

## EVALUATION OF CONFLICT BETWEEN FULANI HERDSMEN AND FARMERS IN SHIRORO LOCAL GOVERNMENT, NIGER STATE.

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### *Abstract*

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*The research investigated the factors that contributed to conflict between Fulani herdsmen and farmers in Shiroro Local Government of Niger State, Nigeria. The research design is analytic survey. The study utilized structured questionnaire to obtain data. The participants of the survey involves Fulani herdsmen and farmers within six Areas, namely: Erena, Zumba, Gwada, Kuta, Gussoro and Rukan Ardo. The data collected were analyzed using Factor analysis on Statistical package called Statistical Package for social science (SPSS). Seven components with eigenvalue of 5.702, 2.471, 2.182, 1.919, 1.743, 1.168 and 1.092 were extracted for rotation; and the loading of the selected components of the varimax rotation loads highly on scarcity of land at 0.862. Lack of rational thinking by the herdsmen at 0.828, lack of infrastructural facilities at 0.732, corruption at 0.780, dismantling of insurgency from their base, Land Scarcity at 0.83 and lack of establishment of ranches at 0.764. based on the findings, it is recommended that Grazing reserves should be properly gazetted and customary owners paid adequate compensation to avoid the taking over of land by force and there is need for the States to review the existing laws as it relate to accessibility to land by members of community. That way there will be equity to avert constant conflict. In doing the review, issues like indigeneship and settlers rights in communities, the land use acts which have been abused largely by the upper class should be reconsidered for review in the front burner in the constitution review process.*

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**Keywords:** Analysis, Component Factor, Desertification, Pastoralist, Rural area and Varimax,.

### **Introduction**

Currently, in Nigeria, one of the most trending problem facing the country is the attack by the Fulani herdsmen most especially in northern part of the country, this is so rampant due to some factor that seriously need to be address. More than 90 percent of pastoralists in Nigeria reportedly are Fulani, a large ethnic group straddling several west and central African countries [1].

The conflict between Fulani herdsmen and farmers is becoming intolerable in the country, many has lost their lives, properties, many factor had been said to have contributed to these crisis such as unavailability of ranches, lack of land for grazing by the fulani, land scarcity e.tc. 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.

Fulanis thought to have originated from Futa-toro in Lower Senegal in the 14th century and they are predominantly found in Northern part of Nigeria. Most of the Fulanis that resides in Niger state believed to have migrated from Sokoto, during the time when Niger state was under Sokoto State, while some came from Kebbi and Kastina. They occupy some parts and they dwell there for shelter and rearing of their anima, some of them are engaged in other activities such as trading, shop keeping and also farming [2].

The Fulani herdsmen may be dangerous but they also contribute about 95 percent of the 12 million cattle in Nigeria. The important role played by the Fulani-herdsmen can be seen in their being the major supplier of beef, mutton, hides and skin,

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*Journal of the Nigerian Association of Mathematical Physics Volume 61, (July – September 2021 Issue), 175– 182*

hoof, horn, dung for manure, bones, cow urine used in the production of medicines etc. Satisfying about 95 percent of their compatriot's protein needs, they are undeniably an important segment of the nation's economy. The "janjali" tax which they pay should further elicit pity and consideration in the distribution of amenities which they are unfortunately denied." [3].

[4] described the Fulani herdsmen in the region as made up of two categories, the resident pastoralists and the mobile armed pastoralists (the new arrival). While the former group is fully integrated into their host communities to the extent of speaking their languages and intermarrying with them, the latter group is comprised of the Bokolo or Bururu who are militant, armed and able to coerce their hosts to inflict mayhem on these host communities. He further described them as terrorists disguising as pastoralists with the primitive motive of the forceful acquisition of the land of the host communities through the re-launch of jihads or by acting out the script of the Boko Haram group.

However, this research work is subjected to Factor analysis. Essentially, the factors involved in farmer-herdsmen conflict are several, using this analysis will find the original variables that correlate highly with the derived factors.

According to [5], 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).

### Statement of Problem

The crisis between Fulani herdsmen and the famers in some part of the country in which Niger state cannot be excluded has posts serious threat on the security, it has affected high crops production in the country. It is quite unluck that government of the country has failed to handle this conflict despite the fact that many lives and properties is affected on a daily basis. The Fulani Herdsmen sent fears, tension, sleeplessness, and shocks that led to the loss of lives and properties in other to secure positions of authority and economic resources.

The current and most serious version of insecurity challenge facing Nigeria today is the instigation of farmers-herdsmen violent conflicts. The major effect of the violent conflicts are food and livestock shortages, food price increase, lost in revenue, and income, thousands of lives and household properties, cattle routes, demarcated grazing reserves farm land and towns infrastructures are frequently destroyed and or denied access. Lack of ranching options and the effective checkmating of deforestation make it imperative for the herdsmen to roam freely. In Niger state, even within the residential areas of the metropolis, it is not out of place to encounter herdsmen and young boys leading herds comprising more of cattle, a few sheep and very rarely, dogs, across the major roads, and through undeveloped plots of vast land, etc. Sometimes constituting a nuisance to road users and other citizens.

### Aim and Objectives of the Study

The aim of the study is to use Factor Analysis to analyze the factors that contributed to fulani-herdsmen and famers crisis in Shiroro Local Government.

The specific Objectives of this study are to:

1. To determine the most frequent factor.
2. To make recommendation based on findings.

### Review of related Literature

The crises between Fulani Herdsmen and Famer in Nigeria is not a new phenomenon, many life and properties have been wasted on this issue and governments are not ready to take quick action against it both at the state level and the local level. Nomadic herders are believed to have drifted from Senegambia and the high plateaux of the Futa Jalon in modern-day Guinea more than a thousand years ago although pastoral nomadism and military conquest were the two processes that contributed immensely to their spread through West Africa [6].

The reports about Fulani herdsmen attacks all over the country are horrifying and many Nigerians now see them as Enemy of the human race. A report published by the SMB Intelligence, a mining and research firm on the attacks of the herdsmen in the north central region of the country accused the federal government of complicity through unhealthy silence on the "Terror in the food basket". The report maintained that the attacks were not only on life and property but agriculture as well. The attacks on Benue, Nasarawa and Plateau states left many dead and thousands displaced. The report which saw the herdsmen menace as bigger problem than the Boko Haram insurgency said 2500 people were killed annually by the sect while the herdsmen killed 2000 in north central region alone in 2015. The report also said that, "Because the government has failed to respond adequately by protecting lives and property of the citizens in the region, the herdsmen have grown bolder, and their perceived attempt to wipe out the native ethnic groups has quietly morphed into low intensity warfare. Even where the traditional rulers have attempted to call the herdsmen to peace meetings, the herdsmen routinely take advantage of these occasions to perform reconnaissance for future attacks." [7].

Campbell [8] in his research, stated that the conflicts between the Fulani herdsmen and the farmers in Nigeria has been endemic over the years fuelled by land and water use, religion, boundary disputes and the manipulations of politicians with the new entrant on the stage being the magnitude of killings carried out by the herdsmen. He further said increase in population of famers and scarcity of land are the major factors that causes the crisis between famer and herdsmen. This view is the popular notion held about the herdsmen attacks since the usual reason of struggles over land resources is no longer as water-tight as it used to be.

Abass [9] contends that the major source of tensions between pastoralists and farmers is basically economic, with land related issues accounting for the majority of the conflicts. This can then be situated within the broader context of the political economy of land struggle, traceable to a burgeoning demography in which there is fierce competition for fixed space to meet the demands of the growing population [11,18].

Haman [12] revealed that the nomadic herdsmen or grazers suffer from material damages when the crop farmers inflict physical injuries on the cattle by using cutlasses, spears or guns or by poisoning the cattle.

The attacks by Fulani herdsmen have in recent years taken many dimensions with the use of new and sophisticated types of weapons and communication devices such as AK 47 riffles. This has further aggravated violence, with destruction of lives and properties. Conflicts resulting from cattle grazing actually accounted for 35% of all reported crises between 1991 and 2005 in Nigeria [10]. Another study revealed ethnic conflict, and integration as problems of inter the grazers and their host crop farmers and Lack of education is the major causes of fight between Fulani Herdsmen and ethnic relation facing [14].

Tenuche and Ifatimehin [15] in their study observed that there is no resource sustainability in Nigeria. Because of this there is difficulty for a majority of its citizens who require land for farming and grazing to have access to land. And this is a major cause of conflicts in the Benue valley region. Consequently, they suggest that there is need for the State to review the existing laws as it relates to accessibility to land by members of community. That way there will be equity to avert constant conflict. In doing the review, issues like indigene-ship and settlers rights in communities, the land use acts which have been abused largely by the upper class should be reconsidered for review in the front burner in the constitution review process.

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.

### Methodology

This chapter will provide insight into the research method employed during the course of the study. That is, sampling techniques, the method of data collection, and the method of data analysis in order to achieve the set objectives. The targeted population are the residents of Shiroro Local Government, Niger State. Shiroro is a Local Government Area in Niger State, Nigeria. The headquarter is situated in Kuta town. It has an area of 1,879 km<sup>2</sup> and a population of 81,783 at the 2006 census. For the purpose of this project work, the sampling elements are the Fulani pastoralists and famers in Shiroro Local Government Niger State. Sample size (n) is determined with the uses of Taro Yamane formula because we cannot study the entire population as a result of insufficient time and resources. In determining the sample population, the formula by Yamane (1974) is to be used and is giving below:

$$s_n = \frac{N}{1 + N(e)^2}$$

N - Is the overall population

e – Level of precision

s<sub>n</sub> = Sample

Where N = 81,783

e = 5%

Confidence level = 95%

$$s_n = \frac{81,783}{1 + 81,783 (0.05)^2}$$

s<sub>n</sub> = 398.053.

Hence, a sample size (n) for this study is 390 but 150 questionnaires were distributed due to time factor and the resource at researchers dispose. Out of 150 questionnaires, 75 questionnaires were distributed to the famers and 75 questionnaires were distributed to the Fulani herdsmen. However only 120 were retrieved from the respondents.

The Sampling techniques adopted in this study is stratified sampling technique since the population is subdivided into different strata. Four area dominated by the Farmers (i.e Ereana (45 people), Zumba (35 people), Gussoro (30 people), Kuta (25 people) and two area dominated by Fulani (i.e Rugan laggude; Gwada (60) and Rugan Ardo (80) in Shiroro were purposively selected for this study.

**Table 1: Sample selected from the sub-population**

Area	Subpopulation	Sample
Erena	55	25
Zumba	45	20
Gussoro	50	23
Kuta	40	18
Rugan laggud	60	27
Rugan Ardo	80	36
Total	330	150

**Source of Data Collection**

Data for this study was collected from primary and secondary sources. The technique of questionnaire, and interviews was used for collecting primary data while secondary data was collected from books, journal articles, government publications, news media and letters.

**Method of Data Analysis**

Analysis was conducted using factor analysis using principal component method with varimax rotation of Kaiser Normalization. Factor analysis is used mainly to determine some underlying pattern or relationship that exist among variables; discovering a new set of factors; or confirming existing factors as being the true factor(s) . The factor loading high under each factor variable (Beta weight) represents a correlation of variables to the identified factors and has the same interpretation as any correlation coefficient. However, only variables with loading of 0.40 and above (10% overlapping variance) were used in naming factors. Also factors that loaded in more than one places were discarded.

**Mathematical Models**

In the ‘classical factor analysis’ mathematical model,  $p$  denotes the number of variables  $(X_1, X_2, \dots, X_p)$  and  $m$  denotes the number of underlying factors  $(F_1, F_2, \dots, F_m)$ .  $X_j$  is the variable represented in latent factors. Hence, this model assumes that there are  $m$  underlying factors whereby each observed variables is a linear function of these factors together with a residual variate. This model intends to reproduce the maximum correlations.  $X_j = a_{j1}F_1 + a_{j2}F_2 + a_{jm}F_m$

where  $j = 1, 2, 3, \dots, p$

The factor loadings are  $a_{j1}, a_{j2}, \dots, a_{jm}$  which denotes that  $a_{j1}$  is the factor loading of  $j^{th}$  variable on the 1st factor. The specific or unique factor is denoted by  $e_j$ . The factor loadings give us an idea about how much the variable has contributed to the factor; the larger the factor loading the more the variable has contributed to that factor. Factor loadings are very similar to weights in multiple regression analysis, and they represent the strength of the correlation between the variable and the factor.

On the other hand, factor analysis performed using a covariance matrix is conducted on variables that are similar (e.g., items from the same scales). The correlation matrix is often used because it is easier to interpret compared to the covariance tables, although there is not a strict requirement for which matrix to use. The diagonal element of the matrix is always the value 1 (i.e., the correlation of a variable within itself). In principal components analysis, the diagonal values of the correlation matrix, 1s, are used for the analysis. Conversely, computation for the factor analysis techniques involves replacing the diagonal element of the matrix with the prior communality estimates ( $h^2$ ). The communality estimate is the estimated proportion of variance of the variable that is free of error variance and is shared with other variables in the matrix. These estimates reflect the variance of a variable in common with all others together. Factor analysis is also rooted in regression and partial correlation theory so analysing it from this perspective may shed light on the theories behind this technique. The basic idea behind this model is that factor analysis tries to look for factors such that when these factors are extracted, there remain no intercorrelations between any pairs  $X_i$  and  $X_j$  because the factors themselves will account for the intercorrelations. This means that for all pairs of any two elements,  $X_i, X_j, \dots, X_p$ , are conditionally independent given the value of  $F_1, F_2, \dots, F_m$ . Once a correlation matrix is computed, the factor loadings are then analysed to see which variables load onto which factors.

**Data Presentation and Analysis**

**Table 2: Education and tribe Cross tabulation**

		Tribe					Total
		Eng.	Hausa	Gbagyi	Fulani	Others	
Education	University	1	0	2	0	0	3
	Polytechnic	8	0	6	0	1	15
	secondary	6	4	13	4	0	27
	Primary	5	8	7	2	0	22
	None	8	0	6	39	0	53
Total		28	12	34	45	1	120

**Source: Field Survey (2019)**

The table above revealed that 28 representing 23.3% of the respondents are those that speak English, 12 respondents representing 10% are Hausa, 34 respondents representing 28.3% are Gbagyi while 45 respondents representing 37.5% are Fulani and the just 1 respondent representing 0.8% are other tribes. However, 3 respondents representing 2.5% are graduate from polytechnic, 15 respondents representing 12.5% are graduate from Polytechnic, 27 respondents representing 22.5% attended secondary schools, 22 respondents representing 18.3% only have primary certificate while 53 respondents representing 44.2% does not attend school.

**Table 3: The occupation of the respondents**

Occupation	Frequency	Percentage
Herdsmen	44	36.7
Trader	1	.8
Farmer	65	54.2
Other	10	8.3
Total	120	100.0

**Source: Field Survey (2019)**

Table above revealed that 44 respondents representing 36.7% herdsmen, 1 respondent representing 0.8% are Trader, 65 respondents representing 54.2 famers, while 10 respondents representing 8.3% are others

**Table 4: The Kaiser-Meyer-Olkin and Bartlett's Test Table**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.748
Bartlett's Test of Sphericity	Approx. Chi-Square	1.211E3
	Degree of freedom	276
	Significant level	.000

The table 4, reveals the KMO statistic value which is used to measure sampling adequacy. The value obtained is 0748 with approximate Chi-square 121.3276. it indicates that the sampling size is appropriate enough for factor analysis. the Bartlett's test of sphericity is highly significant (p-value less than 0.05) for these data, therefore the test suggests that the null hypothesis should be rejected since the pattern of correlations are relatively compact and so factor analysis should yield distinct and reliable result. Hence, there is enough evidence that factor analysis is appropriate.

**Table 5: Communalities Among Factors Showing the Extractions**

	Initial	Extraction
Lack of Rational Thinking by the Herdsmen	1.000	.752
Illiteracy and lack of orientation	1.000	.739
Lack of training for the herdsmen	1.000	.729
Lack of relationship between the herdsmen and Fulani	1.000	.661
Poor communication	1.000	.620
Origin of the president	1.000	.732

Dismantling of insurgency from their base	1.000	.724
Political ambition by the opposite parties	1.000	.639
Corruption	1.000	.714
Lack of security	1.000	.717
Injustices by the Judiciary	1.000	.725
Easy access to local arms by the Fulani herdsmen	1.000	.580
Lack of establishment of ranches	1.000	.674
Slow decision making by the law maker	1.000	.587
Lack of infrastructural facilities	1.000	.474
Land scarcity	1.000	.761
Climate Change in the availability of water and forage crops	1.000	.624
Increase in cattle's population	1.000	.653
Desertification	1.000	.637
Low rainfall in the north	1.000	.748
Poverty among Nigeria	1.000	.685
Selfishness among elites	1.000	.780
Increase in farmers population	1.000	.674
Population explosion	1.000	.647
Average	1.000	.678

Extraction Method: Principal Component Analysis.

The table 5, revealing the communalities after extraction. Since there are less than 30 variables under consideration and average communalities after extraction is 0.678 approximately 0.7 then we can retain all factors with eigen value above 1. The communalities suggest that the model is good fit.

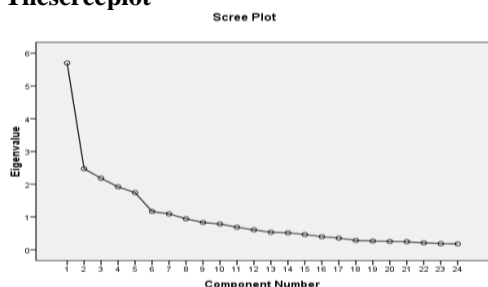
**Table 6: Total Variance Explained factors contributing to Fulani herdsmen and farmers crisis in Shiroro Local Government.**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.702	23.757	23.757	5.702	23.757	23.757	3.633	15.139	15.139
2	2.471	10.297	34.054	2.471	10.297	34.054	2.874	11.976	27.115
3	2.182	9.091	43.146	2.182	9.091	43.146	2.688	11.201	38.316
4	1.919	7.994	51.140	1.919	7.994	51.140	2.175	9.063	47.378
5	1.743	7.263	58.403	1.743	7.263	58.403	1.741	7.252	54.631
6	1.168	4.865	63.269	1.168	4.865	63.269	1.684	7.016	61.646
7	1.092	4.552	67.821	1.092	4.552	67.821	1.482	6.174	67.821
8	.943	3.929	71.750						
9	.830	3.459	75.209						
10	.785	3.271	78.480						
11	.686	2.858	81.338						
12	.605	2.521	83.859						
13	.533	2.219	86.078						
14	.516	2.151	88.229						
15	.462	1.927	90.156						
16	.397	1.654	91.810						
17	.353	1.472	93.282						
18	.284	1.184	94.466						
19	.265	1.102	95.568						
20	.249	1.038	96.607						
21	.244	1.017	97.623						
22	.209	.871	98.494						
23	.184	.768	99.262						
24	.177	.738	100.000						

Extraction Method: Principal Component Analysis.

From table 6, the initial eigen value associated with each factor represent the variance explained by that particular component. The initial eigenvalue equal or greater than one indicates that first few factors i.e 1,2,3,4,5,6,7 with 5.702, 2.471, 2.182, 1.919, 1.743, 1.168, 1.092 respectively explained relatively large amount of variance and must be extracted. The first component factor account 23.7%, the second component factor account for 10.3%, the third component factor account for 9.1%, the fourth component factor account for 7.99%, the fifth component factor account for 7.3, the sixth component factor account for 4.9%, the first component factor account for 4.6%. whereas subsequent factors explained only small amount of variance.

**Thescreeplot**



From the Figure 6, the scree plot begins to tail off after five factors, we could probably justify retaining five to seven factor, component 1,2,3,4,5,6, and 7 can be selected on the component axis. This is evident from the total variance explained with the first component as 5.702, second component as 2.471, third component as 2.182, fourth component as 1.919, fifth component as 1.743, sixth component as 1.168, seventh component as 1.092

**Table 7: Rotated Component Matrix**

	Component						
	1	2	3	4	5	6	7
Lack of Rational Thinking by the Herdsmen	.133	.828	.154	.139	.048	.012	-.063
Illiteracy and lack of orientation	.161	.807	.237	-.053	-.039	-.022	-.031
Lack of training for the herdsmen	.163	.796	.159	.121	.070	.122	-.101
Lack of relationship between the herdsmen and Fulani	.257	.127	.399	.016	-.555	.130	-.307
Poor communication	.118	-.465	.211	.540	-.182	-.107	.092
Origin of the president	.236	-.191	.306	.265	.476	-.498	-.039
Dismantling of insurgency from their base	.304	.247	.172	.174	.707	-.077	-.073
Political ambition by the opposite parties	.371	.386	-.029	.106	.470	-.016	-.346
Corruption	.222	.105	-.196	.780	.181	.113	-.087
Lack of security	-.020	.226	.044	.755	.075	.022	.203
Injustices by the Judiciary	.190	.338	.732	.020	-.069	-.120	.134
Easy access to local arms by the Fulani herdsmen	.160	.205	.429	.130	-.350	-.335	-.277
Lack of establishment of ranches	.142	-.169	-.074	.114	.040	.146	.764
Slow decision making by the law maker	.567	-.021	.174	-.178	.099	.069	-.433
Lack of infrastructural facilities	.149	-.043	.733	.396	-.366	.100	.014
Land scarcity	.862	.097	.024	.145	-.095	.834	.148
Climate Change in the availability of water and forage crops	.042	.179	-.387	-.177	.079	-.070	-.110
Increase in cattle's population	.265	.059	.648	.133	.053	.290	-.235
Desertification	.531	.016	.482	.145	.103	-.299	.037
Low rainfall in the north	.694	.099	.184	.169	-.201	-.347	.182
Poverty among Nigeria	.656	.281	.038	.041	.171	-.326	.190
Selfishness among elites	-.068	.162	.023	.082	.035	.019	-.045
Increase in farmers population	.377	.039	-.217	-.450	-.161	.310	.399
Population explosion	.752	.126	.191	.090	.078	.114	.035

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 15 iterations.

Table 7, loading which varimax Rotation gives indicates that component 1 loads highly on land scarcity with 0.862. component 2 load highly on lack of rational thinking by the herdsmen with .828, component 3 loads highly on lack of infrastructural facilities with .732, component 4 load heavily on corruption with .780. component 5 loads highly on dismantling of insurgency from their base. The component 6 load highly on Land Scarcity with 0.83 while component 7 load highly on lack of establishment of ranches with .764.

### Discussion of Findings

The study was designed to investigate the methodological approach (Factor analysis) in evaluating factors that contributed to conflict between Fulani-herdsmen and farmers in Shiroro Local Government, Niger State. The result obtained revealed that 7 factors were identified as the most factors with one selected from each of 7 categories of these factors to include land scarcity, illiteracy and lack of orientation, corruption, lack of infrastructural facilities, dismantling of insurgency from their base and lack of establishment of ranches. The findings revealed that Land scarcity is the major factor that contributed to the conflict between famers and Fulani herdsmen in Shiroro Local Government, this may be due to the fact that most of the Fulani are non-indigenes and they do not own land but graze their livestock in host communities or they lacked where they could claim as their grazing routes and grazing. This is in agreement with the view of Campbell [8] that the conflicts between the Fulani herdsmen and the farmers in Nigeria has been endemic over the years fuelled by land insufficient and water use. And also, [15] in their study observed that there is difficulty for a majority of its citizens who require land for farming and grazing to have access to land. And this is a major cause of conflicts in the Benue valley region. However, most of Fulani in Shiroro Local Government Fulani has no formal education this may be the reason why lack of rational thinking was extracted as the second factor that contributed to conflict between Fulani herdsmen and the farmers. This disagrees with the view of [14]. That lack of Education is the major causes of problem between the grazers and their host crop farmers in Nigeria

### Summary

The incessant farmers-herder's conflicts in Nigeria have become a very serious source of concern to Nigerians. This is against the background that such conflicts in recent times are taking a very dangerous dimension which if not nipped in the bud, will eventually metamorphose into more widespread destruction capable of setting the whole nation ablaze. The aim of this study was to employed factor analysis to analysis the factors that contribute to conflict between the Fulani pastoralist and the farmers in Niger state. A valid questionnaire designed was used to source the data used from the field survey. Hence primary data were used. The study found that Land scarcity, lack of infrastructural facilities, Lack of rational thinking and lack of establishment of ranches were the factor extracted by the factor analysis. Then recommendation was made based on finding.

### Conclusion

It is evident from this study that conflicts between farmers and herdsmen hinged on land related issue, which has been heightened by pressure on land from the two conflict actors.

The analysis revealed that loading which varimax Rotation gives indicates that component 1 loads highly on land scarcity with 0.862. component 2 load highly on lack of rational thinking by the herdsmen with .828, component 3 loads highly on lack of infrastructural facilities with 0.732, component 4 load heavily on corruption with 0.780. component 5 loads highly on dismantling of insurgency from their base. The component 6 load highly on Land Scarcity with 0.83 while component 7 load highly on lack of establishment of ranches with 0.764. we can therefore conclude that Land scarcity is the major factor that contributed to crisis between Fulani herdsmen and Famers in Shiroro Local Government.

### Recommendations

The study therefore made the following recommendations as panacea to achieving peace in the Shiroro Local Government. Grazing reserves should be properly gazetted and customary owners paid adequate compensation to avoid the taking over of land by force.

*Journal of the Nigerian Association of Mathematical Physics Volume 61, (July – September 2021 Issue), 175– 182*



There is need for the State to review the existing laws as it relate to accessibility to land by members of community. That way there will be equity to avert constant conflict. In doing the review, issues like indigeneship and settlers rights in communities, the land use acts which have been abused largely by the upper class should be reconsidered for review in the front burner in the constitution review process. Law enforcement agencies should be alive to their constitutional roles and government must strengthen the security around the farmers and herders across the state by providing necessary training and state-of-the-art equipment required anytime there is conflict.

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