



**CAUSES OF FARMERS-PASTORALISTS' CONFLICT AND MITIGATION:
A PANACEA FOR SUSTAINABLE NATURAL RESOURCE MANAGEMENT IN
WESTERN ZONE OF BAUCHI STATE, NIGERIA**

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ABSTRACT

This study assessed the causes of farmers-pastoralists' conflict and mitigation: A panacea for sustainable natural resource management in western zone of Bauchi State, Nigeria. Data were collected using questionnaire using descriptive statistics as analytical tool. Purposive simple random sampling technique was used to select 75 arable farmers and 75 pastoralists. Purposive sampling was employed to be enabling the researcher to capture pastoralist who were sparsely distributed. The result shows that most (73.91%) of the respondents perceived that conflicts do occur in the study area. The result also reveals that 59.40% of the respondents agreed that conflict frequently occurred only during rainy season. The results further reveals that, the major causes of conflicts include lack of defined cattle route (54.05%), poor government attitude toward agricultural development (52.03%) and inadequate grazing reserves (51.35%) among others. Also, 22.30% and 20.95% of the respondents reported that, pastoralist-fisher folks and farmer-hunter conflicts also occurred, respectively, in the study area. The result further reveals that major losses incurred due to conflicts include destruction of crops (92.46%), body injury (89.59%), loss of Livestock (57.32%), destruction of houses (52.44%) among others. Seventy five percent of the respondents perceived that youth were the major victims of conflict in the study area. The major constraints to conflict prevention and management include inadequate social infrastructures (91.21%), poverty (86.49%) and failure of government to implement agricultural policies (84.49%) among others. The study recommend that provision of adequate infrastructures (e.g., dams, grazing reserves, etc.) and sensitizing pastoralists to establish private grazing paddocks and boreholes will stem down the occurrence of conflict and subsequently enhance sustainable livestock production in the study area.

Key words: Clashes, Conflict, Farmers, Mitigation, Pastoralists.

INTRODUCTION

Africa is a vast and varied continent made up of countries with specific histories and geographical conditions as well as uneven levels of economic development. The causes of conflicts in Africa reflect the continent diversity and complexity. While some causes are purely internal and portray specific sub-regional dynamics, others have a significant international dimension. Notwithstanding these differences, African conflicts show a number of crosscutting themes and experiences (Bujra, 2002). The most important cause of conflicts is human population increase and the globalization of the economy. Such conflicts reflect both point resources (mines, farms, reserves) and eco-zonal conflicts (water, grazing and hunting rights). Although attempts to involve the community have been partially successful in relation to



reserved land, conflict over extensive and patchy common property resources such as wetlands and grazing has made them more difficult to conserve and manage (Blench, 1996).

Conflicts are caused by several factors with varying dimension. Blench and Dendo (2003) related that the causes of farmer – pastoralist' conflict include among others; increased competition of pastoralists for a dwindling 'stock' of grazing land as agriculture has expanded, the collapse of the system of *burti* or cattle tracks, intended to separate livestock from farms, movement of pastoralists into new terrain, where language, religion, culture and landholding patterns are unfamiliar, and a declining importance of the market for dairy products. Umar (2009) opined that the major cause of conflicts between farmers and herders were found to include crop damaged by herders' livestock, encroachment of cattle corridors and grazing lands, and blockage of water points by farmers. Adebayo and Olaniyi (2008) indicated that, the predominant manifest causes of conflict are the crop damaged by the pastoralist and blockage of water points by the farmers. Similarly, Ofuoku and Isife (2009) in a survey conducted in Delta State disclosed that the causes of farmer- pastoralist' conflicts include destruction of crops, contamination of streams by cattle, over-grazing of land, disregard for local traditional authorities, female harassment, harassment of nomads by youths of host communities, indiscriminate bush burning, defecation of cattle on roads, cattle theft, and straying of cattle.

On the other hand, West African Network for Peace building [WANEP] (2011) have posited that the main causes of farmer- pastoralist' conflicts include misperceptions and deep-seated inter-communal prejudice between farmers and herders, and little recognition or consideration of the concerns of Pastoralism in national policies of countries in the region as well as ignorance about the benefits that can be derived from transhumance for host communities as well. The adoption of new irrigation techniques, and the sedentarisation schemes for transhumant pastoralists that accompanied the introduction of capitalism in West Africa, disrupt the production symbiosis of *Fulbe* and Farmers in addition to increasing the likelihood of conflict between them (Mark and Anuiska, 2010).

Global Center for Responsibility to Protect [GCRP] (2010) disclosed the following causes of conflict in Nigeria; nationwide problem of official discrimination against populations labelled as non-indigenous, conflict over control of political power between primarily 'settler' and 'indigenous' groups and the manipulation of ethnic and religious identities to serve political and economic interests, competition between primarily Christian farmers and primarily Muslim pastoralists over access to cultivable land and water and prevailing culture of impunity (i.e., freedom from unpleasant consequences/exemption from punishment) which is prevalent in Nigeria.

Pastoralism has historically been a sustainable livelihood option to most people in Sub-Saharan Africa (SSA). However, increased environmental stresses and changes in policies and practices, including restricting access to land and water, have increased the environmental impacts of Pastoralism. Since many pastoral systems operate in dry lands, access to water is a limiting factor when determining herd sizes for many individuals and communities. As such, there is a high risk that competition for water may lead to overuse (Ahmed, 2010).

Farmer-pastoralist conflicts have resulted in reduction in output and income of crop farmers as a result of the destruction of crops by cattle and indiscriminate bush burning. Many farmers lost part or whole of their crops. This meant reduced yield which translated into low income on the part of the farmers who take farming as a major occupation. This tends to negatively affect their savings, credit repayment ability, as well as the food security and economic welfare of urban dwellers that depend on the farmers for food supply. This discourages the farmers and agricultural development. Also, the conflicts cause displacement of farmers and herdsmen. Such displaced farmers have become a source of liability to other farmers whom they have to



beg for food for themselves and their families. This has created a vicious cycle of poverty in such communities. A lot of killing by the nomads and reprisal killing of nomads by the host communities takes place during the conflicts. Herds of cattle belonging to the nomads are also killed. Also, some of the victims (young and old) are injured or maimed. This has reduced some women farmers to the status of widows. All these have drastically reduced agricultural labour force in the area. In the process there are reported cases of proliferation of small arms and ammunitions since the host farming communities and the herdsmen saw each other as arch enemies. This is inimical to the spirit of integration of Nigerian tribes or ethnic groups and peaceful co-existence (Ofuoku and Isife, 2009).

The major objective of this study was to assess the causes of farmers- pastoralists' conflict in the study area. The specific objectives include to; ascertain the occurrence of farmer-pastoralists' conflict; identify and describe the causes of farmer-pastoralist' conflict; examine the category of people affected by conflict in the study area and identify the constraints to conflict prevention and management.

MATERIALS AND METHODS

The Study Area

This study was conducted in western Zone of Bauchi State, Nigeria. The zone consists of seven Local Government Areas including Alkaleri, Bauchi, Bogoro, Dass, Kirfi, Tafawa Balewa and Toro. The Zone has population of 2,497,782 people representing 53.41 percent of the population in the state (National Population Census [NPC] (2006). The State is characterized by two distinct vegetative zones which include Northern Guinea Savannah and Sudan Savannah. The study area is bounded by Gombe State to the east, Plateau State to the south and Kaduna State to the West (BASG, 2010). Crops and livestock farming is the major occupation of the people in the study area. Pastoralism is practiced mostly by the Fulanis. Crop farming is ranked highest and this enhanced the designation of the area as agrarian State.

Sampling and Analytical Techniques

The sampling frame for this study was drawn from farmers and pastoralists, in three (3) selected local government areas of Western Zone of Bauchi State. Multi-stage random sampling technique was employed for this study. Firstly, three LGAs were selected using simple random sampling method which includes Kirfi; Tafawa Balewa and Toro. Secondly, five villages were selected from each L. G. A. using systematic random sampling technique making a total of fifteen villages. The selected villages include Bara, Kaloma, Kaljanga, Cheledi and Lariski (Kirfi L.G.A), Bununu, Lere, Gital, Boto, and Zwal (Tafawa Balewa L.G.A.) and Zalau, Tulu, Ganye, Madugu and Zaranda (Toro LGA). Finally, ten respondents (seventy five each for farmers and pastoralists) were selected from each village making a sample size of 150 (75 each for farmers and pastoralists). Arable farmers were selected using simple random sampling technique. On the other hand, purposive sampling was used in the selection of pastoralists, this was to capture pastoralist who are sparsely distributed.

The research utilized primary field data collected using questionnaire administered with the assistance of village extension agents (VEAs) to respondents. Data were analyzed using descriptive statistics such as frequency tables and charts.

RESULTS AND DISCUSSION

Figure 1 portrayed the perception of farmers-pastoralists on the possibility of conflict occurrence in the study area. The result shows that most (73.91%) of the respondents perceived that conflicts do occur among them in the study area. This agrees with Oladele and Oladele

(2011) that most of the respondents in Oyo State indicated the incidence of conflicts between crop farmers and nomadic pastoralists in their respective communities.

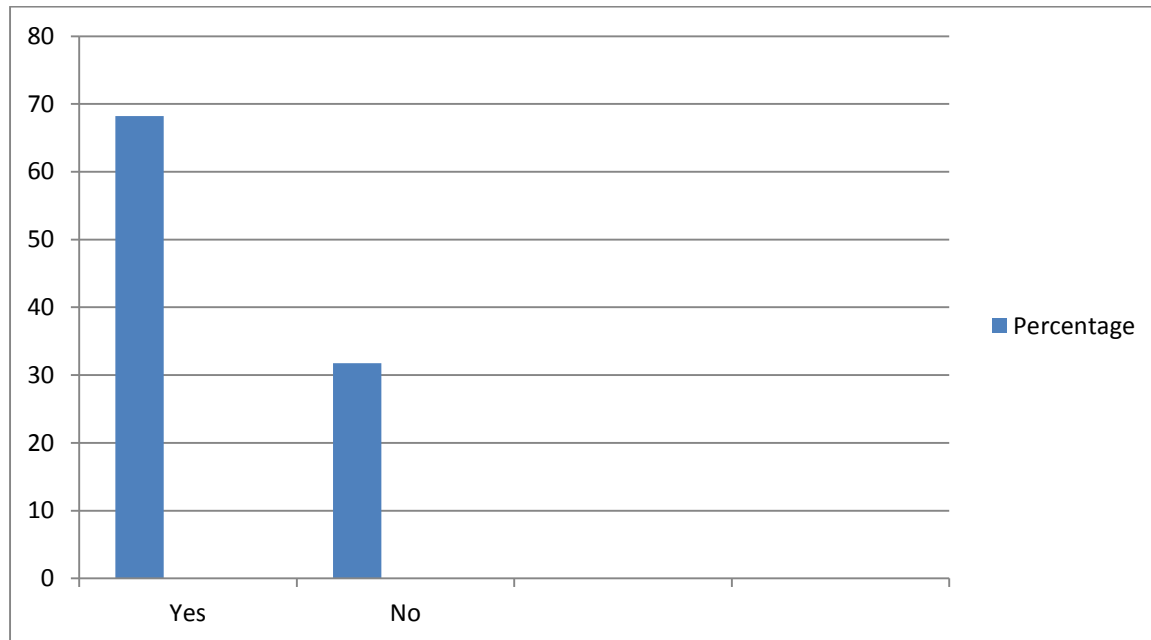


Figure 1: Distribution of farmers-pastoralists based on occurrence of conflict
 Source: Field Survey, 2012.

The results of respondents' perception on the period of conflict and the frequency of occurrence are presented in Table 1. The result in Table1 shows that 59.40% of respondents had the opinion that, conflict occurred during rainy season only. The result also reveals that 57.40% of the respondents agreed that conflict occurred seasonally. Ajuwon (2005) declared that, conflicts between farmers and pastoralists have been occurring almost annually in the last five decades in northern Nigeria.

Table 2 depicts respondents' perception on the causes of farmer-pastoralist conflicts in the study area. The result shows that the major causes of conflicts include lack of defined cattle route (54.05%), poor government attitude toward agricultural development (52.03%) and inadequate grazing reserve (51.35%) among others. The finding is closely related to Pur *et al.* (2006) who revealed that, insufficient grazing reserves and encroachment in to stock route as the major cause of conflicts. This also agrees with study conducted by Ajuwon (2005) who confirmed that, conflict is also caused by non-development of grazing reserves, because only 10% of the available grazing reserves are functional and most of the land earmarked as grazing reserves, stock routes and watering points for the pastoralists have been encroached by the farmers in Nigeria.



Table 1: Distribution of Respondents based on Period and Frequency of Conflict Occurrence

Index	Frequency	Percentage
Period of Conflict Occurrence		
Dry season	20	19.80
Rainy season	48	59.40
All of the above	21	20.80
Total	101	100
Frequency of Conflict Occurrence		
Seasonally	58	57.43
Annually	42	41.58
Biennial	01	0.99
Total	101	100

Source: Field Survey, 2012.

Table 2: Respondents Perception of the Causes of Farmer-Pastoralist Conflicts (N= 148)

Causes of conflict	Frequency	Percentage*
Low level of compliance with <i>burti</i> (cattle route)	75	50.68
Lack of well define cattle routes	80	54.05
Unstable access to land & water	55	37.16
Farm fragmentation	52	35.14
Commercialization of harvest residues	48	32.43
Little respect for traditional farming customs	37	25.00
Little respect for traditional grazing customs	36	24.32
Declining influence of traditional rulers	49	33.11
Poor Government attitudes	77	52.03
Deliberate hostility between parties	32	21.62
Increase in Fadama farming	42	28.38
Tribal/ethnic variation	55	37.16
Religious differences	56	37.84
Inadequate grazing reserve	76	51.35
Siltation of water points	49	33.11
Encroachment by herders	70	47.30

Source: Field Survey, 2012. *Multiple responses recorded as percentages > 100

The respondents' perception on the occurrence of conflicts other than farmer-pastoralist conflicts was depicted in Figure 2. The result of Figure 2 reveals that substantial (38.51%) proportion of the respondents do not agree that other types of conflicts occurred in the study area. However, 22.30% and 20.95% of them agreed that, Pastoralist- fisher folks and farmer-hunter conflicts occurred in the study area, respectively. This is in agreement with Ajuwon (2005) that, the degree of conflict between these different resource users' ranges from insignificant to extremely tense but conflict between pastoralists and farmers far outweighs all other types of resource conflict in frequency and importance.

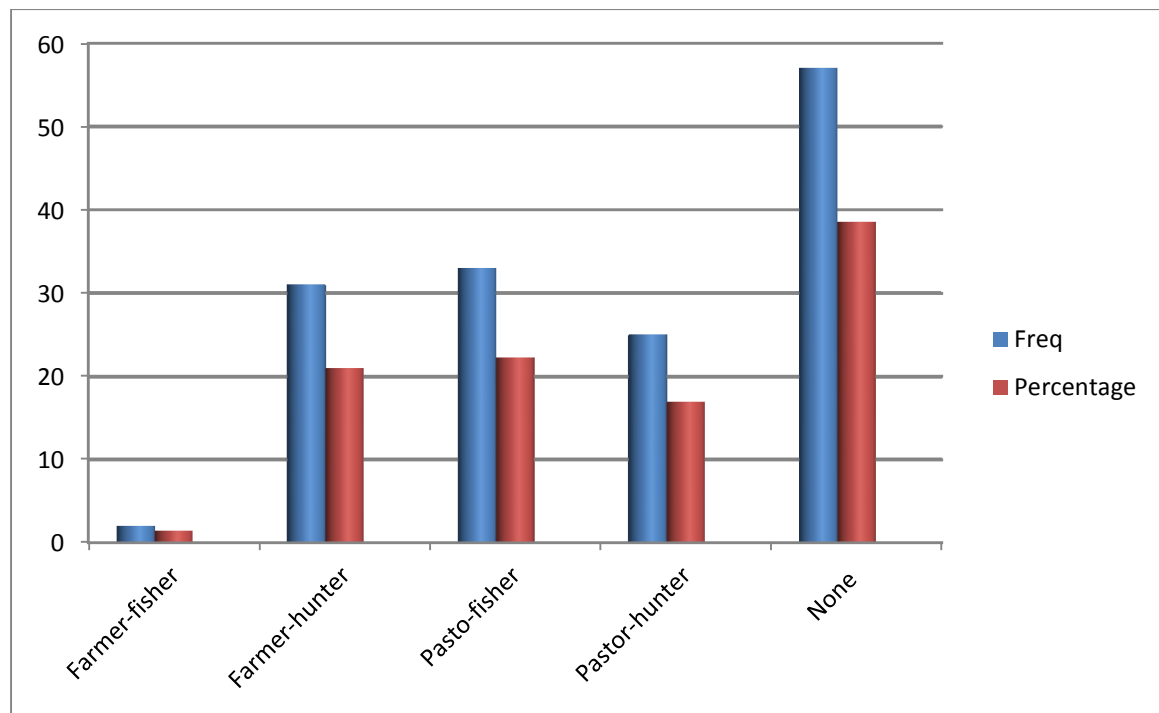


Figure 2: Respondents distribution based on occurrence of conflicts other than farmers-pastoralists' conflicts

Source: Field Survey, 2012.

As shown in Table 3 majority (55.40%) of the respondents reported that they incurred losses due to conflict in the study area. The result further reveals that major losses incurred due to conflicts include destruction of crops (92.46%), body injury (89.59%), loss of Livestock (57.32%), destruction of houses (52.44%) and loss of lives (30.49%) among others. Sulaiman and Ja'afar-furo (2010) related that farmer-pastoralist conflicts are generally considered as a negative phenomenon which often lead to loss of lives and property which invariably impacts negatively on the community. Solagberu and Oluwasegun (2010) revealed that persistence of farmer-herdsmen conflicts portend grave socio-economic consequences in northern Nigeria.

Figure 3 shows that 75% of the respondents perceived that youth were affected by conflict in the study area. This might be due to the fact youth are usually takes risk. Sulaiman and Ja'afar-furo (2010) reported six persons lost their lives, and 45 persons were injured in the farmer-pastoralists conflict in Bauchi State.

Table 3: Distribution of Respondents due to Nature of Loss Incurred (N= 148)

Index	Frequency	Percentage
Incur loss		
Yes	82	55.40
No	66	44.60
Total	148	100
Nature of loss incurred*		
Loss of lives	25	30.49
Loss of Livestock	47	57.32
Loss/ destruction of crops	75	92.46
Destruction of houses	43	52.44
Loss of cattle route (<i>burti</i>)	12	14.63
Loss of grazing land	12	14.63
Loss of watering points	05	6.10
Body injury	71	86.59

Source: Field Survey, 2012. *Multiple responses recorded as percentage greater than 100

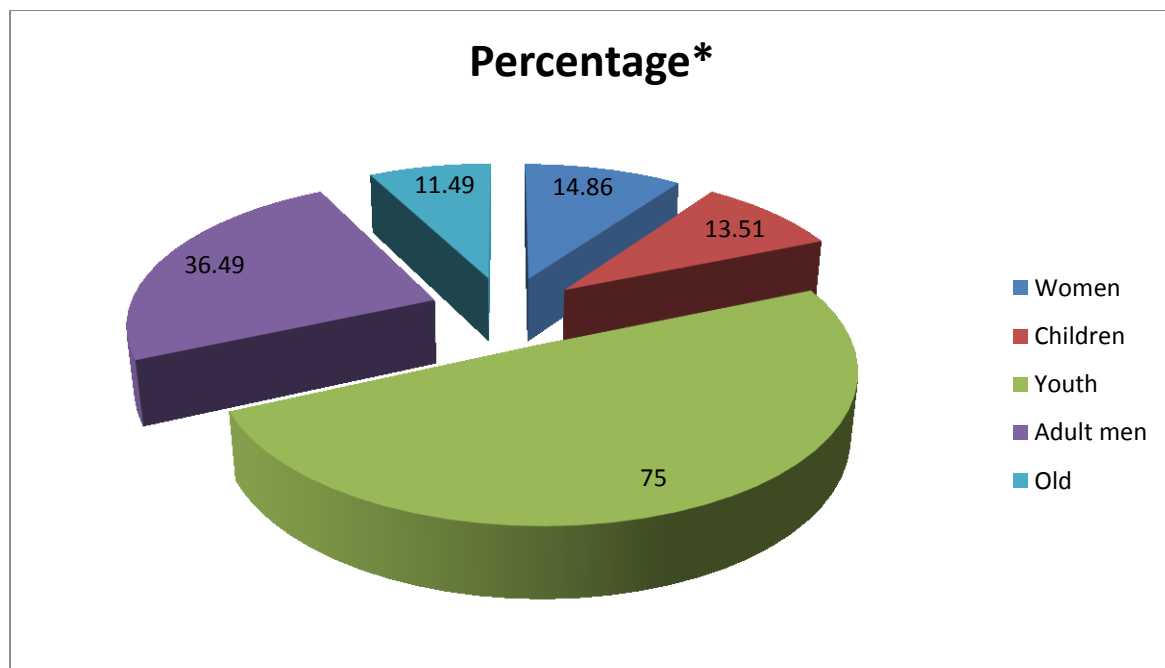


Figure 3: Distribution of respondents based on category of people affected by conflict.

Source: Field Survey, 2012. *Multiple Responses recorded as percentages >100

Table 4 described the perception of farmers-pastoralists on constraints to conflict prevention and management. As shown in the table, inadequate social infrastructure (91.21%) was the major problem in conflict prevention and management. This is in accordance to a priori expectation. That is the lack of infrastructure translates the inability of government to implement necessary policies that would boost food production in the country. Poverty (86.49%) was ranked second as constraints to conflict mitigation. Failure of government to implement agricultural policies (84.49%) was rated third as problem affecting conflict resolution in the study area. Illiteracy (76.09%) was also perceived by the respondents as



problem toward conflict prevention and management. However, illiteracy influences people to violate laws and order. This agrees with Ajuwon (2005) who asserted that nomads are maltreated and exploited by people because of their ignorance of law and low social standing in the society.

Table 4: Constraints to Conflict Prevention and Management

Constraints	Frequency	Percentage*
Illiteracy	112	75.68
Loss of social control	102	69.00
Govt failure to Implement Agricultural Policies	125	84.49
Inadequate social infrastructure(e,g dams, grazing reserves, etc)	135	91.21
Poverty	128	86.49
Selfishness of Nigerians	109	73.65
Corruption by leaders	26	56.75
Political Manipulations	67	45.27
Difficulty of tracing parties involved in conflicts	48	32.43

Source: Field Survey, 2012. *Multiple Responses Recorded as percentages >100

REFERENCES

- Adebayo, O. O. and Olaniyi, O. A. (2008). Factors associated with pastoral and crop farmers conflict in derived savannah Zone of Oyo state, Nigeria. *Journal of Human Ecology*, **23**(1): 71-74.
- Ahmed, D. (2010). *A good practice guide pastoralism, nature conservation, and development secretariat of the convention on biological diversity: A Good practice guide Montreal*. Retrieved November 16th, 2011 from <http://www.acdivoca.org/acdivoca/PortalHub.nsf/ID/ethiopiaPLI>
- Ajuwon, S. S. (2005). *Conflict in Fadama communities*. National Fadama Development Project (NFDP) pp1-16.
- Bauchi State Government (2010). *Bauchi State Government of Nigeria Diary Book* p1-8
- Blench, R. (1996). *Aspects of resource conflict in semi-arid Africa: Natural resource perspectives overseas development institute (ODI)* pp1-8.
- Bujra, A. (2002). *African Conflicts: Their causes and their political and social environment development policy management forum occasional (DPMF)*. Paper, No. 4 Addis Ababa. Retrieved on October 5th, 2012 from <http://www.dpmf.org>
- Blench, R. and Dendo, M. (2003). The transformation of conflicts between pastoralists and Cultivators. *Journal of Africa*. Guest Road Cambridge CB1 2AL United Kingdom.
- Ofuoku, A. U. and Isife, B. I. (2009). Causes, effects and resolution of farmers-nomadic cattleherders' conflict in Delta state, Nigeria *International Journal of Sociology and Anthropology*, **1**(2): 47-054 Available online <http://www.academicjournals.org/ijsa>
- Oladele, O. T. and Oladele O. I. (2011). Effect of pastoralist-farmers conflict on access to resources in savanna area of Oyo State, Nigeria. Retrieved January 4th, 2011, from <http://www.lifesciencesite.com>. *Life Science Journal*, **8**(2): 616-621.
- Pur, J. T., Gaya, H. I. M. and Benisheik, K. (2006). Cases of Farmer-pastoralist Conflict in Borno State, Nigeria. *Journal of Agricultural Extension*, **9**(1): 87-94.
- Sulaiman, A. and Ja'afar-furo, M. R. (2010). Economic effects of farmer-grazier conflicts in Nigeria: A case study of Bauchi State. Retrieved May 27th, 2012



http://scialert.net/fulltext/?doi=tae.2010.147.157&org=11#18623_bc. *Trends in Agricultural Economics*, **3**:147-157.

Umar, B. F. (2009). *The pastoral-agricultural conflicts in Zamfara State, Nigeria North Central Regional Centre for Rural Development*. Iowa State University, Ames. Retrieved December, 6th, 2011 from <http://www.conference.ifas.ufl.edu/ifsa/posters/umar.doc>

WANEP (2011). *Communiqué of the regional workshop on agriculture and pastoralist conflicts in the ECOWAS Sub-Region: A Step towards Concrete and sustainable actions held between 22nd and 23rd February*. 2p.