



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

CONFLICT MANAGEMENT STRATEGIES TO REDUCE CONSEQUENCES ON LIVELIHOODS OF FULANI CATTLE HERDERS AND FARMERS IN KABBA-BUNU, KOGI STATE, NIGERIA

Kehinde, E. A.

Samaru College of Agriculture, Ahmadu Bello University, Zaria

E-mail: emmakehinde67@gmail.com

ABSTRACT

Farmers and Fulanis are in recent times becoming more frequently involved in land resources use conflicts. A lot of lives (human and cattle) as well as crops and properties are lost to this conflict on a regular basis. It is due to these profound losses that the study aimed at investigating the root causes; determine the consequences of the conflict on the respondents and ascertain the management strategies in use to curb or reduce the conflict. A total of 486 respondents were randomly selected for the study while a structured questionnaire was used for data collection. Descriptive statistics and the logit regression were used to analyze the data. The results shows that majority (76.4%) of the farmers interviewed are middle aged, that is between 40-59 years while majority (76.7%) of the Fulanis are youths between 20 and 39 years. The result further shows that majority (70.0%) of farmers and 47.4% of Fulanis said destruction of crops/animals was the major source of conflict. The results on effect of conflict on the losses incurred by the farmer's shows that all the variables had direct relationship with conflict. However, only the loss of crops (2.047) and loss of other properties (1.016) had significant effect on conflict at $p < 0.05$ and $p < 0.01$, respectively. The results on the effect of conflict on the losses incurred by the Fulanis show that only loss of cattle (1.003) is statistically significant at $p < 0.05$. It has a direct relationship with the Fulanis conflict with the farmers. The result of the conflict resolution methods shows that majority (90.3% and 72.3%) of farmers and Fulanis, respectively, agree that payment of compensation is the best way of settling conflict between farmers and Fulanis. The results on the selected conflict management strategies indicate that majority (49.7%) of farmers and 52.2% of Fulanis hold the view that the use of traditional rulers in conflict resolution is the most preferred. On the basis of these findings, it was recommended among others that: Existing laws on grazing routes should be reviewed and strengthened by the National Assembly and various State Assemblies. The Nigerian Agricultural Insurance Corporation (NAIC) and other insurance organizations should devise insurance policies as strategies of reaching farmers and Fulanis to ensure support whenever they suffer losses which will go a long way to mitigate their sufferings and Government should ensure that adequate compensation is paid to farmers and Fulanis who suffer losses.

Keywords: Farmers, Fulani, Conflict Management, Crops, Cattle and Losses

INTRODUCTION

The Agricultural sector has always been an important component of Nigerian economy with over 70 percent of the population engaged in agriculture and agricultural related activities (Obasi, F. C. and Agu, S. E., 2000). The small scale farmers are responsible for about 95% of the total agricultural production (Salau, S.A., 2013). Livestock provides a source of employment and income for a large proportion of the rural

population as well as is an important source of protein in the local diet (Fetuga, B.L.A., 2003). The livestock sub-sector is dominated by traditional systems of production, processing and marketing. Eighty percent of cattle, sheep and goats are reared by transhumant pastoralists (Fetuga, 2003). Crops, livestock, water resources and other vegetal resources play key roles in the development, maintenance and projection of the socio-economic strength of a society (Schama, S., 1996).

The Fulanis perform their activities between the arid and semi-arid zones where they are largely concentrated. Their animals feed on rangeland forage supplemented by crop residues and tree leaves (Ismail, 2004). Fulanis have intermingled with farmers for centuries, with established reciprocal-trade relationship. However, these ancient practices and many generations of coexistence have been threatened by many modern factors such as; population growth, advancement in technology, increasing commercialised agricultural production and climate change (Fratkin, Elliot 1997, International Regional Information Network, 2009). These factors have led to the expansion of agriculture on formerly shared grazing lands, and have increased tension and conflicts between farmers and Fulanis in many parts of West Africa. The incessant resource conflicts witnessed in the tropics had resulted in loss of lives, properties and environmental degradation (Hellström, E. 2001; Niemella J, Young J, Alard D, Askasibar M, Henle K, Johnson R, Kuttala M, Larsson T, Matouch S, Nowicki P, Paiva R, Portoghesi L, Smulders R, Stevenson A, Tartes U, Watt A., 2005).

According to International Regional Information Network (2005), over the last decade, clashes between farmers and Fulanis have increased in several parts of central Nigeria. Kogi State has witnessed serious cases of conflict. In some cases, due to the seriousness of such conflicts, Fulanis were prevented from entry or forced out of some areas in the State. For instance, in 2007 they were driven out of Bassa Local Government Area after serious encounter with farmers. Between 1996 and 2002, forty nine cases of Farmer – Fulani conflicts were reported. Crops estimated at over 1 million naira were reportedly damaged (Ajuwon, S.S., 2004).

The inability of the state security agencies to deal effectively with farmers' complaints has forced many of them to take the law into their hands by attacking Fulani herdsmen's cattle that stray into their fields. At other times, it has led to prolonged and unnecessary court cases between the farmers and Fulanis (Ismail, 2004). The village head and the head of Fulanis (Ardos) are usually involved in settling the dispute. Conflict Management Strategies that are in place have not been capable of resolving the conflict between farmers and Fulanis. Rather, the problem has continued to persist, thus affecting the farmers, Fulanis, host communities and society. It is to this extent that the study seeks to ascertain the selected management strategies used in the communities to resolve the Farmer-Fulani conflicts in order to ameliorate the negative consequences of the conflict. The specific objectives of the study are to:

1. describe the socio-economic characteristics of respondents,
2. find out the root cause of the conflict,
3. determine the consequences of the conflict on the farmers and Fulanis and
4. ascertain selected management strategies

METHODOLOGY

The study was conducted in Kabba-Bunu Local Government Area of Kogi State which has its headquarters at Kabba. The main ethnic groups include Owes and Bunus while the minority tribes include Bassa -Kwomu, Bassa- Nge, Ebira Koto, Nupe, Ogori, Hausa-Fulani, Igbos and other settlers (Nigeria Year Book, 2000). Kabba-Bunu Local Government Area belongs to the rain forest zone with an average maximum temperature of 33.2°C and an average minimum temperature of 22.8°C. It lies along latitude 7° 49'N and longitude 6° 03' E of the prime meridian. Rains start in March and reach the peak in September and then decreases down to

almost zero in December (Nigeria Year Book, 2000). Due to its wet condition for most of the year, it is attractive to the Fulanis. It has a population of 145, 446 persons consisting of 74,289 males and 71,157 females according to 2006 Census (National Population Census, 2006). The main occupation in the areas is civil service, while others engage in crop production, pastoralism and trading.

The data for the study was collected through structured questionnaire from the target populations who are the local farmers and Fulanis. A focus group discussion (FGD) was also employed to compare with the information received using the questionnaire instrument. A group of farmers and Fulanis numbering 5 each were used. A total of 486 respondents (237 Farmers and 249 Fulanis) were randomly selected from 25 communities using a multi-stage sampling procedure. Kogi state as well as Kabba-Bunu Local Government Area in the State were purposively selected for being a major hub where farming and grazing is rampant in Nigeria. The study villages (25) were also purposively selected due to the prominence of conflict between farmers and Fulanis in the areas. The final stage where the respondents were selected was done randomly. A list of 670 farmers was obtained from the ADP in Aiyetoro and from which 237 farmers were randomly drawn. Similarly a list of 350 Fulani household heads was received from the Ardo in Kabba from which 249 respondents were randomly selected. The selections were based on the diversity of the population of farmers and Fulanis as well as evidence that they had lived in the area for a minimum of five years. The data obtained was analyzed using descriptive and inferential statistics. The descriptive statistics was used to analyze objectives 1, 2 and 4 while the logit regression analysis was used to achieve objective 3 of the study.

RESULTS AND DISCUSSION

Socioeconomic characteristics of respondents

The results in Table 1 show that majority of the farmers (76.4%) interviewed are middle aged, that is between 40-59 years. In the study area, farming seems not to appeal to the younger generation probably due to its tedious nature and preference for white collar jobs. The majority of Fulanis (76.7%) interviewed are youths, that is, between 20 and 39 years. This age category among the Fulanis is usually the ones responsible for taking the cattle out for grazing and probably also the category that are more visible and accessible.

Despite the fact that basic education across the country is free and or without tuition fee the result in Table 1 shows that majority (89.2%) and 62.0% of the farmers and Fulani herdsmen attained only primary education. The low level in education suggests that it might prevent them from keying into the Agricultural Transformation Agenda of the Federal Government of Nigeria and the Nomadic Education Programme which may thus affect their socio-economic status. Furthermore, education creates enlightenment thereby if encouraged can positively reduce the conflict between farmers and Fulanis and ensure greater peaceful coexistence. Majority (99.2%) of the farmers owned land while only an insignificant number (0.8%) of the Fulanis owned land. Access to land and other vegetal resources have remained objects of conflict from time immemorial. This is largely due to the economic potentials and importance attached to land. However, the Fulanis being largely migratory have no official claim to most of the land used by them for grazing, hence, their use of such land is considered as trespass and conflictual especially with crops purposely eaten up or destroyed. The implication of Fulanis not being settled could further lead to more conflict and losses to the farm families and country at large.

Table 1: Socio-economic characteristics of respondents (N= Farmers 237 and Fulanis 249)

| Variables | Farmers Frequency | Percentage | Fulanis Frequency | Percentage |
|--------------------------|----------------------|------------|----------------------|------------|
| Age | | | | |
| 20-39 | 40 | 16.8 | 191 | 76.7 |
| 40-59 | 181 | 76.4 | 48 | 19.3 |
| 60 and above | 16 | 6.8 | 10 | 4.0 |
| Education | | | | |
| Illiterate | Nil | Nil | 63 | 26.6 |
| Primary | 222 | 89.2 | 147 | 62.0 |
| Secondary | 20 | 8.0 | 27 | 11.4 |
| Tertiary | 7 | 2.8 | Nil | Nil |
| Ownership of land | | | | |
| Yes | 235 | 99.2 | 0 | 0 |
| No | 2 | 0.8 | 249 | 100 |

Main Source of Farmers-Fulani cattle herder conflict in the study area

The results in Table 2 show that most (70%) of the farmers and 47% of the Fulani cattle herders share the opinion that the main reason for conflict between farmers and Fulanis is due to destruction of crops and killing of cattle. Gefu, J. O. (1990), and Adebayo, O. O. and Olaniyi, O. A. (2008), in related studies identified damage of crops by herds as the most critical factor responsible for conflict between farmers and Fulani cattle herders. The reason is that it touches on the livelihood of the farmers and Fulanis more than any other thing. The Focus Group Discussion (FGD) conducted, the Fulanis claimed that the people of the town (Farmers) used to extend their farms into cattle routes and deny their cattle access to drinking water. Such attitude displayed by farmers according to the Fulanis amounts to sheer “wickedness”. However, the farmers are of the opinion that the Fulanis are migrants and therefore should not have a say on how they use land belonging to their community. The view expressed by the farmers in all the villages of the study is that Fulanis are responsible for all the conflicts through eating up of crops and destruction of farmlands by their herds.

Table 2: Distribution of respondents according to the main source of conflict

| Sources of conflict | Farmers Freq | Percent | Fulanis Freq | Percent |
|-------------------------------|-----------------|--------------|-----------------|--------------|
| Destruction of crops /animals | 166 | 70.0 | 118 | 47.4 |
| Lack of access to water | 56 | 23.6 | 30 | 12.0 |
| Encroachment of grazing land | 12 | 5.1 | 100 | 40.2 |
| Pollution of drinking water | 3 | 1.3 | 1 | 0.4 |
| Total | 237 | 100.0 | 249 | 100.0 |

Effect of conflict on farmers

The results in Table 3 show the parameters measuring the goodness of fit of estimated logit model on the effect of conflict on losses incurred by the farmer. The -2 Log Likelihood (-2LL) indicated that the model employed for the analysis is of good fit. The result shows all the variables had direct relationship with conflict. However, only the loss of crops and loss of other properties had significant effect on conflict ($P \leq 0.05$ and $P \leq 0.01$ respectively). This result is according to on farm observation. The FGD carried out with the farmers in all the villages of the study indicated that conflict with the Farmers always start when the cattle of the Fulanis eat up or destroy the crops on the farm. This is supported by the empirical result obtained. The result in Table 2

showed that more than 70% of the farmers claimed the destruction of their crops is responsible for their conflict with the Fulanis. Despite the fact that loss of life is not statistically significant, its t-value (1.644) is very close to being significant at the 10% level (1.645). Serious conflict usually leads to loss of lives although this is not frequent.

Table 3: Logit estimate of the effect of conflict on losses incurred by the farmers

| Variables | Coefficient | Standard Error | t-values |
|--------------------------|-------------|----------------|----------|
| Constant | 5.503 | 0.652 | 8.435* |
| Loss of crops | 2.047 | 0.717 | 2.856* |
| Loss of life | 0.643 | 0.391 | 1.644 |
| Loss of other properties | 1.016 | 0.457 | 2.221** |
| Nagelkerke R Square | 0.58 | | |
| Cox and Snell R Square | 0.67 | | |
| -2 Log Likelihood | 0.011 | | |
| Model Chi Square | 25.06 | | |
| N=237 | | | |

*Significant at 5% Level of probability,

**Significant at 1% Level of probability

Effect of conflict on the Fulanis

The result in Table 4 shows that the parameters measuring the goodness of fit of estimated logit model on the effect of conflict on the Fulanis. The -2 Log Likelihood (-2LL) indicated that the model employed for the analysis is of good fit. The result in Table 4 reveals that only loss of cattle is statistically significant. It has a direct relationship with the Fulanis conflict with the Farmers. The FGD conducted with the Fulanis and the result on Table 4 indicated that the loss of cattle is the major source of conflict with Farmers. During a Focus Group Discussion, a certain Fulani claimed:

“Cattle are our life; life is worthless to me as a Fulani without my cattle. Therefore, what do we do when our means of existence is threatened? Should we fold our hands and

see our cattle, our hope and our lives being threatened? The inaccessibility to grazing land no matter the reason is a call to war”.

Table 4: Logit estimate of the effect of conflict on losses incurred by the Fulanis

| Variables | Coefficient | Standard Error | t-value |
|--------------------------|-------------|----------------|---------|
| Constant | 2.103 | 0.434 | 4.851 |
| Loss of cattle | 1.003 | 0.351 | 2.856* |
| Loss of life | 0.234 | 0.269 | 0.869 |
| Loss of other properties | 0.456 | 0.394 | 1.156 |
| Nagelkerke R Square | 0.49 | | |
| Cox and Snell R Square | 0.69 | | |
| -2 Log Likelihood | 0.080 | | |
| Model Chi Square | 33.04 | | |
| N=249 | | | |

* Significant at 5% Level of Probability

Description of the conflict resolution methods

Conflict resolution methods

The result in Table 5 shows that majority (90.3%) of the Farmers received compensation in return for the losses suffered due to damages to their crops and farmland. Similarly, majority (72.3%) of the Fulanis indicated that the conflicts was resolved though compensation. The choice of compensation by both Fulani and farmers as a way of settling conflict may be to reduce the loss suffered and to prevent future likelihood of such error being repeated.

Table 5: Distribution of respondents according to how conflict was resolved

| How conflict was resolved | Farmers | | Fulanis | |
|---------------------------|------------|--------------|------------|--------------|
| | Freq | Percent | Freq | Percent |
| Compensation | 214 | 90.3 | 180 | 72.3 |
| Verbal warning | 20 | 8.4 | 65 | 26.1 |
| Peaceful resolution | 3 | 1.3 | 4 | 1.6 |
| Total | 237 | 100.0 | 249 | 100.0 |

Selected conflict management strategies

These are the organs, agencies and institutions responsible for management of conflicts in the area.

The result in Table 6 shows that many of the conflict (50%) for farmers and (52%) for Fulanis were managed by the traditional rulers. Ordinarily, one would have thought that the formal means of social control (Police and Court) will be the most preferred conflict resolution agencies due to their being more specialized, informed, and neutral. However, results of this studies and similar studies by Adebayo and Olaniyi (2008), and Ahmed, B. (2008), show that almost half of the respondents reported traditional rulers as the major arbitrator of conflict involving Farmers and Fulanis. The reason for this choice may not be unconnected with the fact that valuable time is usually lost when cases are taken to the police or court in investigation and prosecution which sometimes defeats the purpose.

Table 6: Distribution of respondents according to selected conflict management strategies

| People responsible for conflict management | Farmers | | Fulanis | |
|--|------------|--------------|------------|--------------|
| | Freq | Percent | Freq | Percent |
| Traditional Rulers | 118 | 49.7 | 130 | 52.2 |
| Police | 60 | 25.3 | 60 | 24.1 |
| Farmer | 57 | 24.0 | 50 | 20.1 |
| Associations | | | | |
| Law court | 2 | 1.0 | 9 | 3.6 |
| Total | 237 | 100.0 | 249 | 100.0 |

CONCLUSION

The conflict between farmers and Fulanis in Kabba-Bunu, Kogi State can be likened to what is referred to in literature as resource conflict. The livelihoods demands of Fulanis and farmers necessitate competition for scarce natural resources and in particular access to land for farming and cattle grazing. The management of the conflict between these two groups has been superficial; hence, it has become quite endemic. The use of payment of compensation and traditional rulers to arrest conflict is at best a short term measure, more sustainable methods or strategies for conflict resolution should be rigorously determined.

Recommendations

1. Existing laws on grazing routes should be reviewed and strengthened by the National Assembly and various State Assemblies
2. The Nigerian Agricultural Insurance Corporation (NAIC) and other insurance organizations should devise insurance policies as strategies of reaching farmers and Fulanis to ensure support whenever they suffer losses. This will go a long way to mitigating their sufferings.
3. Government should ensure that adequate compensation is paid to farmers and Fulanis who suffer losses.
4. Mutual inter-group committee be established to periodically look into differences between the warring groups, give counsel, monitor formal resolutions reached between them as well as ensure that new mandates are strictly adhered to.
5. Government should encourage and equip traditional institutions to properly resolve conflicts between Fulanis and farmers.

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. © Kamla-Raj 2008 Journal of Human Ecology, 23(1): 71-74
- Ahmed, B. (2008) Resource Use Conflict between Crop Farmers and Pastoralists in Bali Local Government Area of Taraba State, Nigeria. Unpublished M.Sc Thesis, Abubakar Tafawa Balewa University, Bauchi.
- Ajuwon, S. S. (2004). Managing Conflicts of Interests in Community Development: A Case Study of Bauchi, Gombe, Kebbi, Kogi and Imo States of Nigeria.

- Fetuga, B. L. A. (2003). "Harnessing Nigeria's Animal Resources for Food Security," in *Tropical Veterinarian*, Vol. 21:(4) 168-181
- Fratkin, Elliot (1997) Pastoralism: governance and development issues. *Annual Review of Anthropology* 26:235-261
- Gefu, J. O. (1990). Conflict in Resource Use among Livestock and Crop Farmers in West Africa. *Livestock Systems Research Programme*, Ahmadu Bello University, Zaria.
- Hellström, E. (1996). Environmental conflicts in forestry, forest policies and the use of forest resources. Recent developments in USA, Germany, France, Sweden, Finland and Norway. *EFI Working Paper* 7. 72 p
- International Regional Information Network (2009). Nigerian government aims to pacify farmer-nomad conflict. *Africa, The Good News*. UN Office for the Coordination of Humanitarian Affairs.
- International Regional Information Network (2009). Nigeria:30 killed in clashes between farmers and herdsmen in Adamawa state. *Humanitarian news and analysis a project of the UN Office for the Coordination of Humanitarian Affairs*.
- International Regional Information Network (2009). NIGERIA: Government steps in to curb farmer-nomad clashes, *Humanitarian news and analysis a project of the UN Office for the Coordination of Humanitarian Affairs*
- Ismail, I. (2004) Nomadic education and education for nomadic Fulani. Retrieved on 7/25/2004 from <http://www.gamji.com/fulani7.htm>
- Mohammed, A.S. (2004). The Impact of Conflict on the Economy: the Case of Plateau State of Nigeria. Retrieved from <http://www.odi.org.uk/events/nigeria>
- Niemella J., Young J., Alard D., Askasibar M., Henle K, Johnson R, Kuttala M, Larsson T, Matouch S, Nowicki P, Paiva R, Portoghesi L, Smulders R, Stevenson A, Tartes U, Watt A (2005). Identifying, managing and monitoring conflicts between forest biodiversity conservation and other human interests in Europe. *For. Policy Econ.* 7: 87-890.
- National Population Census (2006). Published by National Population Commission, Garki-Abuja, Federal Capital Territory, Abuja.
- Nigeria Year Book (2000). Printed by Time Press Ltd, Apapa, Lagos-Nigeria.
- Obasi, F. C. and Agu, S. E. (2000). Economic of Small Scale Rice Farmers under Different Production System in South Eastern Nigeria. *Journal of Agriculture, Business and Rural Development* 1:2.
- Salau, S.A. (2013) Determinants of Technical Inefficiency among Maize-Based Farming Households in Niger State, Nigeria. *Ethiopian Journal of Environmental Studies and Management* Vol. 6 No.5 2013
- Schama, S. (1996). *Landscape and memory*. Harper Collins, London. p.231.