

Analysis of Herdsmen - Crop Farmers' Conflicts in Oyo state, Southwest, Nigeria.

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Abstract

This research applied the framework of Dual Concern Theory of Conflict Management to analyze the different patterns of herdsmen-crop farmers' conflicts and the implications on food security in Oyo state of Nigeria. Specifically, it examined the pattern and frequency of farm invasion by herdsmen, the types and value of crops affected, the reasons why herdsmen invade farms and the actions taken by crops farmers to mitigate the effects (Dual concern behavior exhibited by both parties) Cluster and multistage sampling techniques were applied in selecting respondents for the study. Descriptive (means) statistical tools was used for data summarization while Kendall's Coefficient of Concordance test (W) was the inferential tool applied for ranking (in order of significance) the factors measured in the study. Results reveal that crops mostly invaded by herders as cassava, maize, cashew and vegetables. Similarly the average income of crop farmers was generally low for most crops; implying that invasion of farms poses serious threat to food security in the area. The behavior exhibited by herdsmen was more of concern for the satisfaction of their own interests and believes that "there's not enough room in this conflict for the two of us, meaning it's either you or me. On the other hand crop farmers exhibited more of negotiation behavior by seeking for peaceful co-existence with herders.

Keywords: Herders, Crop Farmers, Conflict, Farm Invasion

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1.0 INTRODUCTION

The Fulani cattle herdsman have identified conflicts arising from land use as the most important problem they face in their occupation (Mustapha , 2015 and Abass 2013). However, in recent times, the problem of cattle rustling has brought about a new concept to cattle stealing/robbery and has compounded the crisis. The herding season begins from end of rainy season (October to December) with southward movement of the herd along rivers and stream valleys and this ends around the months of March and April. However, herdsman have now cultivated more permanent abode in their new found lands.

The herding activities towards the forest zone are a common experience in all the coastal countries of West Africa. This has been made easy due to the availability vaccines for the control of tsetse fly, widespread availability of veterinary medicine, increasing use of crossbreed cattle, availability of pasture, low cattle population densities, proximity to markets. In addition, the need for the migrant Fulani pastoralists to take advantage of the social life available in the host communities largely explain their migration and settlement in the savanna and the forested southern areas (Mohammed,2015, and Fabusoro and Oyegbami 2009). The movement of pastoralists into the savanna and the fringes of the forest zones, where they are regarded as “strangers” or “migrants” have brought with it numerous opportunities and challenges to both the pastoralists and the sedentary agricultural populations (Mustapha, 2015, Abass 2012).

Similarly it has been further established that social behavior can be better explained in terms of the aggregate of individual behaviors (social interactions). Thus, it assumes that responses to conflict borne risks are influenced primarily by group and social context and not individual cognition. Finally, the cultural model has contributed testable models and hypotheses that allow researchers to establish relationships between social affiliation and risk selection. Thus, cultural risk theorists have traditionally been concerned with groups and institutions rather than individuals (Bellaby, 1990). Indeed, they offer a theoretical perspective that views people’s responses to risks in terms of the former’s utility in maintaining a social group’s chosen form of organization. In other words, the cultural model posits that “risks are defined, perceived, and managed according to principles that inhere in particular forms of social organization” (Rayner, 1992). Studies (Stern & Dietz, 1994) have also established that certain value orientations (e.g. egoistic, social-altruistic values) influence individual perceptions of risk and underpin social

movements (e.g. Fulani herdsmen migration to resource rich areas despite the uncertainties being faced).

2.0 Literature Review

2.1 Issues and Policies related to Crop farmers- Herders' Conflict in Nigeria

Research supports the fact that the Fulani pastoralists had immigrated into Hausa land (Northern Nigeria) from the Senegambia valley in the western Sudan (Adebayo, 1995). It was also reported that they are found in every corners of West African savanna landscape in small groups. They migrate with their compound family members, reflecting the male headed (patrilineal) family structure. The deteriorating environmental conditions, land degradation, recurrent drought, tendency for more sedentary lifestyle due to modernization and closeness to the market are the findings of researchers for the current incursion of herders to other locations south of Nigeria (Isine,2015, Mustapha,2015, Abass 2013, Tenuche & Ifatimehin,2009). The last two decades have further witnessed even more intense migration of the Fulani herdsmen further southwards to the humid tropical forest region.

A plethora of information abound on the argument that the practice of pastoral livelihoods has been frequently pointed out as outdated in many areas of the world; however, it has been argued that the practice is still strategic to food security in vulnerable areas in supporting pastoralists' subsistence, contributing to the provision of meat, milk and hides and skins to town and urban dwellers and to the national economies of poor countries. However, rather than concentrate on utilizing plant resources from marginal lands not currently used for crop production activities, the herders infringe on crop farmers resources and even destroy large hectares of cropped lands (Okeke, 2014; Aziwike, 2010; Adekunle & Adisa, 2010; Tenuche and Ifatimehin, 2009; Nori, 2006; Nori *et al.*, 2005; Thebaud & Batterbury, 2001 and Sandford and Habtu, 2000).

2.2 Conceptual model for this research: Model of conflict analysis: The “Dual-Concern Model”

The conceptual model for this research is the “dual-concern model” of negotiation behavior; which postulates that; there are two dimensions of concerns of disputants (Rahim 2011). The first dimension is concern for the satisfaction of one's own interests. Conflict theorists refer to this dimension as “assertiveness,” “concern for self,” or “agency.” The other dimension is

concern for the satisfaction of the interests of the other disputant. This dimension is referred to as “cooperativeness,” “concern for other,” “concern for relationships,” or “communion” (Pruitt and Rubin, 1986). However these two dimensional extremes of behaviors are polar opposites, although with some intermediate variants that exhibit these extreme attributes in lesser degrees (Dual concern model). Thus, *if disputants are concerned about their own well-being, they will be willing to harm the other disputant; on the other hand if disputants are concerned about the well-being of the other disputant, they will be willing to let the other walk all over them*(Deutsch, 1973). Although this last extreme may not be real, but it is believed that ‘fatalists tend to feel powerless and accept what is imposed on them as they view the occurrence and outcome of events as subject to fate and chance’ (Pearson educational, 2010 and Rubin, Pruitt & Kim 1994). Thus, in this model of the negotiation process, one can either act in one’s self-interest, tough and nasty, or be cooperative, and risk losing all one has. Thus those who exhibit concern for the satisfaction of one’s own interests believe that “there’s not enough room in this conflict for the two of us, meaning it’s either you or me. This either-or proposition reflects the invisible veil, in which self-protective behavior in a conflict must always be competitive, or adversarial.

3.0 Methodology

3.1 Study area

The research was carried out in Oyo State, located 8⁰ north and 4⁰ east of the equator and covers approximately an area of 28,454 square kilometers. It is an inland state in south-western Nigeria, with its capital at Ibadan. Oyo state is bounded by four states namely Kwara State in the north, Osun State in the east, in the south by Ogun State and in the west partly by Ogun State and partly by the Republic of Benin. The landscape consists of old hard rocks and dome shaped hills, which rise gently from about 500 meters in the southern part and reaching a height of about 1,219 meters above sea level in the northern part. The soils ranged between sandy loam to gravelly sub-types(Egbeda, Iwo and Origo series)Some principal rivers such as Ogun, Oba, Ofiki, Sasa, Oni, Erinle and Osun originate in this highland.

Nigeria’s is located within the region, exhibiting a mix of dry and wet seasons with relatively high humidity. The dry season lasts from November to March while the wet season starts from March/April and ends in October/November. Average daily temperature ranges between 25 °C (77.0 °F) and 35 °C (95.0 °F), almost throughout the year. Oyo State though homogenous, mainly inhabited by the Yoruba ethnic group who are primarily agrarian but exhibit preference

for living in high-density urban centers, harbors several Nigerian ethnic (Hausa/Fulani, Igbo, Egede, Ebira, Ghara, Zuru, Gogobiri, Nupe etc) as well as foreign inhabitants. The major crops cultivated by farmers include maize, cassava, yam, cocoyam, rice, cocoa, cashew, kola, oil palm, leafy and fruit vegetables as major crops. Local animals (Sheep, Goat, chickens and to some extent cattle) are also raised though mainly on free range system

3.2 Research Design and Methodology

3.2.1 Field Site. The study took place over a 12-month period in Oyo state. As a transformed derived savannah landscape and Oyo State's diversified economy offers opportunities for both the herding and marketing sectors for herdsmen and their wives. Oyo state has a high concentration of Fulani/Bororo migrants because of the availability of pastures for longer periods of the year which makes Oyo state appropriate field site for this project.

The Survey Sampling techniques included Cluster and multistage sampling techniques for selecting respondents for the study. The large number of herdsmen residing (some illegally) in the area may not encourage a systematic random sample. Snowball sampling is a common method for building a sampling frame for small populations that are difficult to find such as undocumented immigrants (Bernard 2002). Efforts were made to sample respondents independently of one another based on the compiled list and on previous encounter with herdsmen. Informants were selected using purposive sampling to ensure statistical representation. Interviews were conducted to elicit information on the variables contained in the objectives of the research. Attempts were made to ensure inclusion of female respondents.

Interviewees were recruited through diverse sources; self-help groups, ethnic associations, religious, and government officials especially law enforcement agents. A sample size of 450 (through proportionate sampling) respondents comprising of crop farmers and herdsmen residing in the study area were included in the research.

3.2.2 Actual data collection was achieved through the following steps:

- a) Snow-ball / informant rating techniques was used to locate communities and enlist the Fulani and Crop farmers for the study
- b) Observation techniques were recorded using various techniques, like field notes, camera and mapping. In addition to carefully documenting observations, conversations and informal interviews were carried out for data collection.

c) Semi structured Interviews were further adopted to evaluate herdsmen-farmers' crisis behaviors on the bases of the degree of institutionalization of infringement activities, involvement in activities and intensity using a Likert-type scale ranging from low to high respectively.

Measurement of conflict behavior (Dependent variable). Data were collected on activities leading to conflict using variables developed from the dual concern theory elements (*Problem solving, forcing/Dominating, Yielding, Avoiding and Collaborating*) from which Likert-type scales were developed to measure the level of engagement in different conflict activities. The first dimension (variable group) is concern for the satisfaction of one's own interests' among the two sets of respondents. Conflict theorists refer to this dimension as "assertiveness," "concern for self," or "agency. The other dimension is concern for the satisfaction of the interests of the other disputant. This dimension is referred to as "cooperativeness," "concern for other," "concern for relationships," or "communion" (Pruitt and Rubin, 1986). It is believed that the two dimensions are polar opposites, thus, if disputants are concerned about their own well-being, they will be willing to harm the other disputant. The scores obtained from the two dimensions were further subjected to rank order tests in order to determine the significance of the elements (Ofem and Bassey, 2014 and Pruitt and Rubin, 1986). There were five-point responses from always to never. The summative score was the score for conflict behavior.

4.0 Results and Discussion

4.1 Table 1: Socio-economic characteristics of crop farmers

Table 1 below shows the socio-economic characteristics of crop farmers interviewed in the study. The results indicate that the average age of the crop farmers as 51.66 years, meaning that they are still active in production. The average household size of 8 persons indicates that they have large household. Other variables recorded are many (31.55) years of farming experience, moderate cost of labour (₦ 111,905.21), low exposure to other cultures, low contacts with extension service (0.7) and generally low average income from most agricultural products.

Table 1: Crop farmers' descriptive characteristics

Variable	Mean
Age	51.66
Household size	8.06
Highest level of schooling	1.78
Years spent in school	3.40
Farm size	4.01
Cost of labour/annum (₦)	111905.21
Years of farming experience	31.55
Extent of external exposure	03
Frequency of contact with extension agents in the last one year	0.72
Average income from maize(₦)	137464.45
Average income from cassava (₦)	103710.90
Average income from yam (₦)	112734.60
Average income from vegetables (₦)	28729.86
Average income from cashew (₦)	13914.69
Average income from cowpea (₦)	473.93
Average income from others (₦)	18654.03
Number of times farmers' farm invaded	12.00

Source: Data analysis, 2020

Ranking of the significance of crops destroyed by herdsmen

Table 2 shows the distribution of respondents by significance of crops destroyed by herdsmen. The claims of farmers by significance of crops destroyed by herdsmen in the rank order include cassava (5.62), maize (5.33), cashew (4.90), yam (3.09), vegetables (3.05), sorghum/millet (3.02) and cowpea (3.00). Based on the finding, cassava was the most significant crop destroyed by herdsmen. No wonder, cassava was most significant crop destroyed simply because cassava can be converted to several forms for human and livestock consumption. This development if not properly checked could lead to food scarcity leading to poverty and starvation. Basically, the destruction of crops especially the arable crops have direct impact on

the lives and livelihoods of those involved. They also disrupt and threaten the sustainability of pastoral production and agriculture in West Africa (Moritz, 2010). This destruction of crops reinforces circles of extreme poverty and hunger, and destroys social status, food security and affects mostly the most marginalized groups that include women and children. This affects education of children leading to obstacles in their development and mass displacement. Consequentially, this threatens the existing mutual farmer-pastoralist relationships. The Chi-square test statistic value ($X^2 = 674.295$; $p\text{-value} \leq 0.05$) used to test the significance of the Kendall's test ($W = 0.142$) indicates significance of the ranking of the reasons adduced by herders' for invasion of farms.

Table 2: Ranking of the significance of crops destroyed by herdsmen

Ranking of the significance of crops destroyed by herdsmen	Mean	Rank
Cashew	4.90	3 rd
Cassava	5.62	1 st
Cowpea	3.00	7 th
Maize	5.33	2 nd
Yam	3.09	4 th
Vegetables	3.05	5 th
Sorghum/millet	3.02	6 th

N	211
Kendall's W	0.533
Chi-square	674.295
df	6
p-value	0.000

Source: Data analysis, 2020

Patterns of Conflict Behaviors Exhibited by Disputants

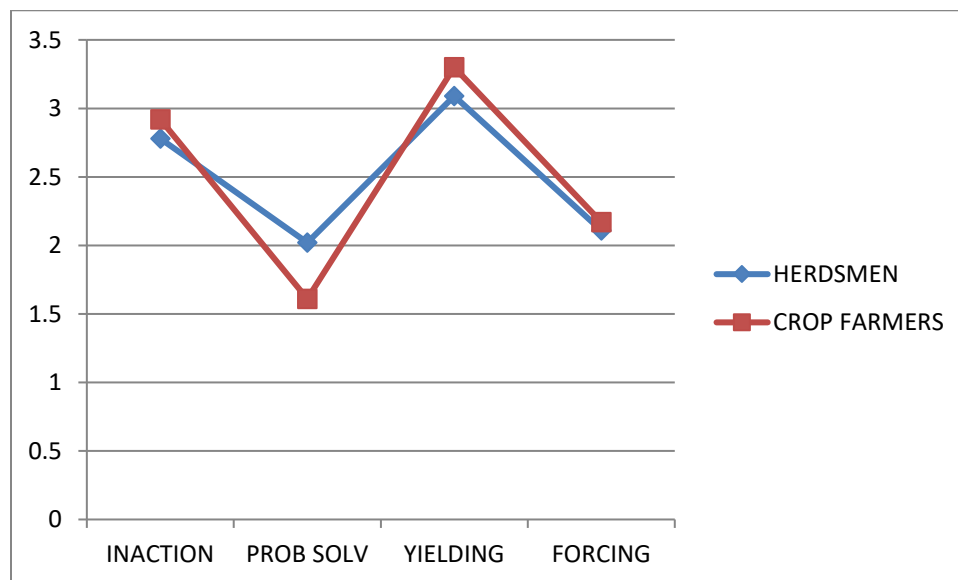
The behaviors exhibited by both herders and crop farmers include inaction, problem solving, yielding and forcing (Table3). With respect to the graphical illustration of the various behaviors exhibited by the herdsmen and crop farmers using their weighted mean scores (figure1) is discussed as: for the *inaction behavior* the crop farmers exhibited milder behavior and were

followed closely by the herdsmen. The implication is that the crop farmers may be overwhelmed by the incessant invasion of their farms, lack of timely intervention from the traditional authorities and the law enforcement agents as well as the violence that may result in their communities if they dare confront the herdsmen, and most profoundly may be inhuman. The attitude exhibited by the herdsmen (despite being largely non-land owners), feel nothing should be done to stop their animals from grazing on any available land, including farmlands. For the self-reported responses on *problem solving behavior* it seems the herdsmen were more willing to *explore avenues to proffer solution to the conflict* compared to the crop farmers. This may be because the crop farmers are already perturbed by the menace of the herdsmen and activities on their various farmlands, and belief that the herdsmen should readily accept measures to bring about peaceful co-existence between the two groups of land users. This could be the reason why the herdsmen may have exhibited attitude aimed at reaching consensus or seeking ways to shift ground on issue of conflict for the sake of their livestock enterprise. For the *yielding behavior*, the crop farmers were more willing reach consensus than the herdsmen. By implication the crop farmers were more willing to forestall an event of violence and bloodshed. Hence they are focused on reaching consensus. Finding common ground and ways to shift ground on the issue of crop destruction, and the herdsmen had no choice but to closely relate with the farmers to reach consensus and consider common ground shared in the interest of their peaceful co-existence, even as they both use the available land resources. For the forcing behavior both the herdsmen and crop farmers seem to be ready to engage one another even as their weighted mean scores plotted tend to match (Kum, 1983). Without timely intervention from mediating authorities, the aggrieved, depressed and pained crop farmers may result to forceful measures that may stir up violence which may lead to violence. The behavior exhibited by herdsmen was more of concern for the satisfaction of their own interests and believes that “there’s not enough room in this conflict for the two of us, meaning it’s either you or me. On the other hand crop farmers exhibited more of negotiation behavior by seeking for peaceful co-existence with herders.

Table 3: Patterns of Conflict Behaviors Exhibited by Disputants

<i>Inaction</i>	<i>Problem Solving</i>	<i>Yielding</i>	<i>Forcing</i>
<i>No serious response or action taken after farm invasion</i>	<i>Exploring avenues to proffer solution</i>	<i>Reaching consensus or seeking for common ground/ways to shift ground on issue of conflict</i>	<i>Employing forceful measures which could result to blood shed</i>

Source: Deutch, (1973) and Rahman, (2011)



Behavior Exhibited By Herdsmen And Crop Farmers

Reasons for herders’ invasion of farms

Table 4 shows the distribution of respondents by reasons for herders’ invasion of farms. The reasons as adduced by herders for invading farms in the rank order include shortage of labour force to control the cattle (7.54), scarcity of grass (7.54), the need to feed their cattle by all means (7.41), herdsmen are self - centered (6.90), herdsmen are heartless (6.55), and because farmers are not on farms (6.21). Other reasons advanced for herders’ invasion of farms are as

follows: the fact the road is too narrow for the cattle to pass (6.08), carelessness on the part of herdsmen (5.95), grazing land is too small (5.95), due to bush burning (5.95), farms are located close to river (5.95) while others claimed ignorance for invasion of farms (5.95). The findings therefore that shortage of labour force to control the cattle and scarcity of grass are the major reasons for herders' invasion of farms. This implies that shortage of labour force to control the cattle and scarcity of grass which therefore forced cattle to invade the farms resulting into economic losses to crop farmers, are preventable excuses. Grass had always been the major resource requirement for herders, especially for the survival of livestock. All the aforementioned reasons for farm invasion by herdsmen could trigger long lasting conflicts resulting into loss of human life, animal, houses, stalls and other valuable items of high premium if adequate resolution strategies are not implemented. Agreeably, some researchers have linked this crisis to the theory of eco-violence (Okoli and Atelhe, 2014), where environmental factors and exploitation of scarce resources leads to conflict and violence. This may be linked to the explanation advanced by some researchers about the dwindling grazing resources (land, pasture etc.) and poor management of existing grazing reserves (Mustapha , 2015, Abass 2013, and Adisa & Adekunle2010) as culpable. Similarly, other researchers (Odoh and Chigozie, 2012; Abbass, 2012) relate the reason for herders' invasion of farms and causes of conflict to the global climate change and the contending desertification and aridity that has reduced arable and grazing lands, forcing pastoralist to move southwards in search of pasture for their livestock. The Chi-square test statistic($X^2 = 218.356$; p-value = 0.01) used to test the significance of the Kendall's test ($W = 0.142$) indicates significance of the ranking of the reason for herders' invasion of farms.

Table 4: Reasons for herders' invasion of farms

Reasons for invasion	Mean	Rank
I do not know	5.95	8 th
The road is too narrow for the cattle to pass	6.08	7 th
Carelessness on the part of herdsmen	5.95	8 th
Grazing land is too small	5.95	8 th
Short of labour force to control the cattle	7.54	1 st
Herdsmen are heartless	6.55	5 th

Herdsmen are self-centred	6.90	4 th
Because farmers are not on farms	6.21	6 th
Because they want to feed their cattle by all means	7.41	3 rd
Due to bush burning	5.95	8 th
Scarcity of grass	7.54	1 st
Farms are located close to river	5.95	8 th

N	140
Kendall's W	0.142
Chi-square	218.356
df	11
p-value	0.000

Source: Data analysis, 2020

Farmers' reaction to farm invasion

Results in table 5 show the distribution of respondents by farmers' reaction to farm invasion. The farmers' reaction to farm invasion in a ranked order include reporting to traditional authority (14.55), law enforcement agencies (police and immigration) (14.28), report to their parents/guidance (13.13), depressed (12.18), it pains us (9.87), call the attention of other farmers for help (9.40), call for proper settlement (9.06) and by attacking the cattle (8.92). Other actions taken by farmers are; tracing the track of invading cattle until they are found (8.92), arrest of cattle until necessary payment is done (8.92), employing vigilantes to arrest them (8.92), calling them and settle it amicably (8.92), scattering their cattle (8.92), pursue them and scatter their animals (8.92), no action taken by farmers (8.92) and by collection of fine (8.92). It is evident from the findings of this study that farmers reacted in different ways to their farms invasion by herdsmen; however traditional authorities and law enforcement agents were the approaches adopted in resolving the conflicts. Intervention of community leaders/ traditional leaders and law enforcement agencies were accepted as strategic towards ameliorating the effects of farm invasion by herdsmen in order to avoid physical attacks on herders and their animals. Furthermore, this may be due to the fact that traditional authorities and law enforcement agents are respected among most communities based on their verse knowledge of community terrain

and settlement patterns in the area (Agyemang, 2017). They can impose sanction on deviants probably as a means of stabilizing and maintaining peaceful co-existence of every member of their community. This finding agreed with that of Olaosebikan (2006) which observed that community leaders/security agents most times asked the herdsmen to pay compensation or in case of excessive damages, the state or local government comes in aid of the crop farmers who are mostly affected in order to resolve the conflict. In the same vein, the finding corroborates earlier finding by Olanrewaju (2012) which identified the use of vigilante group as a major preventive strategies against the incidence of agro-crime in the study area.

Table 5: Farmers' reaction to farm invasion

Farmers' reaction to farm invasion	Mean	Rank
Depressed	12.18	4 th
Attacking the cattle and are wounded	8.92	10 th
It pains us	9.87	5 th
I traced their leg till I found them	8.92	10 th
Report to traditional authorities	9.26	7 th
Arrest of cattle until necessary payment	8.92	10 th
Employing vigilantes to arrest them	8.92	10 th
Calling them and settle it amicably	8.92	10 th
Reporting to police officers	8.92	10 th
We scattered their cattle	8.92	10 th
Actions of farmers retaliatory actions/fighting them	9.06	8 th
Police involvement	14.28	2 nd
Traditional authority involvement	14.55	1 st
Pursue them and scatter their animals	8.92	10 th
Report to their parents/guidance	13.13	3 rd
No action taken by farmers	8.92	10 th
Fine collection	8.92	10 th
Call the attention of other farmers for help	9.40	6 th
Call for proper settlement	9.06	8 th

N	140
Kendall's W	0.407
Chi-square	1024.874
df	18
p-value	0.000

Source: Data analysis, 2020

Concluding Remarks

This study provides empirical evidence of the patterns of conflicts between herders and crop farmers in Oyo state, Nigeria. The study further established the various crops commonly invaded and the actions taken by farmers which involved more of finding middle course of mediation by involving traditional leaders and law enforcement agents.

Policy Recommendations

The following policy recommendations were derived from the study, namely that:

1. Herdsmen should be effectively monitored to respect the rights of farmers to cultivate their crops without hindrance in order to ensure food security.
2. Mediation options are open and safe for mitigating conflict arising from the destruction of field crops by herders.
3. Since herder-farmer conflicts are complex and escalates gradually, it is important to put restraining policies (Restricting open grazing, encouraging range land development) in place in order to reduce or out rightly eradicate conflict between the parties.

References

- Abbass, I. M. (2012). No Retreat No Surrender: Conflict for Survival between Fulani Pastoralists and Farmers in Northern Nigeria. *European Scientific Journal*, Vol. 8, No.1, pp. 331-346.

- Mustapha, A. R. (2015) Synthesis paper on lessons learned from responses to violent conflicts in Nigeria since 2009: with special reference to northern Nigeria¹. SRP research papers.
- Adebayo, A. G. 1995: 'Of man and cattle: a re-consideration of the tradition of origin of pastoral Fulani of Nigeria' *History in Africa* 18 (1991), pp 1-21
- Adisa, R.S. and Adekunle, O. A. (2010) Farmer-Herders Conflicts: A Factor Analysis of Socio-economic Conflict Variables among Arable Crop Farmers in North Central Nigeria. *J Hum Ecol*, 30(1): 1-9
- Agyemang, E. (2017) Farmer-Herder Conflict in Africa: An Assessment of the Causes and Effects of the Sedentary Farmers-Fulani Herders Conflict. A Case Study of the Agogo Traditional Area, Ashanti Region of Ghana.
- Bellaby, P. (1990). To risk or not to risk? Uses and limitations of Mary Douglas on risk acceptability for understanding health and safety at work and road accidents. *The Sociological Review*, 38, 465-83.
- Bernard, H. Russell 2002 *Research Methods in Anthropology: Qualitative and Quantitative Methods*. Walnut Creek: AltaMira Press.
- Fabusoro, E. and Oyegbami, A. (2009). Key issues in the livelihoods security of migrant Fulani pastoralist: empirical evidence from Southwest Nigeria *Journal of humanities social sciences and creative arts*, 4(2): 1-20.
- Isine ,I. (2015)The Herders's Cattle and the Crops of Farmers. *Premium Times* December 15.
- Kum, J. S. E.1983 *The Farmer-Grazier Dispute in Aghem: An Ethnic or an Economic Problem?* M.A. thesis, University of Yaoundé.
- Moritz, M. (2010). Understanding Herder-Farmer Conflicts in West Africa: *Outline of a Processual Approach*. Society for Applied Anthropology: in *Human Organization*, Vol. 69, No. 2, pp. 34-35.

Nori, M. (2007): 'Mobile livelihoods, patchy resources and shifting rights: approaching pastoral territories' Working Discussion Paper, International Land Coalition.

Nori, M., Switzer, J. and Crawford, A., 2005 - Herding on the Brink: Towards a Global Survey of Pastoral Communities and Conflict - An Occasional Paper from the IUCN Commission on Environmental, Economic and Social Policy; Gland (Ch)
<http://www.iisd.org/publications/pub.aspx?id=705>

Nweze, N. J. (2005). Minimizing farmer-herder conflicts in Fadama Areas through Local Development Plans: Implications for increased crop/livestock productivity in Nigeria. Paper presented at the 30th Annual Conference of the Nigerian Society for Animal Production, held 20th – 24th March, pp33- 40.

Odoh, Olanrewaju, A.D. (2012). An assessment of the impact of corporate social responsibility on Nigerian society: The examples of banking and communication industries. *Universal Journal of Marketing and Business Research*, 1(1):17-43.

Ofem, O Ofem Inyang, Bassey (2014) Livelihood and Conflict Dimension among Crop Farmers and Fulani Herdsmen in Yakurr Region of Cross River State Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy. Pp 512-516.

Okeke, Okechukwu Edward, (2014) Conflicts between Fulani Herders and Farmers in Central and Southern Nigeria: Discourse on Proposed Establishment of Grazing Routes and Reserves .An International Journal of Arts and Humanities Bahir Dar, Ethiopia Vol. 3 (1), S/No 9, 66-84

Okoli, A. C. and Atelhe, G. A. (2014). Herdsmen against natives: A political ecology of Herder/Farmer conflicts in Nassarawa State, Nigeria. *American International Journal of Contemporary Research*, 4(2): 76-88.

Olaosebikan, A. J. (2006). Conflicts in Africa: Meaning, causes, impact and solutions. *African Research Review*, 4(4), 549-560.

Omojola A.S and Fasona M.J (2005) Climate Change, Human Security and Communal Clashes in Nigeria, Paper at International Workshop in Human Security and Climate Change. Holmen Fjord Hotel, Oslo Oct. 21-23, 2005, Pp 3-13.

Pearson, V.M.S., & Stephan, W.G. (1998). Preferences for styles of negotiation: A comparison of Brazil and the U.S. *International Journal of Intercultural Relations*, 22, 67-83.

Pruitt, D.G., & Rubin, J.Z. (1986). *Social conflict*. New York: McGraw-Hill.

Rahim, M. A. (2011). *Managing conflict in organizations*. Third Edition. Transaction Publishers.

Rayner, G. (1992). Cultural theory and risk analysis. In S. Krimsky and D. Golding (Eds.), *Social theories of risk*. Westport, Connecticut: Praeger.

Sanford S, Habtu Y (2000). On emergency response interventions in pastoral areas of Ethiopia: Report of the pastoral appraisal Team. DFID Ethiopia, Addis Ababa.

Tenuche Marietu S. and Ifatimehin Olarewaju (2009) Resource conflict among farmers and Fulani herdsmen: Implications for resource sustainability. *African Journal of Political Science and International Relations Vol. 3 (9), pp. 360-364*.

Thebaud B, and Batterbury S (2001). Sahel pastoralists: Opportunism, struggle, conflict and negotiation: A Case Study from Eastern Nigeria. *Global Environmental Change* 11:69-78.