

Farmer-Herdsmen Conflicts: A Factor Analysis of Socio-economic Conflict Variables among Arable Crop Farmers in North Central Nigeria

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ABSTRACT The persistence of farmer-herdsmen conflicts portend grave socioeconomic consequences. Although there is no clear consensus on which group experiences greater hardships, the plight of arable crop farmers, who constitute the bulk of Nigeria's agricultural production population, continues to attract research attention. The study investigates the variables associated with farmer-herdsmen conflicts from the perspectives of farmers in Kwara State, Nigeria. Using a four-stage random sampling technique to select 300 farmers in communities contiguous with herdsmen's stock routes, data were collected with the aid of structured questionnaire and subjected to factor analysis and descriptive statistical procedures. Data analysis revealed that respondents generally experienced 'losses' in nine out of ten identified material and non-material resources, and 'gains' in three. Factor analysis showed that socioeconomic, production, institutional, and situational factors among farmers, with Eigen values of 2.6412, 1.6103, 1.2456, and 1.0348 respectively, accounted for their conflict with herdsmen. Awareness of and compliance with designated stock routes (situational variables), having coefficients -0.741 and -0.662 respectively were particularly crucial farmer variables of conflict. The paper recommends regular review of stock routes and educational campaigns to increase their awareness and compliance rates among conflict actors. Farmer-herdsmen conflict resolution initiatives should also incorporate a careful consideration of all conflict factors from the perspectives of the actors.

INTRODUCTION

It is probably unarguable that resource ownership and utilization have directly and indirectly defined the dimensions of most conflicts involving Man since time immemorial. Of all resources, however, land has remained an overwhelming source of conflicts among various user groups as well as individuals at varying thresholds. In particular, conflicts between farmers and herdsmen in the use of agricultural land are becoming fiercer and increasingly widespread in Nigeria, largely due to 'intensification and extensification' of production activities that are necessitated by increasing human population (Gefu and Kolawole 2005; Fasona and Omojola 2005).

The vital role of agriculture in the development of the economies of Third World nations, including Nigeria, is undeniable (Eastwood et al. 2007). Nigeria, with a population of about 140 million people, occupying a land area of 923,773 square kilometers continues to benefit immensely from agricultural production activities. And with about 82 million hectares of arable land, out of which only 42% is so far cultivated, agriculture (crop and animal production) contributed

between 31.2% and 39.2% of total GDP between 1986 and 1995, and over 40% 1999 and 2006 (National Economic Intelligence Unit 2006). Dwindling economic fortunes, the need to reverse high food importation bills and the ever-increasing demands for food and raw materials continue to exert more pressures on the arable lands which, incidentally, are required by both farmers and cattle herdsmen for their production activities.

The resultant increase in competition for arable land has often times led to serious manifestation of hostilities and social friction among the two user-groups in many parts of Nigeria. The conflicts have not only heightened the level of insecurity, but have also demonstrated high potential to exacerbate the food crisis in Nigeria and other affected countries due to loss of farmer lives, animals, crops and valuable properties (Cotula et al. 2004). For instance, the conflict in Darfur region of Sudan started as a resource-based conflict between herdsmen and farmers before transforming into a full-blown war that has claimed over 200,000 lives and rendered over a million people homeless (FEWS-NET 2007). Just as in The Sudan, farming and cattle-herding

respectively are predominantly associated with distinct ethnic groups. In a newspaper study of conflicts/crises in Nigeria between 1991 and 2005, Fasona and Omojola (2005) found that farmer-herdsmen conflicts accounted for 35% of the major clashes reported by selected Nigerian newspapers. Another study of 27 communities in Central Nigeria by Nyong and Fiki (2005) showed that over 40% of the household surveyed had experienced agricultural land-related conflicts, with respondents recalling conflicts that were as far back as 1965 and as recent as 2005.

Losses from these conflicts are of far-reaching dimensions and implications on both sides. In a study carried out in Nigeria's Guinea savannah, within which is Kwara State, Fiki and Lee (2004) reported that out of about 150 households interviewed, 22 reported loss of a whole farm of standing crops, 41 reported losses of livestock, while eight households from both sides reported loss of human lives. Other studies also indicated that stores, barns, residences and household items were destroyed in many of the violent clashes. Serious health hazards are also introduced when cattle are reared to water bodies that serve rural communities. The implications of all these may put question marks on the achievability of the 10 percent growth rate in the agricultural sector being proposed by the federal government of Nigeria. Neither would it be easy for the Kwara State government to achieve 20 percent increase in area under actual cultivation nor grain yields from the present 0.99 to 2.5 metric tones per hectare being proposed in its State Economic Empowerment and Development Strategy (SEEDS) as released by the State Planning Commission (KWSPC 2005). Ngedu (2005), in a study of constraints to cassava production in Kwara State found that over 90% of interviewed farmers indicated that their greatest problem in cassava production is cattle rearers' encroachment of their farms. On their own part too, the Fulani cattle herdsmen have also identified conflicts arising from land use as the "most important" problem they face in their occupation (van't Hooft et al. 2005). Several other studies have documented increasing conflict-induced frustrations experienced by these two groups within and outside Nigeria (Watts 1983; Phillips and Titilola 1995; Lee 1999; Raynout 2001 and Adger and Brooks 2003). However, according to Zaur (2006), the link between agriculture and conflict has still not received sufficient analysis and discussion.

From the foregoing, it is discernible that there is a compelling need to continue to find lasting solutions to the problems posed by farmer herdsmen conflicts. Particularly, it is apt to conduct further actor analysis studies into the variables of farmers and herdsmen that are associated with their mutual conflicts. The respective perspectives, peculiarities and production variables of each group are crucial to the understanding of the management imperatives of farmer-herdsmen conflicts. Without prejudice to the plights of herdsmen in their conflicts with farmers for the use of arable land, the focus of this investigation is on the conflict factors from the perspectives and peculiarities of arable crop farmers. This becomes necessary due to the fact that arable crop farmers constitute the vast majority of agricultural producers in the study area (and Nigeria in general). The specific objectives of this study, however, are to:

1. Determine occupational and personal characteristics of arable crop farmers in the study area,
2. Ascertain the losses and gains (if any) experienced by arable crop farmers in their conflict for agricultural land with herdsmen, and
3. Analyze the variables of arable crop farmers associated with their conflicts with herdsmen in the study area.

METHODOLOGY

A four-stage random sampling technique was used to select respondents for the study. Kwara State was randomly selected from six states in north central Nigeria – where farmer-herdsmen conflicts occur frequently. Kwara State is located in Latitude 7° 55' and 100° North and longitudes 2°20' East. Lying in the middle belt of Nigeria, the state has a land area of 32,500 sq km made of Guinea Savannah vegetation to the south and Derived Savannah to the North. Annual rainfall is between 1000-1500mm while maximum average temperatures are between 30° and 35° Celsius (Kwara State Diary 2007). With a cultivable land area of 2,447, 250 ha, the State is significant for food production in Nigeria because of its rich soil that supports the cultivation of many crops (Kwara State Planning Commission 2004). Similarly, it has abundant livestock that comprises of cattle, goats and sheep. Sharing an international boundary with the Republic of Benin, it

has four main ethnic groups namely, Yoruba, Nupe, Baruba and Fulani.

Six local government areas (LGAs) were randomly selected out of the 16 LGAs in the state. The selected LGAs were Asa, Edu, Ifelodun, Ilorin East, Moro and Kaiama LGAs. In each LGA, five villages were randomly selected from a list of villages that were contiguous with designated herdsman's stock routes. Cluster random sampling was used to select 10 arable crop farming households from each village. Thus, 50 respondents (household heads) were selected from each village-giving a total sample size of 300 respondents. Structured questionnaire was used to collect primary data on the personal and occupational characteristics and perspectives of respondents on socioeconomic, production, situational, institutional and ethno-cultural variables.

Measurement of Variables

The independent variables measured included age (in years), gender, and educational level as years of formal education. Others are income level: measured as estimated annual income of respondents that included income from farm and other occupational activities;

Farm size: measured in hectares; and production variables operationalized to include production system, production motives and input availability. They were measured on a 5-point Likert-type scale. The five points on the scale were weighted according to the degree of agreement with eight statements. Situational variables operationalized to include mode of living, land tenure system, awareness of stock routes and compliance level with stock routes, were also measured with a 5-point Likert-type scale consisting of four statements.

Other variables of conflict that were investigated include ethno-cultural variables which involved the measurement of respondents' degree of ethnocentrism, cultural orientation, and religiosity on a 5-point Likert-type scale of four statements. Furthermore, institutional variables operationalized as respondents' perspectives on the nature and influence of government policies, NGOs intervention, role of traditional institutions and agricultural extension impact were also measured on a 5-point Likert-type scale of four statements. Land tenure status of respondents was also measured on a 5-point Likert-type scale involving five statements relating to land tenure.

The conflict experiences of respondents were measured using 10 items developed by the researcher from eclectic literature reviews. The respondents were requested to indicate whether they ever experienced a loss of or gain in any of the variables, which are: crop yield, household resource (land, house, implement etc), social support, stored products, job status, self-esteem, income, family/ personal health, knowledge and quality of relationship.

Use of Factor Analysis

According to Kleinbaum and Kupper (1978), factor analysis is used mainly when one is interested in knowing whether some underlying pattern or relationship exist among variables; discovering a new set of factors; or confirming (an) existing factor(s) as being the true factor(s). In factor analysis, *a priori* identification of factors is not a pre-requisite and the researcher thus uses factor analysis to characterize meaningful factors that could validly describe the data. But it is not out of turn to hypothesize as to the number of underlying factors in a problem (Schwirian 1973). Essentially, the factors involved in farmer-herdsmen conflict were, following Okoro (2000), artificially derived using the computer to find the original variables that correlate highly with the derived factors. The result of the analysis was thus in the form of a matrix where the derived factors form the columns and the original variables constitute the rows (Jimoh and Olorunfemi 2005).

Because the variables in the farmer-herdsmen conflict are several, the factors were subjected to oblique rotation. This is so because of the need to ensure that all variables are ascribed to a factor, and none is allocated to two or more factors (Okoro 2000). Oblique rotation was preferred to orthogonal rotation because; according to Rummel (1970:386) "any lack of correlation among obliquely rotated factors is an *empirical* finding, while the lack of correlation among orthogonally rotated factors is imposed by the orthogonal model".

Interval level data were used for the analysis. The use of Likert-type scale for interval techniques such as factor analysis is, according to Leeper (2001), the norm in contemporary social science. This is also supported by other studies such as Binder (1984), Jaccard and Wan (1996), Zumbo and Zimmerman (1993) and Becker (1999). The proviso, however, is that the scale items

should have five or seven categories (Garson 2007).

RESULTS AND DISCUSSION

Personal and Occupational Characteristics of Respondents

The summary of personal characteristics of respondents is presented in table 1. Although 300 respondents were involved in the research, 293 questionnaires were used in data analysis as the remaining seven were either not returned or poorly completed, giving a response rate of 98%.

Although table 1 shows the preponderance

Table 1: Personal and occupational characteristics of respondents (N=293)

Category	Personal Characteristics	
	Frequency	%
<i>Age (years)</i>		
6-20	16	5.5
21-35	67	22.8
36-50	124	42.3
51-65	54	18.4
66-80	32	11.0
13-15	16	5.5
<i>Gender</i>		
Male	206	70.3
Female	87	29.7
<i>Years of Formal education</i>		
0	122	41.6
1-4	16	5.5
5-8	32	10.8
9-12	77	26.3
13-16	35	11.9
Above 16	11	3.9
<i>Annual income (N'000)</i>		
1-40	106	36.2
41-80	64	21.8
81-120	49	16.7
121-160	22	7.5
161-200	18	6.2
201-240	34	11.6
<i>Religion</i>		
Christianity	104	35.8
Islam	167	57.0
Others	2	7.2
<i>Marital status</i>		
Married	204	69.6
Never married	41	14.0
Divorced	33	11.3
Widowed	8	2.7
No response	7	2.4
<i>Family size</i>		
1-5	59	20.2
6-10	128	43.7
11-15	83	28.3
16-20	23	7.8

Category	Occupational Characteristics	
	Frequency	%
<i>Farm size (Ha)</i>		
<1	92	31.3
1-3	50	17.1
4-6	56	19.1
7-9	38	13.0
10-12	21	7.2
16-18	8	2.7
No response	12	4.1
<i>Alternative Occupation</i>		
None	99	33.8
One	108	36.9
Two	69	23.5
Three	17	5.8
<i>Production System</i>		
Rain-fed	179	61.1
Irrigation	62	21.2
Both	52	17.7
<i>Production Motive (Major)</i>		
Food	53	18.1
Income	240	81.9
<i>Farming Experience (years)</i>		
1-5	28	9.6
6-10	61	20.8
11-15	83	28.2
16-20	91	31.1
21-25	30	10.3

Note: Mean age =44 years; Mean income =N101, 129; while the mean family size was 9; Mean farm size=2.8 Ha; and Mean farming experience =13.7 years

Source: Field Survey, 2008

of male-headed households in the study area, about 30% of respondents were women household-heads, implying additional responsibilities. Also, illiteracy was still a common feature of rural farming, as about 42% of respondents had no formal education, while only about 16% might have had higher education, having had more than 12 years of formal education. Table 1 further reveals that the highest percentage of farmers were those within the age range of 36-50 years (42.3%), while those below 20 years were the lowest, accounting for just 5.5%. The average age of the farmers was 44 years. This conforms to what is normally obtained among rural farmers in Nigeria (Agbamu and Fabusoro 2001).

As discernible from table 1, the average annual income of respondents was the equivalent of \$632.05 per annum (\$1=N160). However, farmers in the lowest range of annual income who, incidentally, were the majority might however need to augment their income earnings as they were all leaving below poverty line by earning below N58, 400 per annum which is the equivalent of \$1 per day. This confirms the prevalence of

poverty among rural farmers in Nigeria, as noted by Chukwuone and Agwu (2005). There thus exists an urgent need to address farmer poverty as a cardinal step in the achievement of food security in Nigeria.

Respondents' family sizes ranged from one (unmarried) to 20 people. The modal range and mean family sizes were 6-10 and nine people respectively. The implication is that the relatively large family sizes may mean more people to cater for and, perhaps also more hands to work on the farm.

Data contained in table 1 also reveals that, farm enterprise sizes ranged from less than one to 18 hectares. However, about 51% of farmers owned farms that were less than 4 hectares in size. Indeed, the modal range of farm size of the respondents was 1-3 hectares, while the mean farm size was 3.6 hectares. This shows the preponderance of small scale farming among respondents as noted by Agwu (2004) and Wiggins (2008).

About 67% of respondents had 1-3 alternative occupations as shown in table 1. The prevalence of multiple occupations might be a way of augmenting family income and poverty alleviation. Agricultural production in the study area is greatly dependent on rainfall. Table 1 shows that 61.1% of farmers practiced rain-fed production system, while about 21% were mainly dry season farmers. Only about 18% claimed they farm all-year round, using both rain-fed and irrigation production systems – perhaps accounting for the involvement of most respondents in alternative occupations.

The two major production motives identified among the respondents were: food and income. Table 1 reveals that respondents generally perceived their major motive to be income. About 82% claimed their major production motive was to earn income. This finding shows that rural farmers did not see themselves farming just for subsistence, but rather as people involved in income-generating enterprises.

Conflict Experiences of Respondents

Table 2 presents the results of the investigation of the conflict experiences of respondents. Conflict outcome experienced was actually determined as the loss, or gain of any of the listed resources. Objectionable as conflicts are, the findings show that respondents reported a few

non-material gains. For instance, while 35.3% and 30% of respondents said they gained in knowledge (especially in new farm protection and conflict prevention methods) and social support (resulting from farm destruction/conflict) respectively, only 4.1% reported a 'gain' in quality of social inter-relationship. These low figures indicate that farmer-herdsmen conflict affects the quality of social relationships. Moreover, 24.6% indicated a loss in quality of relationship as a result of farmer-herdsmen conflict.

Table 2: Percentage distribution of respondents according to their conflict outcome experiences

<i>Resources</i>	<i>Loss % of respondents</i>	<i>Gain % of respondents</i>
Yield	85.0	-
Household resources	23.5	-
Social support	4.4	30.0
Stored products	22.5	-
Job status	55.6	-
Self esteem	52.9	-
Income	90.8	-
Family/personal health	13.9	-
Knowledge	-	35.3
Quality of relationship	24.6	4.1

Source: Field Survey, 2007.

Other non-material resources that were lost included job status (55.6% of respondents); self-esteem (52.9%); and personal/family health (13.9%). Loss of material resources, however, was more widespread. Income loss had the highest relative frequency (90.8% of respondents), followed by loss of yield (85.0%), household resources (23.5%) and stored products (22.5%). Loss of farm yield could pose far-reaching consequences by reducing family food and income as well as planting stock for the next farming season. Clashes that involved loss of household items and stored farm products also have the potential to exacerbate indigence among farmers

Analysis of Farmers' Socio-economic Variables in Farmer-Herdsman Conflicts

As a multivariate technique, Factor Analysis was used to study the interrelationship among the many variables that were included in the instrument of data collection, and to explain these variables in terms of their common dimensions (factors). The first output in factor analysis is the results of extraction of components/factors.

Table 3 shows the results of component factor extraction among farmers in the sample. Five factors namely: socioeconomic, production, situational, institutional and ethno-cultural were *a priori* anticipated based on the tested variables. Table 3 shows the respective Eigen values and percentage of variance for the factors. The rule of thumb here is that only factors with Eigen values greater than 1.0 should be used in further analysis. This criterion of determining the number of factors is chosen among others because of the relatively large number of variables. Moreover, it is the default of most statistical computer programmes.

It is discernible from the data that only Factors 1-4 (socioeconomic, production, situational, and institutional factors) had Eigen values greater than 1.0, with the fourth factor representing 91.6% of the variance in the data. Factor 5, that is, ethno-cultural factors, with an Eigen value of 0.7872 and 8.4% of variance is thus excluded from further analysis. This indicates that ethno-cultural vari-

Table 3: Extraction of component factors (farmers)

Factors	Eigen values	% of variance	Cumulative % of variance
1. Socioeconomic	2.6412	37.9	29.7
2. Production	1.6013	23.3	61.2
3. Situational	1.2456	16.6	77.8
4. Institutional	1.0348	13.8	91.6
5. Ethno-cultural	0.7872	8.4	100.0

Source: Field Survey, 2007.

ables were not significant variables among farmers in their conflict with herdsmen.

Table 5 presents the data for the oblique rotation of the components. The factor loadings for each of the 20 variables are thus revealed. Under socioeconomic factor, the variables with high loadings high are, using Kaiser's rule of thumb which says that variables with coefficients of 0.3 and above may be used to name a factor, educational level (-0.551); farm income (0.684); family size (0.549) and alternative occupations (-0.710). Since all these variables are socioeconomic, the first factor was thus named as 'Socio-economic factor'. Consistent with the observation of McCafferey (2005) that peace and conflict resolution at community level could be facilitated through increased education, level of education showed inverse correlation, perhaps implying that farmer education could contribute to reduction in conflict. Same goes for alternative occupation, which also had negative but significant factor loading. It perhaps implies that increasing number of alternative occupations among farmers helped to reduce negative conflict experiences. Farm income and family size, influencing farm capital and labour respectively, could determine farm size and consequently, the farmers' conflict experiences. This is consistent with the submission of Miguel, Saryanth and Sergenti (2004) that low income could be associated with conflict in developing countries.

Table 4: Oblique rotated factor component correlations (factor loadings).

Variables	Socio-economic factors	Production factors	Situational factors	Institutional factors
1. Age	0.181	-0.036	0.201	0.086
2. Gender	0.035	0.126	0.064	0.316
3. Educational level	-0.551	0.039	0.211	2.33E-2
4. Estimated annual income	0.684	0.007	-0.019	0.226
5. Family size	0.549	0.116	0.220	0.032
6. Production system	-3.221E-2	0.619	0.148	0.202
7. Production motive	-0.183	0.218	0.006	0.062
8. Input inadequacy	0.011	0.634	0.124	0.044
9. Knowledge of stock routes	0.200	-0.05	-0.741	0.111
10. Stock Routes compliance	0.104	0.161	-0.662	-0.204
11. Ethnocentrism	0.097	0.123	-0.026	0.117
12. Cultural orientation	0.066	0.225	0.096	-0.332
13. Religiosity	0.209	0.006	0.129	0.073
14. Govt. policy	0.263	0.102	0.074	0.535
15. NGO role	0.009	-0.124	0.141	0.073
16. Extension impact	0.131	0.009	0.006	0.099
17. Role of traditional institutions	0.016	0.262	0.124	0.621
18. Alternative occupation	-0.710	0.045	0.103	0.005
19. Land tenure	-0.004	1.117E-02	0.048	0.648
20. Farm size	0.201	0.596	-0.136	0.001

Source: Field Survey, 2007.

Under the second factor, the variables loading high for farmers were production system (0.619); access to input (0.634) and farm size (0.596). Factor 2 was thus termed 'Production Factors' because the three factors loading under it are all production-related.

Input inadequacy, by creating other production problems, presents a potential for conflict, as it was found to have positive correlation. For instance, when inputs such as fertilizers, labour and machinery are in short supply, farmers may locate their farms at 'convenient' places - that could be grazing routes of herdsmen. Farm size, which may increase due to cultivation of new lands, also showed positively correlation. This perhaps implies that increasing farm size could not only increase the potential for conflict, but also farmers with large farms may suffer greater consequences of conflict than those with smaller farms. However, de Haan (2002) posited that small farms could actually increase the potential for conflict as they lead to fragmentation that impedes the control of cattle herds. This should not sound contradictory because of the possibility that farmers often increased their farm size by having multiple farm sites, which de Haan (2002) also acknowledged.

Under Factor 3, named 'Situational Factors', two variables had high loadings. These are knowledge of stock routes (-0.741) and compliance with stock routes (-0.662). The negative correlations indicate that as these variables increased the potential for conflict decreases. The more the farmers became aware and adhere to stock routes, the less they become engaged in conflict with herdsmen. When either the farmer or herdsman is not aware of the designated stock routes, the potential to cross one another's path becomes greater. But compliance with these stock routes is another crucial issue, because it was found that quite a number of farmers who were aware of the stock routes did not comply with them. This finding agrees with previous studies such as Ingawa, Ega, and Erharbor (1999) and de Haan (2002), on awareness of and compliance with stock routes.

The variables, with high positive loadings, under Factor 4, 'Institutional Factor', are government policies\programmes (0.535), role of traditional institutions (0.621) and land tenure (0.648). This might be due to the fact that respondents had great expectations from governments. The inability of traditional institutions to adequately and positively intervene in the conflict

situations might inadvertently contribute to the magnitude and direction of conflict among the two groups. The findings of de Haan (2002) that the 'authority of traditional rulers is breaking down' corroborates this finding. Land tenure was positively significant because of the problems of access to and use of land posed by the prevailing land tenure. This is consistent with the findings of Dohrn (2008) that insecure land tenure impedes fair resource management - which could lead to conflict.

CONCLUSION AND POLICY IMPLICATIONS OF FINDINGS

The research focused on arable crop farmers and their conflict for agricultural land with cattle herdsmen in Kwara State, North Central Nigeria. Apart from describing the occupational and social characteristics of respondents and their conflict experiences, the paper also used factor analysis to investigate farmers' socioeconomic variables that are associated with their conflict with cattle herdsmen. Generally, the research showed that farmers' most widely experienced material losses as a result of farmer-herdsmen conflicts were losses of crop yield and farm income, while job status and self esteem were the main non-material losses that were experienced. These losses might contribute to prevalence of poverty among farmers. Furthermore, the major factors of farmer-herdsmen conflicts among respondents for this study are: socioeconomic, production, institutional, and situational factors. Convincingly, the research established that the most important farmers' socio-economic variables of conflicts are practice of alternative occupations, annual income, availability of farm inputs, farm size, knowledge and compliance with designated stock routes, land tenure, government policy, and role of traditional institutions.

The following recommendations are hereby proffered, based on the findings of this study:

- Farmer poverty is not only pervasive, available statistics indicate that it is also on the increase, due to many factors that include farmer-herdsmen conflict. There is need for more concerted and deliberate policies and programmes to find realistic and practical solutions to farmer poverty. This could be achieved through timely and unencumbered availability of subsidized farm inputs and programmed family farms expansion.

- A four-stage, statutory conflict management framework with committees at community, local, state, and federal government levels that would incorporate relevant occupational unions and local leaders should be implemented specifically for prevention and resolution of farmer-herdsmen conflicts.
- There is need for the educational interventionist role of the Extension Service in farmer-herdsmen conflict. This could be achieved by applying educational and campaign methods to create better awareness and compliance rates of stock routes among farmers and herdsmen; teach farmers and herdsmen on conflict prevention and coping mechanisms; and educate both parties on the need for peaceful co-existence and mutual understanding.
- As a matter of utmost importance, governments, traditional, and other local institutions should be more responsive to the plights of victims of farmer-herdsmen conflicts by using appropriate mechanisms at their disposal for effective resolution and management of conflicts.

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