Exploring Farmer-Herder Conflicts in the West African Sahel: A Multi-country Study of Burkina Faso, Niger and Nigeria

Abstract

The West African Sahel is a geographical and transitional zone between the Sahara desert to the north and the savanna grasslands to the south. The zone is home to more than fifty million, largely impoverished people. The steady reduction in annual rainfall, driven by the global climate change, has fueled conflicts between farmers and herders in the region. Indeed, land resources in the Sahel have suffered widespread degradation, fueled by rainfall variability, with incessant droughts since the mid-20th century. The study adopts Burkina Faso, Niger and Nigeria in a Multi-country study, revealing Burkina Faso is prone to climate-driven conflicts, as farmers and herders across northern and eastern parts of the country struggle for control over land, water and pastures. In Niger, deteriorating ecosystems in the north has also driven the nation's herders southwards, in search of water and pasture for their livestock, leading many into conflict with farmers. The Nigerian farmer-herder conflict has been compounded in recent years by the Boko Haram insurgency that has unleashed attacks in Nigeria's northeastern corridor, undermining rural livelihoods, while conflicts between farmers and herders have spilled into the nation's Middle belt, with grave consequences for both human, as well as food and nutrition security.

KEYWORDS: Farmers, Herders, Sahel, Burkina Faso, Niger, Nigeria.

1.0 INTRODUCTION

1.1 Preamble

The West African Sahel is a vast ecological zone separating the Sahara desert to the north and Sudanian savannah to the south; traversing Senegal, Mali, Burkina Faso, Niger, northern Nigeria and Chad (Igbatayo, 2018). The fragility of the region, owning largely to its proximity to the Sahara Desert, renders it vulnerable to land degradation and natural resource depletion, exacerbated by the emergent global climate change. The major objective of this paper is to shed light on the emergent conflicts between farmers and herders in the West African Sahel, with Burkina Faso, Niger and Nigeria as case studies. It employs empirical data to analyze the conflict, with qualitative and quantitative approaches. Data for the study are generated from various publications by such international development agencies as the World Bank, United Nations agencies, as well as journal papers, and other periodicals. The analysis is complemented by interviews of stakeholders across the Sahel. Findings reveal widespread conflict in several communities across the region, involving farmers on the one hand and herders on the other, in a development undermining land management, food and nutrition security, as well as human well-being.

The paper is structured into four parts. Section one introduces the state of land degradation in the West African Sahel, while section two explores the farmer-herder conflicts across the region. Section three examines the farmer-herder case studies in Burkina Faso, Niger and Nigeria. Section four ends the paper with conclusion and recommendations.

1.2 The State of Land Degradation in the West African Sahel

The West African Sahel is an ecological zone prone to high climatic variability and fragile soils. The development fuels land degradation – a reduction in biological productivity, triggered by certain natural processes. The processes may include loss of biodiversity, soil erosion by wind or water, depletion of soil nutrients, changes in the physical structure of the soil, salinization and others (Rasmussen, 1999).

In a detailed study of land degradation in the Sahel, Hammer (2005) classified the phenomenon with the following ecological factors: (i) temporal and spatial rainfall variability; (ii) declining groundwater level; (iii) highly vulnerable soils; (iv) infertile soils; (v) high evapo-transpiration; (vi) sparse vegetation cover; (vii) declining soil fertility and production of biomass; (viii) strong winds and dust storms; and (ix) intensive rainfall.

Mbow et. al., 2015; affirmed in their report on land degradation in the Sahel, that the drivers of the phenomenon are two-fold; climate change and such land use practices as agricultural intensification; over-grazing and consumption of fuel wood. Using Earth Observation techniques, the authors determined that land degradation characteristics, triggered by natural and human influence in the West African Sahel, are manifold and interrelated, as depicted in Figure 1.



Figure 1: Factors triggering Land Degradation in the West African Sahel Source: Mbow et al., 2015

Figure 1 shows a combination of climate change and variability; together with anthropogenic forces, triggers land degradation issues in the West African Sahel. Land degradation in the region has also gained momentum since the droughts in the 1970s and 1980s, fueled by soil erosion which is also spread by wind and water. This development has degraded soils and their fertility, undermining food productivity. Wind erosion removes top soils, exposing the land and rendering it vulnerable to even more damage. On the other hand, water erosion manifests in the Sahel when the surface runoff- through occasional rainfall – is high (UNEP, 2012). Persistent land degradation in the Sahel over the past several decades has rendered most land in the region unsuitable for farming. Indeed, only 8% of the land across the region is arable for faming, while irrigation infrastructure is limited to a paltry 5% of the land. In order to meet increasing food

consumption for the growing population in the region, farmers are expanding into marginal lands traditionally reserved for pastoralists, increasing conflicts in several communities (Nyong, 2007).

2.0 FARMER-PASTORALIST CONFLICT IN THE WEST AFRICAN SAHEL

2.1 Causes of Farmer-Pastoralist Conflict in West Africa

Analysts have identified environmental degradation, resource scarcity, demographic explosion, political instability and the emergent global climate change as drivers fueling farmer-pastoralist conflict in the Sahel, which are examined in turn:

- (a) Environmental degradation: The Sahel is characterized by a fragile eco-system and susceptible to environmental insecurity. Several studies have elaborated the damaging consequences of such activity as over-cultivation and over-grazing. Prolonged land degradation has depleted soils of their nutrients (Ball, 1978). Only 8% of the land in the region is suitable for farming, with irrigation agriculture already occupying about 5% of this land (Siebert et al., 2005).
- (b) Resource Scarcity: Incessant droughts have exacerbated water scarcity, driving mobile pastoralists into farmers' enclaves and increasing the risk of violence in several countries. (Shettima and Tar (2008).
- (c) **Demographic Explosion:** The West African Sahel is a geopolitical zone, accompanied by demographic explosion, with a population of more than 60 million people. The phenomenon is driven by a 'Youth bulge,' which is a major feature of the demographic profile of several countries in the region (Reader, 2008). The region's population is witnessing a rapid growth, often triggering violence between communities and

heightening food insecurity in the most severely affected countries, a development which contributed to the 2012 food crisis, where 18 million lives were at risk (Africa Renewal, 2013).

- (d) Political Instability: The West African Sahel has witnessed, over the past few decades, periods of political instability, driven by violent conflict. Lack of good governance is often blamed for this development. For example, pastoral marginalization has been identified as the root cause of the 2012 Tuareg rebellion in Mali, which degenerated into a full-scale civil war that required French military intervention to bring under control (Sustainable Security, 2016).
- (e) Climate Change: Characterized by a gradual increase in atmospheric temperatures, the global climate change has triggered such weather events as droughts, flooding, erosion, rising sea levels in coastal areas, hurricane, tsunamis, and tropical cyclones. The trend has been blamed on the emission of 'green house gases', arising from the consumption of fossil fuels (African Union, 2011; AfDB, 2015). While conflicting climate change models in Africa have emerged in recent times, there is a consensus that the phenomenon poses severe threat on the environment and livelihoods in the Sahel. The Intergovernmental Panel on Climate Change (IPCC) predicts that the region is set to experience even more extreme climate variability, with the highest rising temperatures in the world over the next few decades (CARIAA, 2015).

A United Nations Environment Programme (UNEP, 2011) study on livelihood security in the Sahel, identified climate change and non-climate (economic, social, political, demographic pressure and land degradation) factors as critical drivers of conflict. Its model elaborates the issues involved, as presented in figure 2.



Figure 2: A Model of Livelihood Insecurity in the Sahel

Source: UNEP, 2011.

2.2 The Manifestation of Farmer-Pastoralist Conflict in the West African Sahel

Farmers and pastoralists have co-existed in the West Africa Sahel over the past centuries, developing mutual relationships through reciprocity, other forms of exchange and support (Moritz, 2010). In recent times, however, extremist groups associated with global jihardism have entrenched themselves in several communities that triggered a rebellion in northern Mali in 2012 (World Bank, 2014).

The traditional relationship that has long existed between farmers and herders in the Sahel was highlighted by Oyama (2014) in a detailed study of livelihoods in the region. According to Oyama, Hausa (Sedentary) farmers plant pearl millet and cowpea seeds in June and maintain the crops from July to September. They also harvest millet in September – October. While access to farmland is strictly reserved to land owners during the rainy season, it is usually open for public use during the dry season. And when farmers are through with harvests, including cowpea leaves and millet stems for fodder, herdsmen are allowed access to farmland for grazing livestock during the dry season.

Various forces have been linked to the recent escalation in farmer-herder conflicts across the region (World Bank, 2014), including: (i) increasing competition over crop damage from livestock, access to water and dry season grazing (ii) rebellion and irredentism, involving pan-nationalism associated with ethnicity; (iii) criminal activities, involving drugs, smuggling, kidnapping and money laundering; and (iv) religious extremism, fueled by such groups as Al Qaeda in the Islamic Maghreb (AQIM). The Farmer-herder conflicts are particularly rife the Saharo-Sahelian zones of the region, a huge landmass stretching from the Southern fringes of the following group of mountains: the Adrar des Ifoghas in Mali, the Air, Ténéré, and Kawar in Niger; as well as the Tibesti in Chad. These Sahelian territories are vulnerable to aridity, water scarcity, under-population, state absence, lack of communication infrastructures and basic social services, as well as uncontrolled spaces and borders, according to the World Bank report. Figure 3 illustrates the territories threatened by violent conflicts in the Sahel.



Figure 3: The Saharo-Sahelian zones prone to Insecurity and Conflict.

Source: World Bank, 2014

Figure 3 reflects widespread areas of the Saharo-Sahelian zones vulnerable to conflict and insecurity.

3.0 FARMER-PASTORALIST CONFLICT IN THE WEST AFRICAN SAHEL: A MULTI-COUNTRY STUDY OF BURKINA FASO, NIGER AND NIGERIA

3.1 The State of Farmer-Pastoralist Conflicts in Burkina Faso

Conflicts between farmers and pastoralists have assumed an increasingly worrisome dimension across Burkina Faso in recent times. The conflicts are fueled by incessant droughts, particularly in the 1970s and 1980s, as farmers and herders across northern and eastern parts of the country struggle for control over land, water and pastures. Also, the causes of the clashes are multi-dimensional, embracing resource scarcity, loss of

traditional rights, agricultural encroachments, ineffective cattle management system, grazing land encroachments, obstructions of pastoral routes and crop damage (Abroulaye, et al., 2015). These conflicts have become rather endemic, accounting for more than 65% of all violence linked to competition for natural resources. Various sources have recorded about 600 cases of farmer-pastoralist conflicts occurring annually in Burkina Faso (MARH, 2011, MRAH, 2012). This development holds grave implications for nation's economy. The livestock subsector contributes to social, economic and cultural development, providing livelihoods to 80% of the active population and contributing 18% to the nation's GDP (MRAH, 2012).

Also, increasing demand for grazing lands, attributed to rising population of livestock against the backdrop of an emergent climate change, has fueled conflict between farmers and pastoralists, leading to violence (Vall et al., 2006). In a study of conflicts between farmers and pastoralists, Brockhaus et al., (2005) revealed:

- Over a period of three years, 111 conflicts were reported by 124 households; of these, livestock accounted for 87% of damages to crops.
- In 90% of the conflicts, dispute resolution was accomplished, with local interest groups and non-governmental organizations playing the role of mediators.
- However, 13% of the disputes remained unresolved at the local level, necessitating intervention of local administrative officers at the departmental level of government.

The conflicts became increasingly violent beginning in the early 2000s. The 2003 violent clash at Bakere, in the eastern region, brought considerable escalation into an already troubled relationship between farmers and herders (IRIN, 2012). With eight million

10

cattle and over 19 million smaller animals, Burkina Faso faces an increasing dilemma about how to manage natural resources to sustain livestock and farming. In the aftermath of the droughts in the 1970s, the government designated 185 pastoral zones, covering two million hectares.

3.2 The State of Farmer-Pastoralist Conflict in Niger

Contemporary conflicts involving farmers and herders in Niger is fueled by increasing competition for natural resources, particularly against the backdrop of an emergent global climate change. This development has subjected pastoralists in the country to pressure. Indeed, changing rainfall patterns and rapid population growth have compelled farmers to shift to 'marginal' lands in the northern regions, which have been reserved for pastoralists (Moutari and Tan, 2008). Turner et al., (2011), in a study of farmer-herder conflict in the West African Sahel, reveals that the most common cause of conflict between the groups is crop damage by livestock, often brought about by the proximity of livestock to agricultural land. In Niger, the northern pastoral zone was reserved for pastoralists. However, in recent decades, there is a northward shift in crop farming and agricultural intensification, fueled by land pressures in the south. This has led to both pasture areas and livestock routes to be cultivated, increasing the incidence of farmer-herder conflicts, which have claimed hundreds of lives since the 1990 (USAID, 2014).

A strong seasonality has also emerged, featuring farmer-herder conflict associated with crop damage and field encroachment onto pastoral sites during the rainy season. On the other hand, the relationship between the two groups shifts toward cooperation, with bartering of milk and manure contracting deemed more important in the dry season.

11

However, proximity of livestock to cropped farmlands has fueled conflict during the rainy season, owing to the following factors (Turner et al., 2011):

- Movements of people and shifts of livestock ownership towards the south, where precipitation is more reliable and pressure on agriculture lands more severe;
- A shift of livestock ownership away from historic livestock managers, together with increasing dependence on farming by pastoralists, has caused a reduction in the seasonal mobility of livestock herds; and
- Recurrent security challenges in the northern pastures of Niger (for herders) as well as the Southern pastures in Nigeria (for Konni and Tahova herders) and Benin (for Say herders) often increases the presence of livestock in the home regions.

3.3 The State of Farmer-Pastoralist Conflicts in Nigeria

The emergent violence between herders and farmers in Nigeria is traceable to the following issues: agricultural intensification; environmental degradation across the Sahel region; the decline of traditional authority and the rise in such criminal activity as cattle rustling (Baca, 2015).

The emergent conflict has assumed alarming dimensions in recent times, with violent clashes leading to the killing of thousands of farmers and herders. The conflict has equally degenerated to ethnic and religious conflagration, consuming whole communities in rural parts of northern Nigeria (Mohammed et al., 2015). Nyong (2011), conducting a study on the effects of climate change on conflict in the West African Sahel, assessed the Nigerian context with data generated from 800 households in 27 communities from

northern Nigeria, between April 2003 and March, 2004. Findings reveal that most respondents were concerned about the risk of insufficient food, followed by water scarcity, which was fueled by droughts. The respondents also identified the causes of conflict, which they attributed to competition for natural resources, as well as religious extremism and social instability.

In 2014, several states in the 'Middle Belt' of Nigeria – Benue, Kaduna, Plateau, Nassarawa and Taraba were particularly affected by communal clashes that left hundreds dead and several others partially or completely destroyed (Magnowski, 2014).

In a development that has compounded the emergent conflict between farmers and herders in Nigeria, the Boko Haram insurgency that has risen to engulf the Lake Chad Basin in recent times. Since 2009, Boko Haram has unleashed violent attacks against three states across the north eastern corridor of Nigeria – Borno, Bauchi and Adamawa--in a development that escalated in 2013, with the launching of 350 raids and the killing of more than 5,000 civilians in northern Nigeria (Amnesty International, 2015). The group's major aim is to carve out a territory in northern Nigeria, where it could practice his own version of radical Islam (Brookings Institution, 2014; Oxfam, 2016).

By 2015, Boko Haram had taken control of 15 local government areas in eastern Nigeria, provoking humanitarian crisis, accompanied by 1,950,000 IDPs in the nation's north eastern states of Adamawa, Borno, Gombe and Yobe, in addition to the 262,000; 119,000 and 281,000 refugees in Cameroon, Chad and Niger, respectively (Oxfam, 2016). Indications are, however, that about three million people or more may have suffered from the Boko Haram insurgency. The conflict has affected households, who have suffered

several years of substantially below-average harvests, reduced income levels and access to food (FEWS, 2016; OCHA 2016).

4.0 CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The West African Sahel is a fragile agro-ecological zone, prone to climatic variability. The 20th century featured considerable climate changes for the region, characterized by incessant droughts that have triggered water scarcity. The global climate change has, in recent times, exacerbated ecological fragility in the region. A combination of climate variability, increasing competition for depleted natural resources and rapidly increasing population trends have unsettled the peaceful co-existence that hitherto prevailed between farmers and herders in the region. Contemporary relations between the two groups have been undermined by incessant violence that consumed the lives of farmers and herders alike. The challenges associated with farmer–herder conflicts have assumed problematic dimensions in Burkina Faso, Niger and Nigeria. A common thread associated with the farmer-herder conflict in the three countries lies in the failure of national strategies to manage natural resources effectively to the benefit of both farmers and herders.

4.2 **Recommendations**

The following recommendations are aimed confronting the farmer-herder conflict in the Sahel:

• Conflict management: There is need to establish robust conflict management mechanisms to resolve conflicts between farmers and herders.

- Climate change mitigation and adaptation strategies: Policy makers should invest in climate-resilient frameworks as effective tools to combat climate change and its impacts, particularly on agriculture.
- Preservation of pastures for herders: Policy makers should provide exclusive land reserves for herders and their livestock to eliminate conflict with farmers.
- Provision of humanitarian assistance to conflict-prone communities: Policy makers, in partnership with development agencies, should make resources available to mediate emergent humanitarian crises in affected communities.

REFERENCES

Abroulaye, S., Issa, S., Abalo, K., and Z. Nouhoun (2015): Climate Change: A Driver of Crop Farmers-Agro Pastoralists Conflicts in Burkina Faso. International Journal of Applied Science and Technology. Vol. 5, No. 3, June.

Africa Renewal (2013): The Sahel: One Region, Many Crises. December. The United Nations.

African Development Bank (AfDB) (2015): Africa's Climate Opportunity: Adapting and Thriving. AfDB at the UNFCC COP 21 meeting.

African Union (2011): Addressing Climate Change Challenges in Africa: A Practical Guide towards Sustainable Development. (in association with AMCEN). Addis Ababa.

Amnesty International (2015): Boko Haram at a Glance. 29th January.

Baca, M. (2015): Farmer-Herder Clashes Amplify Challenge for Beleaguered Nigerian Security. The Global Observatory. 16th July.

Ball, N. (1978): Drought and Dependence in the Sahel. The International Journal of Health Services. Vol. 8, No. 2. Baywood Publishing Co., Inc.

- Brochaus, M., Pickardt, T. and B. Rischkowsky (2005): Managing Conflicts between Farmers and Herders in Burkina Faso. Eldis.
- Brookings Institution (2014): The Impact of Conflict and Political Instability onAgricultural Investments in Mali and Nigeria. Africa Growth Initiative WorkingPaper 17. July. Washington, D.C.

Collaborative Research Initiative in Africa and Asia (2015): Vulnerability and Adaptation to Climate change in the Semi-arid regions of West Africa. (in association with Adaptation at Scale in semi-arid regions – ASSAR). Adaptive Economic Community of West African States (ECOWAS) (2006): Regional Integration

for Growth and Poverty Reduction in West Africa: Strategies and Plan of Action. ECOWAS Executive Secretariat (in Association with WAEMU Commission) Abuja.

- Famine Early Warning Systems Network (FEWS) (2016): Conflict in the Lake Chad Region Continues to Impact Livelihood Activities and Food Access. Nigeria Food Security Outlook. Feb – Sept.
- Food and Agriculture Organization of the United Nations (2017): Adapting Irrigation to Climate Change (AICC). Italy.
- Igbatayo, S.A. (2018): Combating Climate Change and Land Degradation in the Sahel: a Multi-country study of Mali, Niger and Senegal. Proceedings of an International Conference on "Climate Change and Resilience of Territories: lessons from West Africa," organized by Innovation, Environment, Development (IED) *Afrique*, 10th-12th September. Dakar.
- IRIN (2012): Preventing Conflicts between Farmers and Herders. 30th October.
- Magnowski, D. (2014): Nigeria Herder-Farmer Violence Kills 1,000 This Year, Group says. Bloomberg. 15th April.
- Mbow, C., Brandt, M., Ouedraogo, I., and J. Leew (2015): What Four Decades of Earth Observation Tells Us about Land Degradation in the Sahel? Journal of Remote Sensing. Vol. 7, pp. 4048-4067.
- Ministère de l'Agriculture des Resources Halieutiques (MARH) (2011): Analyse Thématique sur la Gestion des Terres et le Froncier. Ouagadougou. MARH/RGA 2006 – 2010.

- Ministère des Resources Animales et Halieutiques (MRAH) (2012): Rapport Annel d'Activité. Ouagadougou.
- Moritz, M., (2010): Understanding Herder-Farmer Conflicts in West Africa: Outline of a Processual Approach. Human Organization. Vol. 69. No. 2. Society for Applied Anthropology.
- Moutari, M. and S. Tan (2008): Security Pastoralism in East and West Africa: Protecting and Promoting Livestock Mobility. Niger/Nigeria Desk Review. October.
- Mohammed, I., Ismaila, A., and U. Bibi (2015): An Assessment of Farmer-Pastoralist Conflict in Nigeria using GIS. International Journal of Engineering Science Invention. Vol. 4, Issue 7. July.
- Nyong, A. (2011): 'Climate Related Conflicts in West Africa' in: Report from Africa: Population, Health, Environment and Conflict. ECSP Report 12. Woodrow Wilscon Center, Washington, D.C.
- Oxfam (2016): Lake Chad's Unseen Crisis. Voices of refugees and internally displaced people from Niger and Nigeria.
- Oyama, S. (2004): Farmer-Herder Conflict, Land Rehabilitation and Conflict Prevention in the Sahel Region of West Africa. Africa study Monographs, Suppl. 50:103-122. October.
- Rasmussen, K. (1999): Land Degradation in the Sahel-Sudan: the Conceptual basis. Geogrfisk Tidesskrift, Sio2 pp 151-158.
- Reader, N. (2008): Backgrounder on the Sahed, West Africa's Poorest Region. IRIN. June, Ouagadougou.
- Shettima, A., and U. Tar (2008): Farmer-Pastoralist Conflict in West Africa: Exploring the Causes and consequences. Information, Society and Justice, Vol. 1-2, June.

Siebert, S., Döll, P., Feick, S., and J. Hoogeveen (2005): Global Map of Irrigated Areas (Version 3.0). Frankfurt and Rome: University of Frankfurt & Food and Agricultural Organizations.

Sustainable Security (2016): Does Climate Change Cause Conflicts in the Sahel?

- Turner, M., Ayantunde, A., Patterson, K. and E. Patterson III (2011): 'Livelihood transitions and the changing nature of the farmer-herder conflict in Sahalian West Africa'. Journal of Development Studies, Vol. 47, Pp. 183-206.
- United Nations Department of Economic and Social Affairs (2011): World Population Prospects. 2011 Revision. New York.
- United Nations Environment Programme (UNEP) (2011): Livelihood Security: Climate change, Migration and Conflict in the Sahel. Nairobi.
- ----- (UNEP) (2012): Sahel: Atlas of Changing Landscapes. Tracing trends and variations in vegetation cover and soil condition. Nairobi.
- United Nations Office for the Coordination of Humanitarian Affairs (OCHA) (2016) : Lake Chad Basin: Crisis Update. No. 5. 11th July.
- United States Agency for International Development (USAID) (2014): Climate change and conflict: Findings and Lessons Learned from Five Case Studies in seven countries. July African and Latin American Resilience to Climate Change (ARCC) Project.
- Vall, E., Dugue, P., and M. Blanchard (2006): *"le tissage des Relations Agriculture Elevage au fil du Coton"*. *Cashiers Agricultures* 15 (1): 72-79.
- World Bank (2014): Pastoralism and Development in the Sahel: A Road to Stability? Global Centre on Conflict, Security and Development. Washington, D.C.