the three selected Agricultural zones, due to prevalence of farmers and pastoralists conflict in the areas. The LGAs included in the study are Guri in Zone III, Ringim in Zone II, and Jahun in Zone I. A total of three (3) LGAs were selected for the study.
Third stage involved purposive selection of three villages from each of the three (3) LGAs selected, due to the presence of the irrigation farming activities, which facilitates year-round cropping in the areas. A total of nine (9) villages were selected for the study.
Fourth stage involved proportionate selection of 50% of farmer groups/associations from each of the nine (9) villages. A total of eleven (11) farmer groups were selected. Fifth stage involved proportionate selection of 30% of the members of each of the arable farmers' group/associations. A total of 75 arable farmers were selected for the study.
Last stage involved cluster sampling of 30% of sedentary pastoralists from each of the clusters or area of pastoral family stead's selected, locally referred to as "Ruga" by random sampling. A total of 75 pastoralists were selected for the study, while 30% of Migratory pastoralists was selected by using snowball sampling method in order to capture the pastoralists who were sparsely distributed around the study area. A total of 79 pastoralists were selected. Balloting method of random sampling was employed to select the actual respondents. Therefore, the total respondents for the study both farmers and pastoralists (sedentary and migratory) were, 229 respondents. Primary data were collected by means of a structured pre-tested questionnaire. The questionnaire was administered by the researcher and trained enumerators with the assistance of Village Extension Agents (VEAs) to respondents. Data collected were analysed using percentages and logistic regression.

Results and Discussions

Socio-economic Characteristics of Farmers and Pastoralists (Sedentary and Migratory)

The result in Table 1 reveals that most of the farmers (36%) and sedentary pastoralist (36.7%) fell within the age bracket of 50-56 years. This implies that the highest percentages of the farmers and sedentary pastoralists are elderly men. While the migratory pastoralists the result shows that 29.2% are within the age range of 35 - 40 years. This means that the highest percentages of them are within their active age and are expected to be energetic. The age of the migratory pastoralists positively influences their conflict with farmers, due to nature of the herding systems old pastoralists are replaced with young once. This influenced them to disobey rules and regulations during grazing of their livestock and destroy farmers' crop which result in potential conflict with crop farmers.
The result also shows that the majority (73.3%) of the farmers was males and all the pastoralists (sedentary and migratory) were males (100%). The higher proportion of the

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farmers of males to females may be because of religious and custom/culture which play crucial roles in the livelihoods of the farmers in the study area and also as a result of socio - cultural factors, most fulani women might not take cattle herding as occupation. This agrees with the findings of Olaleye *et. al.* (2010) that males were more involved in both farming and pastoral activities. The result further revealed that, the majority of the farmers (88.0%), sedentary (93.3%) and migratory pastoralists (89.9%) were married in the study area. The result in Table 1 also shows that, more than half (51.9%) of the migratory pastoralists had never been to school, while 39.9% had Quranic education. Among the sedentary pastoralists, about half of them (49.3%) had Qur'anic education, while 30.7% among them had one form of western education, or the other. While among the farmers interviewed, about half of them (49.3%) had one form of formal education, or the other. This implies that most of the pastoralists (sedentary and migratory) are not educated compared to the farmers who are literate. This is attributed to the mobility of the pastoralists as their way of life. The mobile school systems are no longer functioning which might give them education. This finding agrees with that of Olaleye, Odutola, Ojo, Umar and Ndanitsa (2010) that the majority of the pastoralists do not have formal education when compared to farmers.

The result in Table 1 also shows that, more than half of the farmers (57.2%) had family members between 7 and 18 and also sedentary pastoralists more than half of them (53.3%) had family members between 7 and 12. The implication is that the relatively large family sizes for the farmers and sedentary pastoralists may mean more people to cater for and, perhaps also more hands to work on the farms and help with cattle herding. Among the migratory pastoralists about half (41.8%) of them had household size of 3-4 members, while 30.3% had household size of 5-6 members. The implication is that the relatively small family sizes for the migratory pastoralists was attributed to their mobility as their way of life, any time when they decide to change to better place for their selves and animals they would migrate.

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Table1: Socio-economic characteristics of farmers and pastoralists

Variable	Farmers %	Sedentary. %	Migratory %
Age			
29-35	12	1.3	36.7
36-42	25.3	25.3	29.1
43-49	20	26.7	34.2
50-56	36	30.7	-
57 and above	6.7	16	-
Sex			
Male	73.3	100	100
Female	26.7	0.0	0.0
Marital Status			
Single	4.0	0.0	8.8
Married	88.0	93.3	89.9
Divorced	1.3	4.0	0.0
Widowed	6.7	2.7	1.3
Others specify	-	-	-
Educational Level			
Never been school	1.3	20.0	51.9
Quranic education	49.3	49.3	39.9
Primary school	24.0	10.7	3.7
Secondary school	17.5	8.0	1.3
Nomadic education	-	10.7	5.1
Tertiary institution	8.0	1.3	0.0
Household size			
1-6	24	18.6	89.8
7-12	30.6	53.3	10.2
13-18	26.6	24	-
19-24	10.6	2.6	-
25 and above	8.0	1.3	-
Total	**100**	100	**100**

Source: Field Survey Data, 2018

Crop Damage Due to Conflict per Season for Farmers

The result in Table 2 reveals that out of 75 farmers interviewed, 50 farmers reported losses of crops during the year 2017 rainy season in their areas, 33.3% (25 farmers) had lost 25-50% of their farms crop, while 33.3% (25 farmers) had lost 75-100% of their farms crop as a result of cattle destruction by the migratory pastoralist.

Table 2: Damage on crops due to conflict per season for farmers

Crop damaged	Percentage	Min.	Max.	Mean	Std
Percentage					
25-50	33.3	25	100	65.50	31.254
75-100	33.3				
Total	66.7				

Source: Field Survey Data, 2018

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Distribution of Sedentary pastoralists according to Animals Lost Per Season
The result in table 3 shows that out of 75 sedentary pastoralists interviewed, 35 of them had reported losses of livestock from their herds of cattle during the year 2017 rainy season, about half (22.7%) of sedentary pastoralists lost 3-4 animals, while 20% had lost 1-2 animals and 4% had lost 5 animals during the season.

Table 3: Animals lost due to conflict per Season

Animals lost (no.	Percentag	Min.	Max.	Mean	Std
1-2	20	1	5	3	1.221
3-4	22.7				
5 and above	4				
Total	46.7				

Source: Field Survey Data, 2018

Distribution of Migratory Pastoralists according to Animals Lost Per Season
The result from table 4 revealed that, out of 79 migratory pastoralists interviewed, 20 had reported losses of livestock from their herds of cattle during the year 2017 rainy season, as a result of conflict. Most of them (19%) had lost 1-2 animals per season due to conflict, while 5% among them had lost 3-4 animals per season and also 1.3% had lost 5 animals per season. The research shows that sedentary pastoralists most widely experienced livestock losses as a result of farmers - pastoralists' conflict than migratory pastoralists in the study area. This is due to the fact that sedentary pastoralists are permanently in a home stead. While migratory pastoralists they are always moving from one place to another in search of livestock feed, destroy farmers' crop and flee from the area, left the sedentary pastoralists with the consequences. This finding is conformity with study carried out by Olabode and Ajibade, 2010, in the guinea savannah area of Kwara State, the study reported that out of about 150 households interviewed, 22 reported losses of livestock while eight (8) households from both sides reported loss of human lives.

Table 4: Animals lost due to conflict Per season

Animals lost (no.)	Percentage	Min.	Max.	Mean	Std
1-2	19	1	5	2	1.293
3-4	5				
5 and above	1.3				
Total	25.3				

Source: Field Survey Data, 2018

Experienced Conflict of Farmers and Pastoralists (Sedentary and Migratory)

The result in table 5 revealed that the majority (66.7%) of the farmers interviewed had experienced conflict in the study area during their years in farming activities. Only 33.3% of the farmers had not experienced conflict. While among the sedentary pastoralists about half of them (46.7%) interviewed had experienced conflict during their years in farming and herding in the study area, with more than half of them (53.3%) does not experienced conflict. For the migratory pastoralists, the result shows that only 25.3% of the respondents interviewed had experienced conflict, while the majority (74.7%) of them does not experienced conflict in the study area. These imply that farmers (66.7%) had experienced more conflict and suffer more losses from farmers - pastoralists' conflict, especially economic losses than the pastoralists (sedentary and migratory). This finding is consistent with that of Ofem and Inyang, (2014) which revealed that many farmers lost part or whole of their crops during conflict.

Table 5: Distribution of farmers and pastoralists (sedentary and migratory) based on experienced conflict

Variables	Farmers %	Sedentary %	Migratory %
Experienced	66.7	46.7	25.3
Not experience	33.3	53.3	74.7

Source: Field Survey Data, 2018

Incidence of Farmers and Pastoralists (Sedentary and Migratory) Conflict

The result in table 6 reveals that the majority of the farmers (68%), sedentary (54.7) and migratory pastoralists (58.2%) interviewed indicated that, conflict occurs frequently during harvesting period of agricultural produced. This finding implied that these pastoralists prefer to move with their animals during harvesting period to the area which they would obtain pasture and crop residues to graze their animals. During this period some of the farmers lost part or whole of their crops and harvested produced, which consequently result in conflict with these pastoralists in the study area. This finding is supported by Jerome and Are (2010) who found that pastoral households often move with their herds to fadama lands during the dry season in search of pastures. They move back to upland areas during the rainy season avoiding areas with tsetse flies and their diseases. Their mobility is largely determined by the location of farming communities which provide crop residues for grazing, market for sale of their animals and produce as well as for the purchase of essential need.

Table 6: Perception of frequency of conflicts around their comminities

Variables	Farmers %	Sedentary%	Migratory %
During harvesting period	68	54.7	58.2
Early wet/rain season	32	45.3	41.8

Source: Field Survey Data, 2018

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Farmers and pastoralists (sedentary and migratory) perception according to the strategies of conflict resolution

Table 7 reveals that farmers in the study area believed that court verdict (53.3%) and intervention by low enforcement agents (40.0%) were types of strategies of conflict resolution, while sedentary pastoralists generally believed that intervention by traditional leaders (52.0%), local community crop farmers/herders intervention (42.7%) and payment of compensation to victims (41.3%) were the strategies of conflict resolution, and also migratory pastoralists believed that intervention by traditional leaders (50.6%), payment of compensation to victims (49.4%) and intervention by law enforcement agents (44.3%) were the strategies of conflict resolution in the study area. This agrees with the finding of Adelakun, Adurogbangba and Akinbile (2015) that most of the farmers and pastoralists (68.9%) in the study area indicated intervention by low enforcement agents as one of the methods of conflict resolution, 42.5% opined that they seek the intervention of local community leaders in fostering peace between the parties involved.

Table 7: Farmers and pastoralists strategies of conflict resolution

Types of strategies (Variables)	Farmers % (n=75)	Sedentary (n=75)	Migratory % (n=79)
Intervention by traditional leaders	36	52	50.6
Local community crop Farmers/herders intervention	25.3	42.7	35.3
Payment of compensation to victims	-	41.3	49.4
Intervention by low enforcement agents	40	38.7	44.3
Court verdict	50.3	20	12.7
Dialogue between parties involved	26.7	8	8.9
Total	**181.3**	**202.7**	**201.3**

Source: Field Survey Data, 2018. *Multiple responses recorded as percentages > 100

Roles of extension agents in conflict prevention and management

The result in Table 8 reveals that, 57.3% of farmers, 65.3% of the sedentary pastoralists and 50.6% of the migratory pastoralists agreed that extension agents play roles in conflicts prevention and management in the study area. This indicates that extension agents create awareness for peaceful coexistence between various groups in communities. The result also reveals that most of the farmers (57.3%), sedentary (50.7%) and migratory pastoralists (44.3%) believed that extension agents create awareness, 61.3% of the farmers, 53.3% sedentary and 55.7% of the migratory pastoralists agreed that extension agents served as mediators between contending groups, and also 52% of the farmers agreed that extension agents provides capacity buildings. The result is in accordance to a priori expectation that, extension workers are assumed to have contact with their clients, thus they sensitize and advise farmers and pastoralists to live peacefully.

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Table 8: Distribution of farmers and pastoralists (sedentary and migratory) based on roles of extension agents in conflict prevention and management

Variables	Farmers %	Sedentary %	Migratory %
Roles of EAs in Conflicts			
Yes	57.3	65.3	50.6
No	42.7	34.7	49.4
Total	**100**	**100**	**100**
Types of roles			
Creating awareness	57.3	50.7	44.3
Creating forum for dialogue between parties (mediation)	61.3	53.3	55.7
Advisory services/ Capacity building	52	40	27.8
Total	**170.6**	**144**	**127.8**

Source: Field Survey Data, 2018
*Multiple responses recorded as percentages > 100

Effect of demographic characteristics of farmers on Conflict

Table 9 depicts logistic regression analysis of farmers' effect of demographic characteristics on conflict with pastoralists. The result shows that the R^2 Cox and Snell and R^2 Nagelkerke of 0.184 and 0.325 respectively which signified that 18.4% and 32.5% variance observed in the model is attributed to variability among the independent variables. The fitness of the model was further confirmed by the chi-square (X^2) value of 15.224 with a degree of freedom (df) which was significant at 10% level**.** The result also reveals that household size of the farmers positively influences farmers and pastoralists' conflict. This means that the farmers with large household size will be more implicated in conflict occurrences. Large household size may be advantageous to the farmers as enhanced source of farm labour supply. It could also provide forces of conflicts as recalcitrant members may be willing to be involved in conflict and prove to be ready tools for perpetuating conflict. Hence, a priori expectation was met. This is consistent with finding of Adisa (2011) who observed that the implication for large family sizes for the farmers and pastoralists may mean more people to cater for and, perhaps also more hands to work on the farm and help with cattle herding.

The marital status of the farmers positively influences their involvement in conflict with pastoralists; hence married couples tend to be more cautious when it comes to issue of conflict, so as to avoid loss of both lives.

Nature of the farmers' farms also positively influences farmers and pastoralists' conflict in the study area. The majority (94.7%) of the farmers had not fenced their farms, especially those farmers that have farms near cattle routes, watering points and grazing fields/reserves. Possibly cattle may destroy their crops during movement or grazing period and cause farmers to feel angry and result in conflict with the pastoralist.

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Table 9: Demographic characteristics effecting conflict of farmers

Independent variables	B	S.E	Wald	D.F	Exp (B)
Age (years)	0.057	0.279	0.279	1	1.058
Level of education	-0.322	0.405	0.634	1	0.724
Marital status	3.097*	1.144	7.329	1	22.124
Household size	-0.128	0.093	1.870	1	0.880
Farming experience	0.030	0.102	0.087	1	1.031
Nature of the farm	3.074*	1.241	6.130	1	21.621
Constant	-5.186	3.527	2.162	1	0.006

Source: Survey Data, 2018 *P≤0.01.

Effect of Demographic Characteristics of Sedentary Pastoralists on Conflict

The result of logistic regression estimate as shown in Table 10, shows that the R^2 Cox and Snell and R^2 Nagelkerke of 0.134 and 0.180 respectively which signified that 13.4% and 18% variance observed in the model is attributed to variability among the independent variables. The fitness of the model was further confirmed by the chi-square (x^2) value of 10.758 with a degree of freedom (df) which was significant at 10% level .The result also shows that herd size of the sedentary pastoralists positively influences their conflict with farmers, which is statistically significant at 10% level of probability, indicating that increase in herd size of the sedentary pastoralists will lead to increase in frequency of conflict occurrence between sedentary pastoralists and farmers. This is in line with a priori expectation, since larger herds size require enough stock routes, grazing field and watering points, but all these basic services were encroached by the farmers in the study area, which lead herds of cattle to destroy farmers crop and possible confrontation with the farmers. The significance of this variable implies that herd size is positively associated with frequency of conflict occurrence. This result is consistent with the finding of Umeh and Chukwu (2015) who found that increase in farm size of the farmers will lead to increase in frequency of conflict occurrence between farmers and pastoralists, since larger farm holdings will predispose the farms to invasion by the herds and possibly confrontation with the herdsmen.

The age of the sedentary pastoralists positively influences their conflict with farmers. This is an indication that the older the herdsmen grew in years, the lower their frequency of conflict with farmers. This is accordance with a priori expectation, because older herdsmen are supposed to have gained knowledge and experiences that can support their capacity to manage conflicts more effectively and take steps to reduce the frequency of conflicts occurrences between farmers and the pastoralists. Awareness about grazing reserves by the sedentary pastoralists positively influences their conflict with farmers, which is statistically significant at 10% level of probability. This finding agrees with Rashid (2012), on awareness of and compliance with stock routes. The more the herdsmen became aware and adhere to stock routes, the less they become engaged in conflict and vice versa.

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Table 10: Demographic characteristics effecting conflict of sedentary pastoralists

Independent variables	B	S.E	Wald	D.F	Exp (B)
Age (years)	0.148	0.057	6.671	1	1.160
Household size	0.005*	0.069	0.004	1	1.005
Herd size	0.026	0.015	2.823	1	1.026
Herding experience	-0.011	0.052	0.46	1	0.989
Awareness grazing reserv	1.721	1.036	2.758	1	5.592
Contact with extension Agei	-0.451	0.612	0.543	1	0.637
Constant	9.003	3.378	7.106	1	0.000

*P≤0.01.. Source: Survey Data, 2018

Effect of demographic characteristics of migratory pastoralists on Conflict

The result of logistic regression estimate as shown in Table 11, shows that the R^2 Cox and Snell and R^2 Nagelkerke of 0.161 and 0.221 respectively which signified that 16.1% and 22.1% variance observed in the model is attributed to variability among the independent variables. The fitness of the model was further confirmed by the chi-square (x^2) value of 13.910 with a degree of freedom (df) which was significant at 5% level. The result further reveals that herd size of the migratory pastoralists positively influences their conflict with farmers, which is statistically significant at 10%level of probability, indicating that increase in herd size of the migratory pastoralists will lead to increase in frequency of conflict occurrence between migratory pastoralists and farmers. This is in line with a priori expectation, since larger herds size require enough stock routes, grazing field and watering points, but all these basic services were encroached by the farmers in the study area, which lead herds of cattle to destroy farmers crop and possible confrontation with the farmers.

The age of the migratory pastoralists positively influences their conflict with farmers in the study area. However, it was found that most (50.6%) of them were between the ages of 29-40 years in the study area, with a mean age of 37 years, that means they are in their active age and are expected to be energetic. This influenced them to disobey rules and regulations during grazing of their livestock and destroy farmers' crop which result in potential conflict with crop farmers.

The herding experience of the migratory pastoralists positively influences their conflict with farmers, which is statistically significant at 10% level of probability, indicating that the more experience in years the pastoralists acquires the less the frequency of conflicts with the farmers and vice versa in the area. This conforms to the a priori expectation, because experience acquired over the years will play a significant role in conflict management. However, it was found that most of the migratory pastoralists had less experience in years in the study area, because due to the nature of the herding system it needs young men in moving the livestock from one area to another. The experienced herdsmen are replaced with new herdsmen who are young and more energetic with less or no experience in herding system and result in conflict with farmers due to destruction of crops by their livestock. The result is supported by Garba et al (2015) who observed that the majority of pastoralists had experience of 11-20 years.

Membership of association of the migratory pastoralists also influenced their conflict with farmers positively which is statistically significant at 10%level of probability. This implies that herdsmen who belong to social organizations can easily through knowledge and information sharing in such an association/organization. It was found that the majority (63.3%) of the migratory pastoralists in the study area do not belongs to any asocial organization; this positively leads to increase in frequency of conflict occurrence between farmers and the migratory pastoralists. This result is in line with findings of Umeh and Chukwu (2015) that farmers and pastoralists join cooperative society or organization in order to pool their resources together, obtain needed inputs, knowledge information sharing in such an association prevent and manage conflict more effectively.

Table 11: **Demographic characteristics effecting conflict of migratory pastoralists**

Independent variables	B	S.E	Wald	D.F	Exp (B)
Age (years)	0.135*	0.053	6.466	1	1.145
Level of education	-0.636	0.552	1.328	1	0.530
Marital status	-0.328	0.874	0.141	1	0.720
Household size	-0.122	0.185	0.440	1	0.885
Herd size	0.020	0.011	3.198	1	1.020
Herding experience	-0.149	0.080	3.465	1	0.862
Membership of assoc.	-0.840	0.588	2.040	1	0.432
Constant	-2.447	1.885	1.686	1	0.087

*P≤0.01.Source: Survey Data, 2018

Conclusion and Recommendations

Migratory pastoralists herd size, herding experience and membership of association were significantly related to causes of conflict between the farmers and the pastoralists. Most of the farmers believed that extension agents create awareness, and served as mediators between contending groups. The demographic characteristics associated with conflict should be properly managed by the appropriate institutions involving in conflict resolutions, similarly, government should train and empowers extension agents in discharging their duties, and this will help in effective conflict prevention and management.

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