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Socio-Economic Effects of Farmer-Pastoralist Conflicts in Western Zone of Bauchi State Agricultural Development Programme, Nigeria

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Abstract:

The study examined the socio-economic effects of farmer-pastoralist conflicts in western Zone of Bauchi State. Seventy five arable farmers and 75 pastoralists were randomly and purposively selected respectively. Data were collected using questionnaires and were analyzed using simple descriptive statistics. The results showed that, majority (58.78%) of the respondents fell within the age brackets of 30-49 years. The results also revealed that, most (82.43%) of respondents were males, 74.32% of them had one form of education or the other. The study also discovered that, more than half (57.43%) of the respondent were involved in farmer-pastoralist conflicts in the study area, and 55.40% of the respondents reported that they incurred losses due to conflict. The major effects of conflicts include poverty (69.59%), break down of trust (62.16%), and food insecurity (50.68%) among others. On the other hand, the major spillover effects of farmer-pastoralist conflicts in the study area include hike in prices of commodities (50.68%), build up of social vices (45.95%), and scarcity of food items (42.57%). The study recommends that, both farmers and pastoralists should be sensitized for the need for peaceful coexistence. In addition, social infrastructures that influence both crops and livestock production should be adequately provided to enhance the economic capability of people and will subsequently reduce poverty and build-up of social vices which are precursors to conflict.

Keywords: Farmer-pastoralist, conflicts, socio-economics, and effects

1. Introduction

1.1. Background of the Study

There is a long historical record of fluctuating conflict, competition and co-operation between settled farmers and pastoral or transhumant herders. This includes period of violent herder domination over settled farming production systems and the conversion of former pastoral lands to cultivation. The current levels of conflict that occur in some locations are clearly intolerable for farmers, herders and also for the environment. The need for local communities to resort to such violence is indicative of a lack of policies, or that existing policies are not working to the benefit of these communities as a whole (Seddon, and Sumberg, 2010).

The conflict between settled farmer and nomad goes back to the earliest written records and is mythically symbolised in many cultures. The association of highly mobile pastoralists with raiding and warfare has been crucial in establishing negative stereotypes throughout history. In West Africa, farmers formerly associated pastoral peoples with large-scale military conquest. But with the coming of the colonial regimes and the collapse of indigenous states, conflict between farmers and herders took on a different colouring, becoming more associated with competition for natural resources. Nigeria, however, presents a very special situation quite unlike other West African countries, for two reasons; most notably the ambiguous prestige of pastoral culture particular to *Fulbe* pastoralists but also because of its large and comparatively wealthy population. The situation of pastoralists in Nigeria has long been distinct from other African countries but that it was still historically rooted in competition for access to land. Conflict was transformed by key changes attendant on the demographic and veterinary revolution of the colonial era and again by the flow of oil revenues from the 1970s onwards which increased the market for pastoral products. However, in recent years, Nigeria has been constantly racked by

civil strife, particularly across the religious divide, and this has reconfigured farmer/herder conflict in new and striking ways. The absence of any concerted government response is a matter for concern in terms of rural development, but also because it is noted by the participants who take it as an opportunity to increase the tension still further (Blench and Dendo, 2003). Conflicts between farmers and nomadic cattle herders in search of pasture and water has been in a record for long in West Africa (Tonah, 2006).

However, Farmers-pastoralists clash has remained a major crisis, claiming hundreds lives of people and causing destruction to thousands of animals and farm produce worth million of Naira in the northern part of Nigeria (Adamu, 2011). Similarly, Abdulkadir (2011) reported in daily trust that, between May and June violent conflicts between the farmers and cattle- rearing nomads in the Benue- Nasarawa states borders resulted in the loss of lives, destruction of property and displacement of several communities. Blench and Dendo (1994) observed that, fatal conflicts between farmers and pastoralists are reported almost daily in the newspapers, but no effective action has yet been taken by Government to analyze or remedy the causes of these conflicts. However, this analysis intended to;

- i. Describe the demographic factors influencing farmer-pastoralist conflicts in the study area.
- ii. Determine the effects of conflict on livelihood of the respondents in the study area.
- iii. Determine the level of migration due to conflicts in the study area.

2. Research Methodology

2.1. The Study Area

Bauchi State is located in the north eastern region of Nigeria and occupies a total land area of 49,119 km² and it lies between the coordinates of Latitude 10°30'N 10°00'E and 10.5°N and Longitude 10°E10.5; 10 10.5; 10 (Wikipedia, 2010). According to National Population Census [NPC] (2006), it has population of 4,676 465 people. The Western zone of Bauchi State Agricultural Development Programme was the study area, which is made up of seven local government areas including Alkaleri, Bauchi, Bogoro, Dass, Kirfi, Tafawa Balewa and Toro. The Zone has a total population of 2,497,782 people representing 53.41 percent of the total population in the state. 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). Bauchi state experienced both wet and dry season with temperatures ranging between 15⁰C -29.7 ⁰C in January to 23⁰C -32.4 ⁰C in June with an average relative humidity of 40.1 percent. It is also characterized with an average annual rainfall of 85.6mm (CPP, 2011).

2.2. Sampling Procedure

The sampling frame for this study was drawn from farmers and pastoralists in three (3) randomly selected Local Government Areas (Kirfi, Tafawa Balewa and Toro) of the study area. Purposive sampling was used in the selection of pastoralists, while arable farmers were selected using simple random sampling technique. Purposive sampling was employed to be able to capture pastoralist who were sparsely distributed.

2.3. Data Collection and Data Analysis

The data were collected using structured questionnaires administered with the assistance of Village Extension Agents (VEAs) to respondents. The collected data were analyzed using both descriptive and inferential statistics. Frequency tables and percentages were used in analyzing objective I & III, while Chi-square statistics was used to analyze objective II.

3. Results and Discussions

3.1. Socioeconomic Characteristics of the Respondents

The results in Table 1 revealed that, most (30.40%) of farmers-pastoralists fell within the age bracket of 40-49 years. This implies that, majority of the respondents were in their active age and are expected to be energetic. The result is closely similar with that of Pur, *et al.* (2006) who asserted that, majority of the respondents interviewed were between the age of 35 and below. The result also showed that most (82.43%) of the respondents were males. This might be linked to the religious inclination of the study area where women observed purdah and hence cannot be easily reached. Conversely, Ofuoku and Isife (2009) argued that 58.8% of the farmers studied in Delta state were females while male farmers constituted 41.3%. The result also showed that, most (49.64%) of the farmers had formal education, 24.32% had non- formal education with 25.68% who cannot read and write. This implies that, the level of literacy is high in the study area. According to a priori expectation majority of the people in the study act rationally, hence can accommodate people of different cultural background. This result is consistent with Pur *et al* (2006) where 97% of the respondents were literate. The results further revealed that, majority (84.46%) of farmers and herders were married in the study area. This shows that the conflict incidence in the study area is expected to be low due to the fact that married people are calm and therefore can withstand and resist violent situation. Sulaiman (2008) revealed that household leaders and married are calmer in response to provocation which can often resist violent conflicts. Moreover, the results in Table 1 showed that, majority (63.51%) of the respondents had family members between 1 and 10. This indicates that the respondents have sufficient family labour for both their crops and livestock enterprises. This result is closely similar with Sulaiman (2008) who related that, household size of 6-10 dominated for both arable and pastoralist farmers in Bauchi state.

The results in Table 1 showed that, most (62.97%) of farmers had the experience of greater than 10 years. The implication of this result is that, most of the arable farmers in the study area are well experienced, hence the couple of years they spend in crop farming

influence their productivity. This result is closely related with that of Ofuoku and Isife (2009) who found that farmers who had 5-25 years of farming experience in Delta state represented 88% of the sampled population. On the other hand, majority (57.54%) of pastoralists had experience between 6- 15 years in Pastoralism. This implies that most of the herders in the study have put years of herding in the study area. Sulaiman (2008) observed that majority of pastoralists had experience of 11-20 years.

Index	Frequency	Percentage
Age Group (Years)		
Below 30	26	57.57
30-39	42	28.38
40-49	45	30.40
50 and above	35	23.65
Total	148	100
Gender Group		
Male	122	82.43
Female	26	17.57
Total	148	100
Educational Status		
No Education	38	25.68
Non-Formal Education	36	24.32
Formal Education	73	49.64
Total	148	100
Marital Status		
Married	125	84.46
Single	09	6.08
Divorced	08	5.41
Widowed	06	4.05
Total	148	100
Household Size		
1-5 Members	64	43.24
6-10 Members	41	27.70
11-15 Members	23	15.54
16 and above Members	20	13.51
Total	148	100
Experience by Arable Farmers		
1-5yrs	11	14.67
6-10	20	26.67
11-15	12	16.0
16 and above	32	42.67
Total	75	100
Experience by Pastoralists		
1-5	14	19.18
6-10	21	28.77
11-15	21	28.77
16 and above	17	23.28
Total	73	100

Table 1: Distribution of farmer-pastoralists based on based on socio-economic characteristics
Source: Field Survey, 2012

3.2. Respondents' Involvement in Farmer-Pastoralist Conflicts, Time Taken Prior to Normalcy, Loss Incurred Due to Conflicts And Nature of Loss Incurred

Table 2 showed that more than half (57.43%) of the respondent were involved in farmer- pastoralist conflicts in the study area. This implies that conflict between farmers and pastoralists exist in the study area. The result in Table 2 also showed that, most (47.97%) of the respondents asserted that peace resumed in days. This indicates that conflicts are quickly resolved in the area. 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 (Sulaiman and Ja'afar-furo, 2010). Table 2 further revealed that, most (55.40%) of the respondents reported that they incurred losses due to conflict in the study area. This implies that conflict led to socio-economic losses which could be that of properties, lives, trust, jobs, etc. Solagberu and Oluwasegun (2010) revealed that persistence of farmer-herdsmen conflicts portend grave socioeconomic consequences in northern Nigeria.

Index	Frequency	Percentage
Involved in conflicts		
Yes	85	57.43
No	63	42.57
Total	148	100
Time Taken before Peace Resumed		
In Days	71	47.97
In Weeks	39	26.35
In Months	34	22.97
In Years	04	2.70
Total	148	100
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
Loss of cropped land	04	4.88
Body injury	71	86.59

Table 2: Distribution of respondents based on their involvement in conflicts and period of time before peace resumed, loss incurred due to conflicts and nature of loss incurred

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

3.3. Quantity of Property Lost Due to Conflicts

The results in Table 4 disclose that, 247 houses were destroyed with a mean value of 82 houses across the three Local Government Areas. Meaning that the conflict rendered victims homeless, this could lead to outbreak of disease which may affect the social and economic well being of the farmers/ pastoralists. The result also reveals that, 5237 bags of assorted grains were lost with a mean value of 1762 bags across the three Local Government Areas. In addition, the study discovers that, 156 cattle, 152 sheep, and 126 goats were lost in the study area. However, this implies that farmers-pastoralists conflict may predispose victims in to poverty. 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. Isah, (2011) reported that, in Udeni Gida village incidence of Nasarawa Local Government Area, turned bloody with more than 30 people dead, with many houses, crops and other properties set ablaze. The cause of the violence was due to the destruction of rice farmlands by cattle.

Property lost	Quantity	Mean/LG
Houses	247	82
Crops(bags)	5237	1762
Livestocks		
Cattle	156	52
Sheep	152	51
Goats	126	42

Table 3: Distribution of respondents based on amount of property lost

Source: Field Survey, 2012.

3.4. Category of People Affected by Conflict

The results in Table 4 showed that, majority (75%) of the respondents reported that youth were mostly affected by conflict in the study area. This is in accordance with *a priori* expectation that youth are vulnerable to conflicts because they are relatively more violent in the society, and do not have the ability to control crisis situation.

Category	Frequency	Percentage*
Women	22	14.86
Children	20	13.51
Youth	111	75.00
Adult Men	54	36.49
Old	17	11.49

Table 4: Distribution of respondents based on category of people affected with conflict, migration due to conflicts and Nature of movement

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

3.5. Migration Due to Conflicts

The result in Table 5 revealed that, majority (66.22%) of the respondents vacated their house due to conflict in the study area. The result also disclosed that, majority (71.32%) of people affected with conflict did not migrated out of their community and the movement was mostly (86%) temporary. The result indicates that people temporarily vacate their houses due to conflicts in the study area. Result in Table 6 further shows that, most (63.04%) of the respondents ejected out by conflict received help of which 50% of them were assisted with food, 48.28% received medical help and only 31.08% reported to have been given shelter. This indicates that most of the migrants were not assisted with shelter; this might be due to the fact that they resort to neighbouring houses and refugee camp. On the other hand, majority (58%) of the people affected by conflict settled in neighbouring house, 28% settled in a refugee camp, and only 10% settled in mosque/church.

Index	Frequency	Percentage*
Vacated House		
Yes	50	33.78
No	98	66.22
Total	148	100
Migrated out of the Community		
Yes	42	28.38
No	106	71.62
Nature of Movement		
Temporarily	43	86.00
Permanently	07	14.00
Total	50	100
Place of Settlement		
Neighbouring House	29	58.00
Refugee Camp	14	28.00
Relation House	05	10.00
In Mosque/Church	02	4.00
Total	50	100

Table 5: Distribution of respondents based on category of people affected with conflict, migration due to conflicts and Nature of movement.

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

3.6. Effect of Conflicts on Respondents' Livelihood and Spillover Effects of Conflict in the Study Area

The result in Table 6 showed that, majority (69.59%) farmers-pastoralists perceived that conflict led to increase in poverty this may be due to destruction of both crops and livestock, there by affecting yield which subsequently reduces their income. One of the most devastating effects of wars is scarcity of food item which often led to poverty and diseases (Goodhand, 2001 and Sulaiman, 2008). Break down of trust between farmers and pastoralists was rated second (62.16%). This is because conflict lead to mutual distrust between individuals in the society. However, food insecurity was rated third accounting for 50.68% having effect on livelihood. Conflict led to irreplaceable loss of lives, losses in terms of property (goods, houses, and business premises), losses of employment, etc. Some survivors permanently lost all they laboured for in their lives. As a result, one can safely argue that the aggregate of such instances negatively impact on the overall economy of these communities and by extension, the rest of the country. New armies of the unemployed, the destitute and highly aggrieved are added on the streets with its attendant consequences. Victims are also generally male and belonging to the economically active segments of the society (NIPSS, 2004 and Abubakar, 2005). The results in Table 6 further describe the magnitude of the effects of conflict on livelihood. As shown in the table 34.46% of farmers-pastoralists perceived the degree of effect of conflict on livelihood as very serious. Meaning that, conflict render victim jobless and lead to poverty as indicated in Table 6.

Table 6 also depicts the spillover effects of conflict in the study area. As obtainable from the results, the major spillover effects of farmer-pastoralist conflicts include hike in prices of commodities (50.68%), build up social vices (45.95%), and scarcity of food items (42.57%) among others. This result implies that as population increases in an area, demand for food items will rise, hence resulting to

shortage of food items and subsequently give rise to its scarcity. Similarly, influx of people also influence the rate of crime, because the higher the rate of population the higher the rate of crime, and vice-versa. This is in parity with the result obtained by Sulaiman (2008) who reported that, distortion in price of goods, scarcity of food items and social insecurity as the major spillover effects of conflict in Bauchi state.

Index	Frequency	Percentage*
Nature of Effects		
Increase in Poverty	103	69.59
Loss of Job	57	38.51
Food Insecurity	75	50.68
Social Exclusion	39	26.35
Break Down of Trust	92	62.16
Political Gain	15	10.14
Economic Gain	26	17.57
Spill over Effects of Conflict		
Hike in Prices of Commodities	75	50.68
Refugees Management	20	13.51
Scarcity of Food Items	63	42.57
Migration of Labour	14	9.46
Build-Up of Social Vices	68	45.95
Erosion of Social Capital	17	11.49

Table 6: Distribution of respondents based on their perception on the effect of conflicts and the degree of the effect on livelihood
Source: Field Survey, 2012. *Multiple Responses recorded hence percentages >100%

4. Conclusion

The result of this study revealed that conflict do exist in the study area and the consequences include loss/destruction of crops, loss of livestock, loss of lives, and destruction of houses among others. The implication for this is dwindling effect of people livelihood in the study area. However, the provision of infrastructures such as adequate grazing reserves, viable dams, and educational facilities will bring an end to this age long resource use conflict in the study area.

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