





Analysis of Social Network Dynamics of Fulbe Communities in Northern Ghana



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Executive Summary

This research analyzed the social network dynamics of a sub-regional sample of ethnic-Fulbe communities in northern Ghana in order to understand how this group manages socio-economic activities, and to assess key internal and external actors' influence on their social networks. The research mapped key actors and their networks through a social network analysis (SNA) to gain insights into the various roles and *cliques* in Fulbe networks, such as brokers, influencers, resource hubs and active networkers.

Social networks focus on the types of relations between actors (individuals and groups) and how these actors' relations influence each other. The units within social networks include individuals, families and households. Social networks are a mobilizing force that allow for the development of social belonging, friendship, alliances, mutuality, cohesion, and interaction. However, social networks can also often be used to mobilize tribalism, by fomenting exclusionary behavior and actions that can manifest into cliques, violence, power consolidation, and hostility towards other groups outside the social network. Because social networks are generally siloed by ethnicity, politics or religion, they can both support intra-community cohesion and incite inter-communal marginalization.

The Fulbe are an ethnic group of approximately 40 million people across multiple countries in West Africa,¹ with a long history in the Gold Coast that predates Ghana's independence.² In 1948, there were an estimated 20,000 Fulbe in Ghana; today their population is estimated to be around 300,000.³ Before independence, there was not a significant permanent Fulbe population in Ghana, because the pastoralists practiced seasonal transhumance, and moved south during the dry season when climatic conditions in the Sahel were unfavorable, and returned north when the rains set in.⁴ Their permanent settlement in Ghana is quite recent, occurring only in the past century.⁵

Three main factors influenced the permanent stay of Fulbe in the Gold Coast: the expansion of the regional cattle trade; the expansion and development of ranching and large scale farming under British colonial rule; and the Sahelian droughts in the 1960s-70s, that necessitated their

¹ Sangare, B. 2019. Fulani people and Jihadism in Sahel and West African countries. Fondation pour la Recherche Stratégique.

² Bukari, K. N, Bukari, S., Sow, P., & Scheffran, J. (2020). Diversity and multiple drivers of pastoral Fulani migration to Ghana. *Nomadic Peoples*, *24*(1), 4-31); Tonah, S. (2005b). *Fulani in Ghana: Migration history, integration and resistance*. Legon-Accra: Research and Publication Unit, Dept. of Sociology, University of Ghana

³ The 1948 and 1960 Ghana Population and Housing Census (PHC) put the Fulbe population at 20,000 and 25,050 respectively; the 2000 PHC estimated the Fulbe to be 300,000. The 2020 PHC captured the Fulbe as part of other ethnic groups making it difficult to know their actual population size.

⁴ Bukari, et al. (2020).

⁵ Tonah, 2005b.

migration into sub-Saharan Africa in search of pasture and water for their cattle. Since this permanent relocation took place, Ghanaian cattle owners nationwide have increasingly employed Fulbe to take care of their cattle, and encouraged them to settle closer to their community, supporting Fulbe integration in Ghanaian society, to a certain extent. These socioeconomic relationships and settlements have become the framework for Fulbe-social networks, bonds of friendships and ties with different groups of people in Ghana.

During everyday interactions, Fulbe build internal and external networks with other groups - such as farmers, local associations, traditional and national leadership, market vendors, etc - to ease Fulbe pastoralists' access to community resources. External Fulbe networks with various agents create *social ties*, *bonds*, and *networks* to build their social capital. Social ties are the links that bind individuals with other people, which includes family, friends, classmates, neighbors, colleagues and others. Networks are the (in)formal social arrangements based on social ties. Bonds are the degree to which an individual is integrated into a social network.

Key findings from the Social Network Analysis:

- **Key actors** that influence Fulbe networks are their traditional leaders (chief, elders, opinion leaders), wealthy cattle owners, herder and rancher associations, and family heads.
- Fulbe leadership is responsible for managing land use and ownership, cattle and resource acquisition, access to resources and markets, transhumance activities, and mediating conflicts.
- Fulbe community structure is hierarchical, with the household (*Wuro*) at the base, followed by the clan, and then the community, which is managed by the Fulbe chiefs and the Council of Elders. A third of respondents (34%) identified the Fulbe chief as the most important leader in the community followed by the host community chief (20%), the youth leader (14%), the religious leader (7%) and head of the household (9%). This structure is central to the Fulbe collective sense of identity and the bonds of *Pulaaku* (togetherness) in their communities.
- **Legal integration** in Ghana has been challenging for Fulbe to achieve; there were reports that Fulbe experienced significant hurdles in obtaining the Ghana Card or citizenship. This inadvertently has limited their political participation;
- Fulbe social integration in urban areas was positive, as Fulbe were reportedly
 engaged in economic pursuits beyond cattle, easing their assimilation in host
 communities. Rural Fulbe, meanwhile, are more isolated, often living on the outskirts
 of towns, which perpetuates marginalization and stereotyping, that can contribute to
 and exacerbate intercommunal conflicts;
- Civil society representation is important, and Thabital Pulaaku was reported to be the primary organization representing Fulbe interests in Ghana, and the primary civil

⁶ Tonah, 2005b.

⁷ Bukari, 2017.

- society organization (CSO) that mediates community conflicts involving Fulbe. Other CSOs exist, such as the Ghana Cattle Farmers' Association, which also intervenes on cattle issues, and the Council of Fulani Chiefs; however, Thabital Pulaaku has an outsized role at the community and national level.
- Transhumance organization and networks are managed by the Fulbe chief, Ruga (head of the herders) and Garso (scouts among the pastoralists), at the community level. Thabital Pulaaku, the Garichi Committee, and the Ruga Association of Ghana are also charged with engaging the government and national association actors, when organizing and supporting transhumance countrywide.
- Intercommunal relations with the host-community are the most important relationship, affecting their access to land and resources, and ultimately, their peaceful coexistence with other Ghanians. 60% of the respondents highlighted the critical role that the host community chief plays in intercommunal relations with Fulbe.
- Intermediaries and brokers are critical individuals who help Fulbe obtain access to
 water, pasture, resources, and markets. Intermediaries can be host-community
 traditional and civil society leaders, Fulbe elders and opinion leaders, elected
 officials, language interpreters, butchers, cattle dealers and agents. They also have
 a role in mediating Fulbe social organization, conflicts, and transhumance with the
 host community and government.
- **Primary commercial intermediaries** for the Fulbe are usually butchers. Butchers have dynamic roles that extend beyond basic economic services and relations; onethird of respondents reported accepting financial assistance from their butcher.
- Transnational/regional connections define Fulbe familial and cultural relations in many ways, due to their history of seasonal transhumance. 77% of respondents in northern Ghana have connections to Fulbe groups in Burkina Faso, and 82% of respondents report that they send remittances to family and friends in the Sahel.
- Attacks on Fulbe were reported to be increasing in all research locations. Half of the
 respondents reported witnessing violence against, and involving, Fulbe in the past
 two years. These reports included attacks on individuals, intimidation, farmer-herder
 conflict, and property destruction in Zakoli, Busunu, and Bimbilla.
- Fulbe-on-Fulbe crime, especially kidnapping, also increased. Kidnapping was reported in Banda Nkwanta, Gushiegu, Bole, Tinga and Buipe. Fulbe were also involved in cattle rustling.
- Stigmatization of Fulbe as violent extremists in the Sahel has deepened negative
 perceptions of Fulbe among security agencies and some civilians. These beliefs have
 been confounded by the fact that Amadou Koufa is the Malian, ethnic-Fulbe leader
 of the violent extremist organization (VEO) Katibat Macina (a subgroup of the alQaeda umbrella organization known as Jama'a Nusrat ul-Islam wa al-Muslimin' or
 JNIM).

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Glossary

Term	Definition	Term	Definition
Amiru	Fulbe chief in a community	Linguist	Spokesperson to the chief
Bororo	Fulbe group, mostly from Nigeria	CWA	USAID's Coastal West Africa Regional Initiative
CAMFED	Campaign for Female Education	MMDAs	Ghanaian Metropolitan, Municipal and District Assemblies (in Ghana)
CECOTAPS	Centre for Conflict Transformation and Peace Studies	MOFA	Ministry of Food and Agriculture, Ghana
Council of Elders	A group of Fulbe elders or respected persons who help the Fulbe chief to rule	NIA	National Identification Authority, Ghana
DCE	District Chief Executive	Pastoralism	The livelihood of raising livestock in grasslands using herd and household mobility
FGD	Focus Group Discussion	Queen Mother	Women's leader
Fulani	Fulbe/Peuhl	Respondent	Individuals that responded to the surveys in the primary data collection
Fulbe Mother	Mother of the Fulbe chief or the most respected female senior citizen.	Ruga	The head of the Fulbe pastoralists who mediates among them in Fulbe communities in Ghana
Fulbe Father	Father of the Fulbe chief or the most respected senior citizen	SEND-Ghana	Social Enterprise Development Foundation - Ghana
Garichi	Cattle enclosure, known as kraal	SNA	Social Network Analysis
Garso	Fulbe scouts who chart the way for pastoralists, in search for grazing space	Thabital Pulaaku	Organization promoting Fulbe culture, unity, welfare and interests
Ghana Card	The main national identity card for proof of citizenship	Transhumance	Practice of seasonal nomadic pastoralism
JNIM	Jama'at Nusrat al-Islam wal- Muslimin	VE	Violent extremism
Kananke	Fulbe term for host community chief	WANEP	West African Network for Peacebuilding
KII	Key Informant Interview	Wuro	The Fulbe household and the base of the Fulbe social organization

Methodology

Problem statement

Fulbe movement in and out of Ghana has been indicative of their history in the Gold Coast, long before Ghana's independence.⁸ The existing literature examined inter-Fulbe community networks and relations, and how these networks influence conflicting or cooperative relations with communities.⁹ These studies also explain how Fulbe networks enable access to and use of water, land and pasture resources. However, there are no social network analyses of the Fulbe communities that map out the internal and external Fulbe networks and relations, limiting understanding of which Fulbe actors are best placed to promote cooperative interactions and reduce conflict with external parties. This research therefore examines the Fulbe network nodes (individuals or entities) and the ties, edges, or links (relationships or interactions) that connect Fulbe communities (within Ghana and across the borders).

Research objectives

- 1. Map Fulbe internal network structures in northern Ghana using a social network analysis.
- 2. Examine Ghanaian Fulbe social and political integration and marginalization.
- 3. Analyze the organizational structure of Fulbe transhumance networks and operations.
- 4. Examine the influence of external actors on internal Fulbe relations and networks
- 5. Analyze the interplay between intra-Fulbe networks and crime within the Fulbe community.
- 6. Provide informed policy and practical recommendations on engaging Fulbe in Ghana.

Methodology

The analysis used mixed-methods (qualitative/quantitative) inputs, consisting of key informant interviews (KIIs) and focus group discussions (FGDs), in addition to a comprehensive literature review that was informed by the Theory of Needs, Social Network Theory (SNT) and the Theory of Planned Behavior (TPB), to understand the structure of social groups and interactions within the community (see Appendix 2). The sample population was the Fulbe in northern Ghana, including pastoralists, Fulbe groups, youth leaders, community leaders, chiefs, local cattle owners, butchers, traditional chiefs of host communities, other host community leaders, government officials and host/Fulbe community members (see Appendix 1).

The research focused on five administrative regions in northern Ghana (see Figure 1): Upper East, Upper West, Savannah, North East and Northern regions. Four key criteria informed the selection of Fulbe communities: 1) the proximity of the Fulbe community to major market centers,

⁸ Bukari, et al., 2020; Tonah, 2005.

⁹ Bukari, 2017; Bukari, et al., 2018; Yembilla & Grant, 2014.

2) the proximity of the Fulbe community to border areas, 3) the operational areas of the USAID Coastal West Africa Regional Initiative and 4) prominence of kidnappings, cattle rustling and other forms of crime involving Fulbe. The following 31 communities were selected:

- 1. Northern (9): Diare, Karaga, Gushiegu, Nambagala, Mion, Zakoli, Jimle, Sang, and Bimbilla;
- 2. North East (6): Walewale, Kpasenkpe, Gbimsi, Wulugu, Mankarigu, and Janga;
- 3. Upper East (5): Zebilla, Nankong, Fumbisi, Widnaba, and Tongo;
- 4. Upper West (4): Kundugu, Funsi, Hamile and Kpongu; and
- 5. Savannah (7): Buipe, Yapei, Busunu, Bole, Damongo, Tinga and Banda Nkwanta.

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Analysis of Social Network Dynamics of Fulbe Communities in Northern Ghana

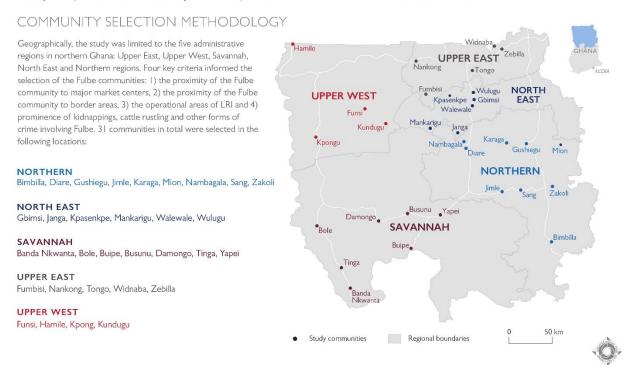


Figure 1: Map of studied communities. Source: USAID OTI.

In each community, relevant actors were identified for the SNA using the convenience sampling procedure. This approach asked respondents to list individuals with whom they discussed important matters in the past six months, after which purposive sampling was employed to select six actors from each community to interview. Actor selection was based on the most connected individuals who are likely to bridge structural gaps and have better access to others. 186 respondents were interviewed (disaggregated by gender, this amounted to a sample of 178 males (95.7%) and 8 Females (4.3%) - see 'limitations' below).

FGDs involved the chiefs and the elders of each Fulbe community, Fulbe youth leaders, butchers and local cattle owners, who were identified using purposive and snowball sampling techniques. Two FGDs were conducted in each community, amounting to 62 in total; three FGDs of Fulbe women were conducted in Widnaba, Hamile and Jimle. Data collection was done using KII and FGD guides. The KII data was collected using Kobo Toolbox while the FGD data were recorded and transcribed. The KII data was analyzed using descriptive statistics and an SNA was created using the kumu.io software.

Limitations of the research

The research was limited by the low representation of Fulbe females, due to difficulties in accessing a female research sample. Women in Fulbe communities do not usually hold major leadership positions or partake in formal decision-making. During the data collection, the women were not available to interview because they generally do not participate in group activities that involve men. Access to the small sample of female respondents was only granted by male family members of these women.

Additionally, the SNA did not capture details of the Fulbe caste system. While a caste system in Fulbe communities in Ghana is not as prevalent as it is in the Sahel, the social ranking and network of it merits deeper understanding. The issue of class and intra-ethnic stereotyping among the Fulbe, did come through in the focus groups, though with limited detail.

1. Social Organization

Networks are important to understand Fulbe social organization, because they offer a way to explore community cohesion. The Fulbe have been described as building both formal and informal relations with different groups; their informal networks enable them to access resources (water, land and pasture) and to settle in communities, sometimes despite opposition from the local population. Relations of solidarity and trust are central to informal networks, which are based on ties of kinship, ethnicity, friendship and community. Social cohesion refers to the ties that bind individuals or people in a community. Interactions between individuals offer clues to understanding the social organization within the group. Social organization is the networks of people, the exchanges and reciprocity that transpire in relationships, accepted standards and norms of social support, and social controls that regulate behavior and interaction between individuals and groups. Other elements include the social structure, which is the arrangement or division of society into social groups, roles or networks, and social organization, which is the pattern of relationships between individuals and social groups in society. Furthermore, Fulbe community needs may be contextually driven by the nature of their work, and their social structure. As pastoralists, transhumance requires security for survival of the group and their animals. This safety need cannot be adequately addressed by the individual, and so intra-group social organization and networking are key.

Across West Africa, various sub-groups of Fulbe have adopted and formed new ethnic identities based on intra- and inter- social organization that reflect their way of life. ¹⁰ Seasonal mobility has become one of the most significant processes by which Fulbe interact with each other and other ethnic groups, which influences their access to resources. As a result, the spatial fluidity of social networks is an important consideration; due to annual migration and regular movement, the internal social contract of the family network fluctuates, depending on when herders are present. These differences also impact intra-Fulbe engagement, and can contribute to in-fighting. ¹¹ Fulbe are not homogenous and there are many divisions among them along ethnic, political, and religious lines, which can lead to fragmentation and intra-communal conflict.

Fulbe Social Structure

Fulbe social structure is defined across three levels: 1) the family (*Wuro*), 2) the clan, and 3) the community (which can be defined by a group of clans). These three levels define social relations and ties within the Fulbe community. Studies about Fulbe have demonstrated that their patrilineal structure is important in their organization of work and political organization at the family level.

¹⁰ Ogawa, R. (1992). Ethnic identity and social interaction: A reflection on Fulbe identity. In P. K. Eguchi &V. Azarya, (Eds). *Unity and diversity of a people: The search for Fulbe identity* (pp. 119-137). National Museum of Ethnology Osaka Japan: Senri Ethnological Studies 35.

¹¹ Promediation. (2021). Pastoralism and security situation in Ghana.

The basic unit of Fulbe social organization often divides along kin and residence lines. This unit is defined in relation to the control of cattle, their primary economic commodity and livelihood resource. Cattle are managed by the head of the *Wuro*. The research found that while some women own cattle, they generally have no control over it as a commodity.

The makeup of the *Wuro* is affected by migration, divorce or the consequence of life cycle events, which can compel members to leave the *Wuro*. Women's roles within the *Wuro* are mainly defined in relation to the men: women are born into the *Wuro* of their father, and then subsequently become members of their husband's *Wuro*, and of their son or younger brother, if their husband is deceased. The *Wuro* is defined by joint management of cattle, whereby splitting up the head (one of the sons leaving the *Wuro*) automatically leads to the division of this social order. Each new *Wuro* chooses a direction that fits its purposes best. Though the *Wuro* is the institutional basis for herding, members generally maintain ties with their existing family households. As such, Fulbe social networks are driven by factors that impact the social order directly, such as: security, management of women as both spouses and labor, information sharing about resource availability across the region, and successful use of a dry season well/stream. The relevant social organization for building these relations and networks is the patrilineage and clan *(lenyol)*, the second level of the Fulbe social order.

Clans and social groups manifest through the practice of co-residence, inter-marriages, pastoral co-operation, joint migration, competition, and political alliance building. Within and between lower-level lineage segments, kin relations among its members are not simply rationalized expost facto, but also through descent relations that are traceable through males, as well as day-to-day social practices, interactions, interests, needs and resource use and availability within the family or clan.¹² Intra-social bonds and ties within Fulbe groups emerge from marriage, exchange of resources, cattle, and external shocks (e.g. attacks/conflicts from an external group/tribe).

Fulbe and their family members' networks are mainly primordial and familial ties. These ties are built through visits, remittances and financial support for family members, and social events like marriage, funerals and naming ceremonies. The research found that remittances (82%) accounted for the most significant type of support that Fulbe gave to their family members in the Sahel. Over 77% of this research sample reported ties to family and friends located in Burkina Faso, which is because the vast majority of Fulbe in northern Ghana are descendents of those who migrated south from the Sahel during the 1970s droughts.

As a result of the history of migration into Ghana, different Fulbe clans now co-exist in one community, mainly due to the recruitment of Fulbe herders, something that's not as commonly seen in the Sahel. Consequently, the Fulbe leadership structure in Ghana can include both *Wuros*

¹² Schareika, (2010). Pulaaku in action: Words at work in Wodaabe clan politics. *Ethnology*, 49(3), 207-227.

and clan heads. Moreover, because of these migrations disrupting the strict hierarchies of clan culture in the Sahel, in Bole, Banda Nkwanta, Busunu and Tinga, community leadership included mainly *Wuros*, instead of the clan heads.

Typology of Fulbe Socio-Economic Groups in Ghana

This social network analysis primarily focused on the role of pastoralists in Fulbe communities in northern Ghana. There are various types of Fulbe pastoralists. These include the strictly nomadic group, the semi-nomadic and the sedentary group. ¹³ Fulbe sub-ethnic groups in northern Ghana include the Bororo (often referred to as Nigerian or Hausa Fulbe), Fulbe Mossi (known as Burkina Peulh), Fulbe Niger, Bargumhe (Benin), and Boorblankobhe (Mali). These groups are usually based on their country of origin. The Fulbe are most well-known for their association with cattle and nomadism, however, only about a third of the Fulbe in Ghana currently live a nomadic lifestyle. Many of the Fulbe communities in rural areas are semi-sedentary, and most of these groups have participated in various forms of mixed farming adaptations and ranching. ¹⁴

The subject of caste was not discussed directly with the research sample. The caste system was mainly reported in the Hausa Fulbe and Mossi Fulbe division with regard to leadership. Some Fulbe Mossi respondents claimed that the Fulbe Hausa looked down upon them and did not regard them as worthy people who should lead them. The Mossi reported that the Hausa believe their wealth denotes their higher ruling class status. The Hausa Fulbe did not report these caste or socio-economic cleavages.

The natural resource management approach of the Fulbe varies in form from place to place. It is characterized by a predominantly semi-sedentary population of cattle raisers who, through marrying within the same clan, caste or ethnic group, and having the new couple stay in the husband's family house (patrilocality), remain apart from local farming populations while retaining extremely close trade, market, or even kin relations with them. Economic relations include the trade or sale of dairy products or meat for cash or the farmers' grain (rapidly declining in favor of cash exchanges). It also involves the labor of Fulbe herders to care for the cattle belonging to the farmer. This form of labor is now increasingly being paid for cattle owning in the absence of entrepreneurs. The presence of semi-sedentary Fulbe communities has assured more nomadic Fulbe communities of access to pastures. They have provided the political link and buffer, which offer an opening for more nomadic groups. Due to marriage networks and herding contracts,

¹⁴ Wilson, W. (1995). The Fulani model of sustainable agriculture: situating Fulbe nomadism in a systemic view of pastoralism and farming. *Nomadic Peoples*, *36*(37), 35-51.

¹³ **Nomadic** groups of pastoralists are mobile and continuously move from place to place. The **sedentary** are permanently settled in a community and may engage in other activities such as farming and trading. The **seminomadic** is a hybrid of the nomadic and sedentary; they stay for a while and move depending on conditions. The research did not seek to understand the makeup of each group in the Fulbe population.

more nomadic Fulbe reduced the dangers of their political or economic marginalization through such social and economic interaction with semi-sedentary or sedentary communities.

"Previously, we [Fulbe] were mainly nomadic and didn't stay long in Buipe. We changed from nomadic to sedentary lifestyle due to the quality and quantity of the pasture and good weather. Even those of us who are nomadic are able to access pasture because of our relations with the sedentary Fulbe." - FGD participant in Buipe, Savannah Region.

Several organizations have been formed to provide political support at various levels of governance for the inclusion of Fulbe interests and concerns. These organizations and associations include:

- **Thabital Pulaaku**: The group promotes Fulbe culture, welfare, defends Fulbe interests and promotes unity by bringing Fulbe together internationally. It is active across most West African countries.
- **National Council of Fulani Chiefs**: Fulbe chiefs across Ghana who represent Fulbe at the regional and local level in national issues. The group is well recognized and enjoys wide political acceptance with regards to national issues.
- Fulani Youth Association of Ghana: Fulbe youth in Ghana who advocate on behalf of the youth, building cohesion, to support youth welfare, and combat negative stereotypes.
- **Association of Fulani Herdsmen**: Fulbe herdsmen who promote the interest and unity of herders, advocate against negative stereotypes, and mediate farmer-herder conflicts.
- **Suudu Baaba Association of Ghana**: One of the oldest Fulbe groups in Ghana that promotes Fulbe welfare, defends Fulbe values and provides formal education to Fulbe, to "give voice to the voiceless herders". ¹⁵ It started in Accra in the 1950s.
- Ghana National Association of Cattle Farmers: Made up of Fulbe and non-Fulbe cattle
 farmers in Ghana, however, the majority of members are Fulbe. The group has regional
 representatives throughout Ghana and promotes the welfare of cattle farmers.

Across all the 31 communities of the research sample, respondents cited Thabital Pulaaku as the most visible and active organization supporting Fulbe in northern Ghana, followed by the National Council of Fulani Chiefs and Ghana Cattle Farmers Association. Suudu Baaba Association is relevant in Greater Accra and parts of the central regions of Ghana, rather than in northern Ghana. The National Council of Fulani Chiefs is more recognized by the Ghanaian government at the national level than any other group.

¹⁵ Interview with National Secretary of Suudu Baaba.

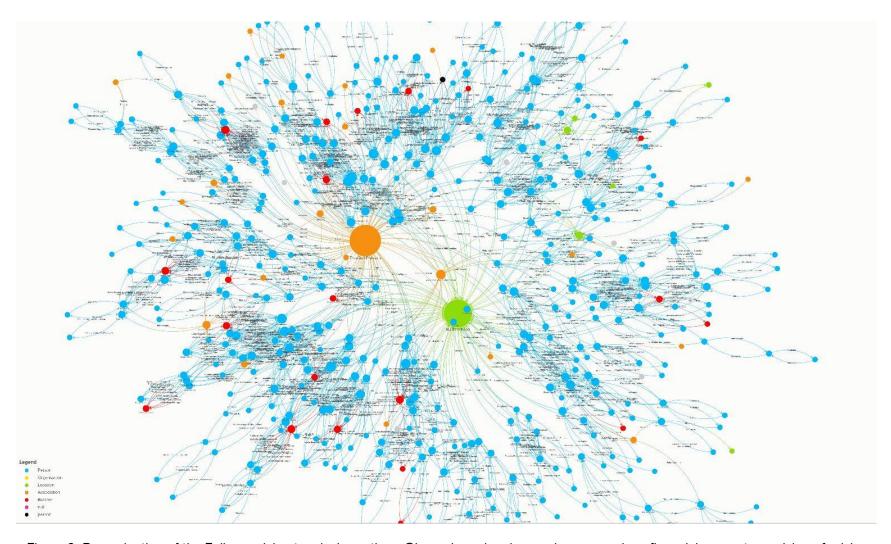


Figure 2: Reproduction of the Fulbe social networks in northern Ghana, based on key exchanges such as financial support, provision of advice, mediation, and support on key functions such as pastoralism and integration. Orange nodes are associations (the largest in the center is Thabital Pulaaku), green nodes are countries (the largest node is Burkina Faso), blue nodes are individuals and red nodes are specifically butchers. Source: authors, based on primary data analyzed in Kumu.io. A social network broken down per region is shown in Appendix 4.

There are many other Fulbe associations in Ghana that build networks among the Fulbe. For example, the Ruga Association of Ghana has been able to introduce the Ruga, Garso, and the Garichi Leaders into the internal leadership structure of Fulbe communities. These associations assist the Fulbe in organizing at the community level around the Fulbe chief, the local leader of the group, who is also recognized by the host-community chiefs and District/Municipal Assemblies. The chief represents the interest of the Fulbe at the community level with regards to land acquisition, farmer-herder conflicts, and general welfare concerns of the community.

2. Fulbe Leadership Structure

Fulbe build relations and alliances with different stakeholders in their host community and with external actors outside the host community. Fulbe leaders mediate and respond to competing interests and demands. This section examines these leadership structures.

Leadership Structure

Key Actor	Roles and Responsibilities
Host community chief (Kananke)	Distributes land to Fulbe, handles conflict management, installs/approves the Amiru
Fulbe chief (Amiru)	Head of the Fulbe leadership structure, handles conflict management, ensures welfare of Fulbe in the community, integration of new Fulbe, liaise between Fulbe and the leadership of the host community
Fulbe Father (Baba Walde)	Father of the Fulbe chief or the most respected senior citizen; advises the Fulbe chief and supports conflict management
Fulbe Mother (Inna Walde)	Oversees women's affair, advises young females, manages domestic and marital conflicts in some communities
Assistant Fulbe chief (Jokudu Amiru)	Acts as chief in the absence of the Fulbe chief and handles conflict management
Council of Elders (Maube Zanguru Amiru)	Advise the chief, handle conflict management
Linguist	Chief protocol officer
Imam	Leads the Fulbe in worship, provides religious teaching, mediates conflict and misunderstanding, educate Fulbe on good behavior and good neighborliness
Wuro	Mediates conflicts among and within families

	_
Ruga	The head of the Fulbe pastoralists who mediates among them in Fulbe pastoralists in the community.
Women Leader (Ardido Rewbe)	Nurtures females into adulthood, mediates marital conflicts, organizes females, provides advice on child naming ceremonies, marriages and funerals
Youth Leader (Sirichi Samari)	Organizes the youth, educates youth on good neighborliness, organizes the you to provide protection (watchdog groups) for the Fulbe community, manages conflict among the youth
Butcher	Buys livestock, provides financial assistance, mediates conflicts
Garso	Assistant to the Ruga, relays information from herders to the Ruga
Garichi (Kraal) Leader	The leader of the cattle kraal in the market or community; responsible for marketing of cattle as well as herd management.

Table 1: Key Actors in the Fulbe community and their responsibilities

An analysis of the data from the SNA shows that slightly over 34% of the respondents identified the Fulbe chief as the leader in the community followed by the host community chief (20%), the youth leader (14%), the religious leader (7%) and head of the household (9%) as shown in Figure 2. Other (10.3%) influential persons listed include the Father and Mother. The results were similar when the respondents were asked about the person with most authority in the community. The Rugas were not reflected in either responses.

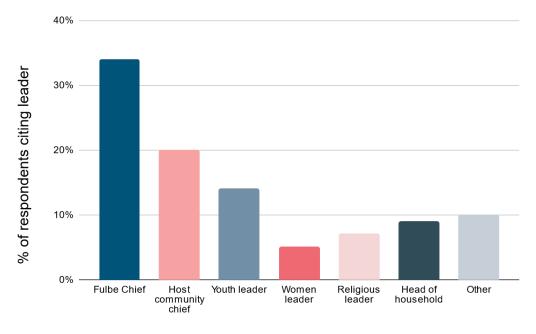
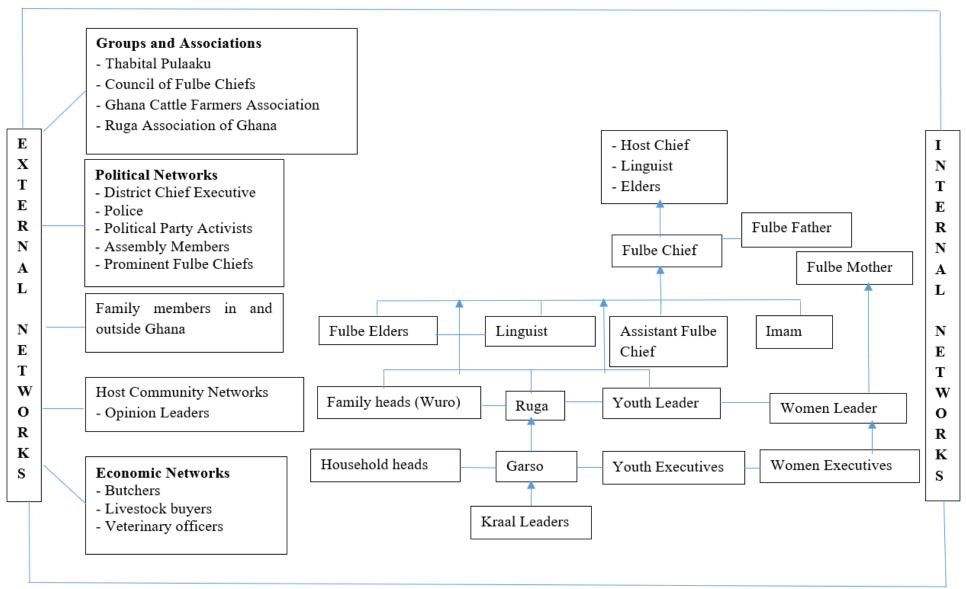


Figure 3: Leaders in the Fulbe Community. Source: Field data, October 2022.

Figure 4. Structure of internal and external Fulbe networks. Source: authors based on field data.



Chieftaincies

Fulbe organizational structures and patterns are intricately related to their economic survival. Fulbe communities studied in the five regions are mostly migrant settlers who have pledged their allegiance to the chief of their host communities. Their leadership structures are hierarchical. The chief of the host community (*Kananke*) is at the apex of the hierarchy. Among the Fulbe, the Fulbe chief (*Amiru*) is the most senior civil society leader, followed by a deputy Fulbe chief in some communities. The selection of the Fulbe chief is initiated by the host chief. When there is the need to select a chief, the Kananke allows the Fulbe to do internal consultation to bring forward a candidate for the chieftaincy. The process for selecting a new chief then begins with consultations among the most influential Fulbe to determine who will represent the Fulbe with the host community. After the Fulbe chief is selected, he is presented to Kananke for approval, who then validates the choice. The position of Fulbe chief is often not hereditary. The Fulbe chief, in turn, appoints the deputy chief, council of elders, youth leaders, *Rugas* (in some cases) and influential opinion leaders - or advisors - who help him govern.

Fulbe respondents stated that Fulbe chief selection is usually based on the individual's age (with preference towards the elders), and in some cases, by who was the earliest to settle in that community. Sometimes the selection of the Fulbe chief is met with chieftaincy disputes which have escalated into violence. For example, in Banda Nkwanta, violent altercations between the youth and the chief selected by the *Kananke* led to a deadlock; the youth and a section of the Fulbe community rejected the choice of the chief, which resulted in violence. The *Kananke* banished two of the Fulbe youth from the community, displacing them to Kintampo. In another chieftaincy dispute in Gushiegu, the Fulbe chief was deposed by the *Ya Naa* (King of Dagban), in favor of a new Fulbe chief. Buipe is also experiencing chieftaincy disputes between the Fulbe community and the host community over the latter's choice of a youth leader. And in Bimbilla, the local Fulbe have rejected the selected chief, because he is not originally from Bimbilla.

Fulbe leadership are responsible for managing terms of land use and ownership, cattle and resource acquisition, access to grazing land, land for settlement, water, transhumance activities, access to markets, access to herding jobs, and mediating conflicts internally and externally. The Fulbe father, usually an older Fulbe elder, in some communities, also advises Fulbe chiefs and operates as a steward in their absence. In instances where the biological parents of the Fulbe chief are alive, they become the Fulbe "Father" and "Mother". A senior citizen of reputable standing, like a community elder may also be selected as the Father. The Father is a cumulative position that epitomizes power and authority due to his longevity and seniority, even though he ranks just as an advisor to the Chief, and the mediator of conflicts and disputes. This was seen

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¹⁶ If a sitting Fulbe chief is no longer in charge, for example due to their death, the new chief is selected by the Fulbe community, rather than the host community chief. This is the process that often leads to intercommunal violence, as rival clans vie for the powerful function.

in Widnaba, Zebilla, Tongo and Nankong, where the Fulbe Father's status in society is somewhat on par with the Fulbe chief.

The Wuro

Another important actor in the leadership structure of the Fulbe are *Wuros* - heads of households (eponymous to the lowest level of Fulbe social organization). Due to their transhumance nature (because many settled Fulbe own cattle that are cared for by Fulbe herders), Fulbe generally live in pockets of settlements, usually on the outskirts of towns. Each settlement is headed by a family head called a *Wuro*. Some of the *Wuros* are selected by the Fulbe chief into the council of elders, except for smaller communities where all the *Wuros* are council members. The role of the *Wuro* is to mediate household conflicts, nurture youth to become responsible adults and act as intermediaries between their families and the Fulbe chief.

Women and Fulbe Mothers

Some Fulbe communities have *Fulbe Mothers*, women with social seniority that guide other women in the community. In communities where they do exist, this person is responsible for organizing women across the group, and is consulted on social issues such as marriage, funerals and child naming ceremonies. In Bimbilla and Jimle, the Fulbe Mother represents womens' interests and mediates conflicts. This function is uncommon in northern communities, but where present, they are praised for serving an important social function. Otherwise, most community gatherings are largely male-centric; women are not involved in formal Fulbe decision making processes. In general, women are not included in gatherings unless those meetings involve marriage, child naming, funerals, childcare and the milk-trade, which would require their attention and input.

"Women do not come to our gatherings and thus do not play any role when it comes to decision making. The women are informed about decisions that have been made. In the family setting, though women have a say, the ultimate decision rests with the man. For example, a wife can advise the husband on certain issues like education of the children or setting up a business venture, but the man makes the final decision." - FGD participant, Hamile, Upper West Region.

Nonetheless, the role of women differs across Fulbe communities. For example, in some communities like Gushiegu, the focus group members generally agreed that women take part in decision making and have contributed support to some intra-community conflicts and disputes, usually with regards to marital disputes.

"We involve women in all our activities, even when our daughters are going to get married, they have a say in it, they help in funerals, they can resolve conflict when their husbands have an issue with their wives and bring us information." - FGD participant, Gushiegu, Northern Region.

The researchers conducted focus groups with women in Hamile, Widnaaba and Jimle. These women provided little detail about leadership structures and Fulbe politics, claiming that they were not involved in those issues, and therefore had little to say on decision-making regarding politics, leadership and transhumance. The research ascertains that Fulbe women have restricted access to politics and internal bureaucratic issues, limiting their public opinions on these issues. However, the researchers assess that self-censoring might also be a reflection of the lack of autonomy that women have to both opine and speak openly about these issues.

The women did however report that areas where they are involved included marriage and intracommunal trade between Fulbe women. Many KIIs and FGD participants remarked that they were married off at young ages, though in general, women were compliant with this practice. The Fulbe Mother in Jimle reported that Fulbe women were now being educated on a number of issues, including child rearing and educating, ending early marriages and financial independence. She explained that she is responsible for overseeing the welfare of women in her tribe, but that she weighs in on politics only if it involves women's issues.

"For us Fulbe Mossi, women in the household can do the milking and have control over the milk and its sale. They can even own one or two cows, but cannot sell it without permission from the man [husband]." - FGD,

Kpasenkpe, North East Region.

Most of the Fulbe women interviewed were unemployed, and none were business owners. Employed women participated in milk and dairy product production and sales, relying on their husbands' livestock. The research revealed that dairy and cattle byproduct businesses were accessible opportunities for women, because they relied on available cattle, and did not require investments into other trades. Fulbe Mossi women appeared to be the most involved in milk production. Through the milk trade, Fulbe women interacted with the host community.

There were some reports of women diversifying their business trades, like soap-making in Jimle, however without financing, these efforts were largely unsustainable. Some women reported that economic empowerment is a way to overcome gender disparities in property ownership. In some communities, women could own property. However, the decision to sell the property, or use it for commercial purposes is still controlled by the man.

Youth leadership

Youth leaders are important actors in the Fulbe leadership structure. The youth leader oversees executive members that assist him in leading the youth association. In some communities, the

youth leader also performs the functions of the Ruga, increasing his status as a decision-maker. The youth leader, in concert with community elders, deliberate on decisions and communicate them to the Fulbe chief. Youth are viewed as volatile, due to external influences from social media, criminal enterprises, and VEOs, among others, that highlight polarizing posts about host-Fulbe community relations.

However, youth leaders are not always aligned within the structure of the group, and at times, they have instigated violence, particularly in chieftaincy disputes. For example, in Banda Nkwanta, frustrated with leadership decisions, the youth established a rogue group that usurped the chieftaincy, resulting in excommunications. Typically, youth will adhere to an elder or the Fulbe chief, but fulbe reported that this particular situation could upset traditional norms and leadership structure in other Fulbe communities.

Herding leadership structure

In concert with the internal clan structure of Fulbe groups, the herders also have a leadership structure that is mostly tasked with ensuring the success of the herder industry. Most of the surveyed communities have Rugas, whose main responsibility is to mediate conflicts and misunderstandings that arise among herders. Rugas are assisted by Garsos and Garichi leaders. Garsos have the responsibility of relaying information from herders to the Ruga. Conflicts that are beyond the Ruga are referred to the Fulbe chief and the host chief for mediation and resolution. Rugas were not established in all Fulbe communities in northern Ghana, but in communities where they exist, they were responsible for managing minor herder-farmer related conflicts.

"The Ruga and the cattle herdsmen are one. When animals destroy crops of farmers, the Ruga goes to the bush to settle the dispute. If he succeeds, then it is fine. If not, they bring the issue to the host chief to settle it. Apart from that, also if cattle go missing in the bush, the Ruga goes to the bush to look for it." - Fulbe chief in northern Ghana.

3. Relations with Non-Fulbe Host Communities

The research highlighted how social cleavages between Fulbe and local communities in northern Ghana have exacerbated challenges that Fulbe experienced with assimilation and integration. Fulbe reported that the local community was often hostile towards them, contributing to a cycle of intercommunal violence. These violent trends and stigmatization have contributed over generations, to the permanence of Fulbe living on the outskirts of rural towns, marginalized to the periphery, as is the case in much of West Africa and the Sahel. As a result of this self-marginalization, Fulbe can often be perceived as exclusionary and secretive in their communal

practices, due to their limited contact and lack of integration with other communities. However, Fulbe integration is in large part determined by local intermediaries and the host-community itself. This section reviews those key positions among non-Fulbe, and then reviews the socioeconomic and cultural trends that impact Fulbe integration.

Host community leadership

Fulbe are intertwined with complex external communal, economic and political networks that contribute to the peaceful coexistence of some sedentary Fulbe and their host communities. Fulbe internal leadership is linked to the host community's leadership, with the appointment of the Fulbe chief often approved by the host community's traditional leadership. The host community chief determines what land Fulbe can use for farming, grazing and living on. Typically, Fulbe have paid host communities to use or rent land through a barter system, paying with inkind payments such as cows, but cash payments are now possible in some communities. The host leadership helps to mediate and ingratiate the local community with Fulbe, and to ensure the peaceful coexistence among their members. Once a Fulbe chief is approved by the host chief, he is introduced to the government-appointed District Chief Executives, police and Assembly members.

External intermediaries

The use of intermediaries, such as elders, religious leaders (Imams), community opinion leaders, linguists and women's leaders from outside the Fulbe community is important in social organization, conflict mediation, land acquisition and herd management. Imams in particular are responsible for leading the Fulbe in worship and are important in resolving conflicts that are beyond the capacity of family heads. For example, during conflict, Fulbe often call on the local Imam to mediate, because they believe that Imams (even non-Fulbe ones) will adjudicate a conflict fairly, pulling on some legal tenets of Islam, which Fulbe have used in part of their customary legal frameworks.

Livestock buyers and veterinarians are also important individuals that sustain the livelihoods of the Fulbe. Often referred to as butchers, the livestock buyers - who are usually non-Fulbe - purchase cattle directly from the Fulbe, and broker the financial relationships that link Fulbe to the communities. In some communities, the Fulbe are forced to sell only to the buyer, without being able to access the open market. This is done to mitigate animal theft through a monopolized system, wherein buyers are the sole providers of livestock, so if a market gets livestock from elsewhere, it is likely obtained illicitly. As a result, buyers have a powerbroker position, and control Fulbe access to cash. Therefore, buyers sometimes mediate between Fulbe and the local farmers in the event of a conflict.

Urban-rural divide

Fulbe settlement patterns provide insight into Fulbe social integration. In urban areas, such as Walewale, Hamile and Gushiegu, Fulbe reported feeling more attached to the host community, as compared Fulbe in rural areas whose livelihoods solely depend on cattle and farming. Those located in urban areas have over the years diversified their livelihoods into several trading activities, which allows them to interact more often with members of the host communities. In urban areas Fulbe are involved in the sale of phones, cosmetics, provisions, clothes and other household items that are purchased by both Fulbe and non-Fulbe. In Walewale, Wa, Damango and Bole, Fulbe also have access to and buy land, that they have developed more permanent homes on. This is in contrast to the Fulbe in rural communities, who continue to engage with the local population in a temporal way, and are therefore only allowed to temporarily access land for herding and grazing during seasonal periods, which has discouraged long term settlement.

In rural areas, Fulbe livelihoods are primarily driven by cattle rearing, pushing them to the outskirts of towns, where their cattle graze. As a result, in smaller communities they are perceived to be outsiders. In these communities, intercommunal cooperation is limited, and has decreased in light of recent violence that has targeted Fulbe. Additionally, the Fulbe still rely heavily on their language - Fulfulde - when communicating among Fulbe, which has further contributed to exclusion by other language groups in northern Ghana. However, dialectical differences were not shown to pose challenges or dispute among the Fulbe. On the other hand, in urban areas, the Fulbe, many of whom are now second and third generation residents of these communities, speak the local languages.

"Because the host communities see us the Fulbe as strangers, it is difficult for them to trust us. They do not recognize us as Ghanaians" - Fulbe chief, Upper West Region.

The urbanization, and subsequent integration, of Fulbe has had probably the greatest impact on how they are welcomed and perceived by the local population in Ghana. The research found that when Fulbe frequently interact with the local population, they can integrate more easily, enjoy better community cohesion, than Fulbe who remain in the periphery. For example, there was sufficient evidence in the research of inter-ethnic relationships that transcend the typical herder-buyer relationship among Fulbe who dwelled in urban centers. Additionally, urban-based Fulbe usually speak the local language, send their children to schools with other members of society, intermarry with the local population, and engage more in society.

Rural Fulbe now have to pay extra fees and adhere to new rules that the communities have developed. These fees include paying monies or giving cattle to host community leaders for the use of rivers and during community programs. This is the case in Kayoro, Zebilla, Funsi, Kundugu

and Hamile, where intercommunal violence has bred serious animosity between the local population and Fulbe in recent years. These 'fees' have materialized as a required tribute - often in the form of cattle - to the community, in some cases, during festivals. In other cases, Fulbe are forced to pay annual royalties in cattle to the village chief, and an entrance fee to access waterways. The Fulbe complained that these community fees discriminate against Fulbe and are used to reinforce ethnic cleavages. A cattle owner in Sang stated the whole idea of paying fees for the use of community water sources such as rivers and dams is new and has mainly been done by host community youth groups.

"Mostly the Fulani cooperate with what they [host community] want, because even when one Fulani child is playing with local people and he beats the local kid, the people will come here and beat us. So that is how it is here. Mostly, we have to cooperate because we are minorities here."
Fulbe FGD participant, Kayoro, Upper East Region.

Marriage and family planning traditions

One significant pathway for Fulbe social integration into the host communities is through intermarriage. This practice has been done with regularity in communities in the Upper East and North East Regions. In general, intermarriage is practiced by Fulbe in more urban settings, rather than remote villages. In communities like Zebilla, Kpasenkpe and Walewale, this practice was increasingly common, showcasing the growing acceptability of intermarriages among Fulbe. When intermarriage occurred, it was generally a Fulbe man marrying into other cultures; Fulbe women were usually not allowed this freedom. According to non-Fulbe, Islam was a major reason for this, though the Fulbe interviewed claimed that they were not opposed to Fulbe women intermarrying with other cultures.

"Presently, we agree to non-Fulbe marrying Fulbe which will never have been accepted in the olden days." - Fulbe chief, North East Region.

However, the practice of intermarriage and integration is dependent on the community itself, as well as the size and pluralism of the host community. For example, some host communities have made it difficult for the Fulbe to intermarry. In Hamile, Upper West Region, the Fulbe indicated that they have significant freedoms to integrate locally, but that intermarriage is not common. This is likely due to cultural precedents that have historically barred Fulbe from intermarrying locally in remote communities that continue to adhere to these old practices. Many ethnic groups in northern Ghana, especially the Gonja (Savannah), Dagomba (Northern Region), Sisalla (Upper West), Nanumba and Konkomba (Bimbilla) claimed that they were culturally forbidden from marrying the Fulbe. The Maprusi, in the North East Region, also explained that intermarrying with Fulbe was often admonished, but acknowledged that it sometimes took place nonetheless. In

bigger cities, where individuals have deprioritized cultural practices, these exclusionary traditions are starting to fade, and Fulbe are increasingly being integrated into society.

Although some Fulbe have been settled in Ghana for decades, many maintain their traditional practices, particularly with regard to intra-Fulbe marriage, fertility and formal education practices. In the smaller villages, Fulbe children usually do not attend the local schools. Young Fulbe boys' education is traditionally about the herding trade, and young girls are usually exempt from any typical schooling. Fulbe that continue to adhere to traditional norms and cultural practices, generally follow a patriarchal social structure; as a result, the role of women in decision making and engaging with other groups outside the Fulbe community, is quite limited. Polygamy continues to be practiced in traditional fulbe circles in northern Ghana, and girls are often married off at a young age. The research found that on average, Fulbe men had two wives, and seven children. There were reports of men having up to 7 wives. Non-Fulbe interviewed for the research flagged these practices as issues that further stigmatized Fulbe in Ghana.

Political Enfranchisement

In Ghana, Fulbe political integration occurs only through citizenship. The government's goal of extending citizenship to Fulbe, is to ensure integration through residence status, voting rights and participation in politics.¹⁷ The research found that a majority of Fulbe have obtained voter IDs, and participated in the recent 2020 presidential elections. As a result, a Fulbe man now holds the position as the Regional Secretary of a leading political party in the North East, and Fulbe now figure prominently in local campaign politics, as candidates hope to garner support from registered Fulbe voters. However, there are concerns among the Fulbe, that their political enfranchisement could be wielded as an opposition weapon in the lead up to elections. Ambiguities and controversies surrounding citizenship rights persist, and Fulbe continue to face impediments to acquiring the 'Ghana Card', a citizenship document in Ghana that is required at national points of entry.

"Even though most of us were born here, we are discriminated against when it comes to securing our stay in the country." - FGD participant, Tinga, Savannah Region.

All interviewed Fulbe had the voter ID cards that grant them the right to vote, however, very few had the *Ghana Card* that protects their right to live and cross Ghana's border freely. In many cases, due to stigmas against Fulbe as VEO collaborators or criminals, police and border security

¹⁷ For a review of this discussion, see Hainmueller, Hangartner & Pietrantuono (2017) Catalyst or crown: Does naturalization promote the long-term social integration of immigrants? *American Political Science Review, V. 111*(2), 256-276.

have refused to accept their *Ghana Card*. There were multiple reports of Fulbe's ID cards being arbitrarily seized by authorities, or individuals experiencing corruption at border crossings. Traditional leaders are engaged to meditate on behalf of Fulbe that are arbitrarily detained in these circumstances, although their interventions are not always successful.

4. Organization of Transhumance Networks

The Fulbe have been traditionally associated with long distance, cross-border movement in West Africa, through the practice of transregional seasonal transhumance. However, this practice was not observed among the Fulbe interviewed for this research in northern Ghana, signaling a decline in this traditional practice in sub-Saharan African states. Due to the relative abundance of pasture in northern Ghana and insecurity in the Sahel, Fulbe communities in Ghana now increasingly prefer sedentary living, and have adopted intra-regional transhumance within Ghana, in place of cross-border herding. Transhumance in northern Ghana has adapted to the current political and security context, and is increasingly organized to enable movements within one region of Ghana, or multiple regions, when necessary during the dry season. The process of movement within Ghana though has its own slew of challenges: due to shorter distances that these herds can move, the risks of crop destruction and competition over limited resources (land, water, seed, etc.) has increased, thereby inflaming intercommunal tensions. As a result, Fulbe herders require organized processes for managing transhumance.

Coping with the Absence of Transhumance Management and Representation

The absence of a formal transhumance management process in Ghana, has forced Fulbe to rely on old customary arrangements that allow grazing and mobility. Since these arrangements are usually informal, and oftentimes generations' old, the power brokers - which are usually the host community - sometimes exploit their relationships with Fulbe, who are constrained to respond because of their limited social and political representation in Ghana.

"We have major headaches in transacting our business. For instance, host communities don't allow us to sell our cows or trade in the community. They prevent us from transporting our herd in our own carts or trucks to Buipe to sell. They told us to use their trucks for a fee and there have been several altercations between us." - FGD participant, Busunu, Savannah Region.

In Buipe, Walewale, Kpasenkpe, Mankarigu, Bongo, Jimle and Sang, the Fulbe communities relied on their *Rugas* to manage and organize transhumance arrangements with the host community; however other communities had no traditional or formal process in place to support them. Rugas historically did not have a strong role in Ghana, and have only recently been

elevated as relevant civil society representatives with the authority to broker these arrangements on behalf of the group. Communities that did not rely on the traditional herder leadership structure, like the herder chief, Ruga and Garso, instead consulted their Fulbe community opinion leaders to broker access to resources.

"There is no group that deals with transhumance, but this gap has been filled by the opinion leaders. We don't have a Ruga in the Bole community. The opinion leaders are the ones who resolve transhumance issues. This was a collective decision taken by the opinion leaders."

- FGD respondent, Bole, Savannah Region.

In communities where there was no formal transhumance process, 43% of the respondents reported that the Fulbe chief manages transhumance arrangements. In the absence of a Fulbe chief overseeing herding issues, respondents sourced information about herding rules, restrictions and seasonal updates from the host community chief (20.4%), the community's Ruga (13.6%), opinion leaders and elders (11.7%), and cattle owners (11.2%). Additionally, the FGD in Banda Nkwanta, highlighted how the kraal and youth leaders engaged on transhumance issues, in the absence of formal oversight.

The research also revealed that smartphones and social media, like Facebook and WhatsApp, have increased connectivity between individual herders, and made sharing information on herder movements and locations of grazing spaces and waterways more fluid and frequent. Although exact data regarding social media use was unavailable, the rise in internet usage has helped Fulbe herders to operate more autonomously, in the absence of traditional organizations managing their activities. These technologies have also made it easier for Fulbe to communicate and connect with each other about security, cattle movement, markets and sharing information about employing herders for hire.

"Initially, there were people who go to the market from Zebilla to Binaba, Zebilla to Bolga, and ask about issues and then come and tell us. At first there was no mobile phone but now we have, so we just call and share information." - FGD participant, Zebilla, Upper East Region.

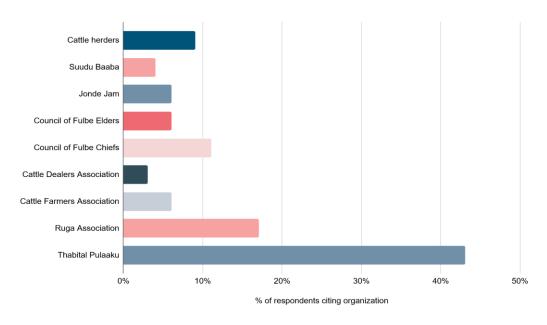


Figure 5: Fulbe Associations in Northern Ghana that represent Fulbe Interests

The research noted a trend in Ghana where Fulbe communities that had historically enjoyed decentralized, somewhat autonomous communal governance structures, after sedentarization appeared more inclined to subscribe to a centralized system. This was particularly seen with Fulbe communities that do not have a Ruga, who now rely on civil society organizations, like Thabital Pulaaku, for herdering arrangements, political representation, and advocacy. In addition to being an intermediary for their integration into Ghanaian society, Thabital Pulaaku also mediates intercommunal conflicts, and represents some Fulbe communities in negotiations over land access with the local community. Nonetheless, there was a disparity between the role CSOs were purported to have with Fulbe, and how the respondents viewed the support they actually received from these groups. In general, Thabital Pulaaku was reported to be the only responsive organization.

"Thabital Pulaaku is vibrant and active. The leaders, including Ahmed Barry and Yakubu Barry, have heeded our calls whenever we reach them to come to our aid. We see the association as the proper representatives of the Fulbe in the community and country. Whenever there is an issue, Thabital Pulaaku sees to it that the issue is resolved and puts us right when we go wrong." - FGD participant, Damongo, Savannah Region.

Other civil society organizations, such as the Council for Fulani Chiefs and the Ghana National Cattle Farmers Association were sometimes cited as networks that share economic and political information on behalf of, or with, the Fulbe community, through their representatives. However,

most respondents had not heard of these associations, showcasing their limited impact on individual herders and local Fulbe networks.

Furthermore, despite the role that CSOs play in Ghana, respondents reported that they only believe information from known sources, like friends and family, or community leadership. The researchers believe that Fulbe are likely to have purposely become insulated in information sharing due to their failing integration and distrust of outsiders. Nonetheless, Thabital Pulaaku, Suudu Baaba, Ghana Council of Fulani Chiefs and Ghana National Association of Cattle Farmers, share information about herding and politics, regularly. Furthermore, there are several influential and famous Fulbe who have an impact on Fulbe organization and transhumance. These influencers have been key players in resolving conflict, negotiating resources and access to land, weighing in on Fulbe internal chieftaincy contests in Banda Nkwanta, Bole, Gushiegu, and helping to organize Fulbe transhumance.

Mapping Grazing Spaces

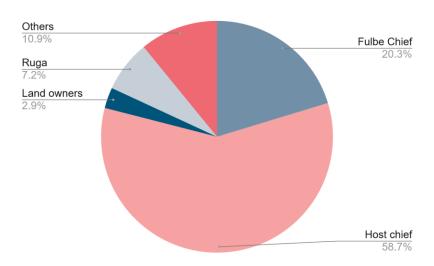


Figure 6: Key leaders providing pasture support. Source: field data, October 2022.

Demarcating and mapping out grazing spaces is generally a process that is brokered between host-community and Fulbe leadership (59% of the time). Grazing is a transactional process, wherein the host-community leaders serve as the custodians of the land and water, permitting grazing and water-use for the cattle. Generally, this relationship is well respected by the Fulbe, and agreed to by the Fulbe leadership. These arrangements often consist of Fulbe herders paying some form of a tribute or tax to the community for access to grazing space. When moving as a group, Fulbe are usually billed one bull per individual herder.

"The youth make the decision about where to graze or herd their cattle and later inform the traditional chief. The chief should always be informed so

that he alerts the [host community] so no one should farm there. If the traditional leader says that he doesn't want cattle in his community, they have no say but to relocate elsewhere with the herd."

- FGD participant, Hamile, Upper West Region.

Farmer-herder mediation

The host chief is responsible for mediating conflicts in his jurisdiction. He plays a key role in providing security, especially when conflict occurs between farmers and the Fulbe herders. Fulbe are generally reluctant to engage Ghanaian authorities and police in conflict management, and will do what they can to de-escalate a dispute or conflict, before drawing in official authorities. If disputes escalate, herders will also engage CSOs to represent them in legal battles.

5. Fulbe Economic Cooperation

Fulbe's primary source of employment in rural areas is cattle herding. Due to their historic expertise in this sector, host communities are known to employ Fulbe to herd their cattle on their ranches or through transhumance. Urban Fulbe now also employ rural Fulbe herders to manage their cattle. As others have increasingly begun to outsource the management of their livestock to Fulbe herders, intercommunal relations have grown stronger and more positive, which has evolved into broader cooperation and integration of Fulbe within the host community. Their employment is driven by word-of-mouth recommendations (and by proxy, social media as well), further facilitating positive relationships - and interdependence - across communities they engage with. Host communities generally do not pay Fulbe herders in cash, but rather compensate them with food and land for their family to farm on. Fulbe cattle owners that employed Fulbe herders, reportedly compensated them in cash and food, and by helping them to secure leased lands for their settlement and farming.

Other research points to a typology of farmer-herder relations - and conflict - that is dependent on ownership patterns. A herder responsible for cattle belonging to several individuals from his host community will be incentivized to carefully manage his relations with the host community, as opposed to a herder managing a herd belonging to a single, faraway owner. This research did not identify these issues, but further research should focus on these niche issues to understand how ownership patterns influence the propensity towards conflict.

Both Fulbe and non-Fulbe participate in cattle trading. Sometimes, the commercial side of livestock sales is managed by the Garichi (or Kraal) Committee which sets prices for the sale of cattle in local markets, and if chaired by a Fulbe, such as the Garichi committee in Tinga is, it can be a significant powerbroker position. Therein, the chairmanship of the Garichi in some communities has become a competitive and contentious issue, between Fulbe and non-Fulbe.

In Busunu, Kpasenkpe, Tongo and Banda Nkwanta, Fulbe cattle owners are not free to directly sell their cattle to the Garichi, and instead require a broker who is usually a non-Fulbe host community member, to facilitate these sales. Arbitrary fees set by a broker limit the amount of money Fulbe can profit, however their lack of political representation and citizenship inhibits their ability to advocate legally for themselves when corruption occurs.

"We have major challenges in transacting our business here. The indigenes don't allow us to sell our cattle or trade in the community. The indigenes prevent us from transporting our cattle in trucks owned by Fulbe to the Buipe Kraal [Garichi] to sell. Indigenes have told us to use their trucks for a fee"

- FGD participant, Busunu, Savannah Region.

The Fulbe-butcher relationship is incredibly important. Butchers, who also play the role as brokers sometimes, are often the main point of contact between Fulbe herders and the host community in rural settings. As such, butchers usually provide the most advocacy on behalf of their Fulbe cattle suppliers, and often aid them during financial and social distress. In Damongo, Walewale, Kpongu, Gushiegu, Karaga, Yendi, Jimle, Mion, Sang and Diari, this relationship was of utmost importance to Fulbe. In Fumbisi, the Fulbe Credit Union (Figure 6) was used as a source of financial support, which is uncommon elsewhere.

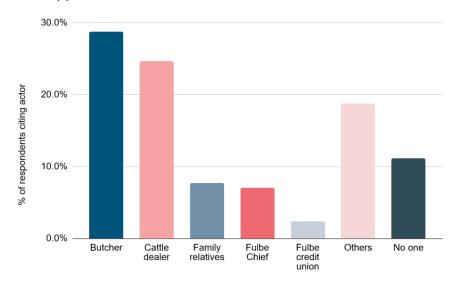


Figure 7: Sources of Financial Support. Source: Field data, October 2022.

6. Crime and Violent Extremism

Since 2020, half of the research sample had experienced violence linked to farmer-herder conflicts, kidnapping, terrorism, cattle rustling, targeted killings and banditry. Savannah,

Northern, and Upper East Regions have experienced relatively more violence than Upper West and North East Regions. The violence against Fulbe was usually driven by farmer-herder disputes over property destruction involving host-community members, criminality involving Fulbe, locals, and bandits, and indiscriminate arrests and corruption involving Ghanaian security forces and police. Collectively, these violent issues have affected Fulbe overall integration in Ghana.

Local Crime and Banditry

45% of the Fulbe respondents admitted that many of the crimes reported involved Fulbe as perpetrators. Fulbe criminals were usually involved in kidnapping and armed robberies of fellow Fulbe and non-Fulbe, including women. While many of the Fulbe sub-ethnic groups were engaged in crime, the Hausa Fulbe from Nigeria and Mossi Fulbe from Burkina Faso were flagged as having perpetrated the most violence against other Fulbe groups. The research also found that occasionally, host community members also engage in these crimes. The Northern and Savannah regions experienced the highest level of criminal activity.

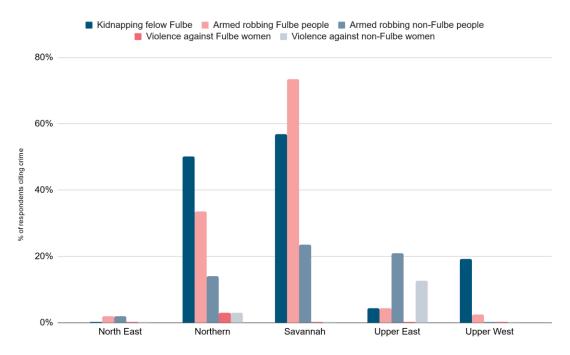


Figure 8: Types of Crime Fulbe are involved in. Source: Field data, October, 2022.

In Kundugu, Banda Nkwanta, Buipe, Yapei and Tinga, robberies, kidnappings, property destruction and cattle rustling were rampant. In northern Ghana, the stigmatization that Fulbe are criminals, continues to proliferate, and was commonly held among respondents in Tinga, Mion and Damongo; furthermore, while there was no evidence that Fulbe are the perpetrators of these crimes, respondents in Yapei were emphatic that recent kidnappings are linked to Fulbeon-Fulbe violence.

"My elder brother was kidnapped last year. The kidnappers demanded a ransom of 100,000 Gh cedis, which I paid. The kidnappers spoke a language which was different from Fulfulde. I believe that they were not Fulbe. After I paid them, they didn't release my brother but took him to his house, ransacked the place before releasing him. I suspect that the kidnappers were security agents due to the weapons that they were carrying. I reported the matter to the police, but nothing was done about it"

- FGD respondent, Bole, Savannah.

Bole discussants shared how the stigmatization against Fulbe has restricted their access to guns. Their regular movements across borders and between towns and the bush, also has created suspicion about who they interact with, furthering the perception that Fulbe are criminals. As a result, host community members are anxious about what they perceive to be suspicious behavior among Fulbe, which is leading to arbitrary arrests and indiscriminate detainments, without evidence. These actions exacerbate the lack of cohesion between Fulbe and host communities, and erode trust in security forces.

"Because perpetrators are not arrested, we cannot tell which tribe or group they came from. The perception that it is Fulbe is a wrong notion held by indigenes and most people." - FGD participant, Kundugu, Upper West.

Violent Extremism

Growing instability in northern Ghana directly impacts overall security across the country; although much of the current instability is linked to chieftaincy issues in Bawku, Fulbe ties to the Sahel have become a growing source of concern, in light of spillover of violent extremism from Burkina Faso into neighboring Côte d'Ivoire and Togo. In response to these emergent threats from the north, Ghana has increased security in some northern communities such as Hamile, Kundugu, Diari, Nambagala, Karaga, Gushiegu and the Bawku area, where Fulbe are populous. And at the community level, such as in n Bimbilla, racial profiling is affecting community dynamics, where a Fulbe man was denied chieftaincy, because of his suspected ties to violent extremists.

The involvement of some Fulbe in violent extremism in the Sahel has deepened perceptions among security agencies and some communities in Ghana that they are agents of these VEOs. Although no evidence was identified that Fulbe were being recruited, these fear have been recently stoked by messaging promoted by Amadou Koufa, the ethnic-Fulbe leader of Katibat Macina (a subgroup of Jama'at Nusrat al-Islam wal-Muslimin or JNIM) in neighboring countries, and the terrorism related arrests of a Fulbe cleric in Karaga in 2022, and the interdiction in 2021

of a VEO cell led by Abu Dujana - a known Fulbe violent extremist living in Karaga who had detonated a suicide bomb at a French military camp in Gossi, Mali in 2021.

"The military at one point interrogated me but ended with advising me about the threat and how I should liaise with them to stop such jihadist cells operating within Ghana. The perception that Fulbe were linked to terrorism is a stereotype... but they are always associating us with such practices." - Fulbe cleric, northern Ghana.

The Ghanaian Fulbe are concerned that if any act of violent extremism occurs in Ghana, it will further alienate their community, and exacerbate ethnic violence, marginalization and prejudice against them. Their stigmatization has also led to security force abuses, which can create antistate sentiments that VEOs exploit during recruitment, as has been the case in the Sahel and more recently across coastal West Africa. This is compounded by a recorded video Abu Dujana made, where he mentioned abuses against Fulbe as a reason for them to fight the Ghanaian authorities and join JNIM.

7. Conclusion

The research found that survival and securing livelihoods guides Fulbe interactions within their community and with external actors. Fulbe are highly structured within their family and clan networks, but these structures are inherently informal and do not conform with broader social and political trends. Nonetheless, Fulbe generally aim to maintain a cordial co-existence with their host community, both to ensure the accessibility to resources and their own peaceful residence. And given their lack of permanent status in Ghana, they rely heavily on civil society and political organizations that represent their interests across the spectrum.

Fulbe social, political and economic integration in Ghana is generally not occurring at the pace and levels that would have been expected, in the decades that they have permanently been settled in Ghana. However, urban Fulbe reportedly were more socially integrated than their rural counterparts are, because they are engaged in economic pursuits beyond cattle, which has enabled them to better adapt to the local culture. Moreover, in urban settings, they are more capable of purchasing land or property and establishing permanent lifestyles, through intermarriage and integrating their children into the Ghanaian education system.

Rural Fulbe, on the other hand, remain isolated from the host communities. They typically live on the outskirts of towns, close to pasture where their cattle are, and are reliant on cattle and transhumance for livelihoods. They rarely send their children to school or involve women in decision making, and inter-marriages are uncommon. Farmer-herder conflict that involve rural Fulbe has further fomented stigmas against the group, eroding community cohesion. While the

Fulbe social network structures exist and are employed to resolve disputes between them and the host community, reprisal violence by local youth has grown increasingly common in the north. And as transnational organized crime and violent extremism spills over into Ghana, Fulbe are increasingly blamed because of their ties to the Sahel. The research found that these stigmas have actually encouraged more Fulbe to sedentarize, in order to assimilate, obtain political rights, and demote these violent narratives about them.

8. Policy Recommendations

- 1. Impact of social media access on Fulbe networks: social media has a direct impact on Fulbe social network organization. The proliferation of mis- and dis-information has corrosive effects on Fulbe perceptions of the state, and their capacity to advocate for themselves. With regards to livelihoods, social media has enabled individual and small groups of herders to access information about resources and grazing space easier and quicker. Nonetheless, overall impact and use of social media by herders, is not well known, and this research identified the need for targeted research to better understand how access to social media like Facebook and Whatsapp is impacting Fulbe networks and their interactions with other groups.
- 2. Access to the Ghana Card: The path to citizenship for Fulbe, is through naturalization, which requires regularization of citizenship status, acquisition of the Ghana Card, and registration with state authorities. Thabital Pulaaku can lead this advocacy effort and support the National Identification Authority to set up (temporary) registration centers in majority-Fulbe communities and larger towns in remote communes in the north. Training and equipping institutions such as the Garichi Committees or Thabital Pulaaku to sensitize communities about the importance of this process, and help facilitate access to the Ghana Card, will streamline Fulbe citizenship and autonomy.
- **3. Transhumance Policy Reforms**: Ghana is in the process of commercializing and commoditizing grazing lands and transhumance access to water sources. Previously 'free' common grazing grounds and waterways, now require a fee to access, particularly in the Savannah Region. The Ministry of Food and Agriculture (MOFA), Metropolitan, Municipal and District Assemblies (MMDAs), and host-community leaders should be empowered to engage the Fulbe, Ghana Cattle Farmers Association, Ruga Association of Ghana and Thabital Pulaaku, in policy development and implementation on fodder production to reduce free range grazing.
- **4. Sensitizing Fulbe on Civic Education and Crime**: The government and CSOs need to do more outreach and education on the criminal code and civic engagement in Ghana, in order to educate Fulbe herders about these policies, so that they do not run afoul of existing laws about crime and property liability, among other things. Non-Fulbe NGOs such as CAMFED, SEND Ghana and Afrikids can participate in the education of Fulbe children, while organizations like

WANEP and CECOTAPS can be key players in engaging the Fulbe on peace education and crime prevention.

- **5. Dialogue between Fulbe and security agencies**: Local discrimination and biases have linked Fulbe to a variety of crimes, which they may or may not be responsible for. As a result, Law enforcement agencies need to be more objective in their approach with Fulbe, in order to avoid unfairly targeting this group. But CSOs should also facilitate regular engagement and dialogues between Fulbe and the security agencies, to build trust between the two, and ensure open lines of communication exist. This can be helpful for Ghanaian security by building a feedback loop through civil society, on emergent threats on the ground and in identifying early warnings without extrapolating individual crimes to the whole ethnic group.
- **6. Organizing transhumance**: Host chiefs, local authorities and the Ghanaian government need to ensure that cattle movement is organized in a manner that reduces crop destruction, crime and the annual problem of killing cattle. Livestock corridors can be created and better formalized, to protect cattle and their mobility. The enforcement of the ECOWAS Protocol on Transhumance is particularly important in organizing transhumance.
- 7. Intra- and intercommunal dialogue with Fulbe: Intercommunal violence is prevalent in Diari, Mankarigu, Gushiegu, Busunu, Nakong and Fumbisi. This requires inter-ethnic dialogue committees, composed of Fulbe and host community members, especially youth. This can be facilitated by NGOs and CSOs. Additionally, chieftaincy conflicts in Banda Nkwanta, Gushiegu, Damongo, Mankarigu, Tinga, Yapei and Bole, competition between Fulbe clans, cattle rustling and accusations of criminality, could lead to violence between the Fulbe. Intra-Fulbe dialogue is necessary to resolve these issues.
- **8. Connecting Fulbe leadership at local, regional and national levels**: Currently, Fulbe leadership structure at the village/community level is not well connected with national political actors like the Council of Fulani Chiefs in Ghana. However, consolidating the Fulbe voice in Ghana is critical to ensure they are effectively and appropriately represented in community and national dialogue. NGOs can support strengthening the Fulbe leadership and in organizing Fulbe with connections between the community, district, regional and national levels.

Bibliography

The bibliography includes both sources used in the final report as well as those used in the research process to inform it, but not included in the final version.

- Ajzen, I. (1985). From Intention to Actions: A theory of planned behavior. In J. Kuhl, & J. Beckman (Eds.), *Action control: From cognition to behavior* (pp. 11-39). New York: Springer-Verlag.
- Ba, A. H. (1991). Amkoullel: L'enfant Peul. Paris: Actes Sud.
- Babaei, H., Ahmed, N., & Gill, S. S. (2012). Bonding, bridging and linking social capital and empowerment among squatter settlements in Tehran, Iran. *World Applied Sciences Journal*, 17(1), 119–126.
- Bandura, A. (1977). Social learning theory. New York: General Learning Press.
- Bandyopadhyay, S., Rao, A. R., & Sinha, B. K. (2011). *Models for social networks with statistical applications* (Vol. 13). London: SAGE Publications.
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Westport, CT: Greenwood Press.
- Bourdieu, P., & Wacquant, L. (1992). *An invitation to reflexive sociology*. Chicago: University of Chicago Press.
- Brabant, K. V. (2010). What is peacebuilding? The concept of social capital. Geneva: Interpeace.
- Breusers, M., Nederlof, S., & van Rheenen, T. (1998). Conflict or symbiosis? Disentangling farmer-herdsman relations: The Mossi and Fulbe of the central Plateau, Burkina Faso. *Journal of Modern African Studies*, *36*(3), 357–380.
- Brooks, I. (2006). Organisational behaviour. London: Pearson Education Limited.
- Bukari, K. N, Bukari, S., Sow, P., & Scheffran, J. (2020). Diversity and multiple drivers of pastoral Fulani migration to Ghana. *Nomadic Peoples*, *24*(1), 4-31.
- Bukari, K. N. & Kuusanaa, E. D. (2018). Impacts of large-scale land holdings on Fulani pastoralists in the Agogo Traditional Area of Ghana. *Land Use Policy*, 79, 748-758.
- Bukari, K. N. (2017). Farmer-herder relations in Ghana: Interplay of environmental change, conflict, cooperation and social networks. Electronic dissertation. Open Access at Niedersächsischen Staats und Universitätsbibliothek Göttingen (SUB), Göttingen 2017. http://hdl.handle.net/11858/00-1735-0000-0023-3EE9-3
- Bukari, K. N. (2021). ECOWAS and the question of how to resolve farmer-herder conflict in West Africa. Africa Portal. South African Institute of International Affairs (SAIIA)Available at: https://www.africaportal.org/features/ecowas-and-question-how-resolve-farmer-herder-conflict-west-africa/
- Bukari, K. N. (2022). Violent farmer–herder conflicts in Ghana: Constellation of actors, citizenship contestations, land access and politics, *Canadian Journal of African Studies/ Revue canadienne des études africaines*, DOI: 10.1080/00083968.2022.2031235
- Bukari, K. N., Sow, P. & Scheffran, J. (2018). Cooperation and co-existence between farmers and herders in the midst of violent farmer-herder conflicts in Ghana. *African Studies Review*, *61*(2), 78-102
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95-S120.

- Cox, M. (2010). Social capital and peace-building: Creating and resolving conflict with trust and social networks. London: Routledge.
- De Bruijn, M. (1997). The hearthhold in pastoral Fulbe society, Central Mali: Social relations, milk and drought. *Africa*, 67(4), 625-651.
- Dupire, M. (1970). Organisation sociale des Peul. Plon: Paris
- Edwards, G. (2010). *Mixed-method approaches to social network analysis* (ESRC National Centre for Research Methods Review Paper No. 015). Southampton: National Centre for Research Methods (NCRM).
- Hagberg, S. (1998). Between peace and justice: Dispute settlement between Karaboro agri-culturalists and Fulbe agro-pastoralists in Burkina Faso. Uppsala: S. Academiae Upsaliensis.
- Heaney, C. A., & Israel, B. A. (2008). Social networks and social support. *Health Beh Health Edu Theory Res Pract 4*, 189–210
- Hussein, K., Sumberg, J., & Seddon, D. (1999). Increasing violent conflict between herders and farmers in Africa: Claims and evidence. Development Policy Review, 17(4), 397–418. https://doi.org/10.1111/1467-7679.00094
- Jay Rothman, Resolving identity-based conflict in nations, organizations, and communities. San Francisco, CA: Jossey-Bass Publishers.
- Kadushin, C. (2012). *Understanding social networks: Theories, concepts and findings*. Oxford: Oxford University Press.
- Ogawa, R. (1992). Ethnic identity and social interaction: A reflection on Fulbe identity. In P. K. Eguchi &V. Azarya, (Eds). *Unity and diversity of a people: The search for Fulbe identity* (pp. 119-137). National Museum of Ethnology Osaka Japan: Senri Ethnological Studies 35.
- Krätli, S. & Toulmin, C. (2020). Farmer-herder conflict in sub-Saharan Africa? London: IIED.
- Kuusaana, E. D., & Bukari, K. N. (2015). Land conflicts between smallholders and Fulani pastoralists in Ghana: Evidence from the Asante Akim North District (AAND). *Journal of Rural Studies*, *42*(2), 52-62.
- Prell, C. (2012). Social network analysis: History, theory and methodology. London: SAGE Publications.
- Prell, C., Hubacek, K., & Reed, M. (2009). Stakeholder analysis and social network analysis in natural resource management. *Society and Natural Resources*, *22*(6), 501–518.
- Pressman, J. (2008). Warring friends: Alliance restraint in international politics. Ithaca, N.Y.: Cornell University Press.
- Promediation. (2021). Pastoralism and security situation in Ghana. Promediation. Unpublished.
- Putnam, R. D. (2001). Social capital: Measurement and consequences. *Insuma: Canadian Journal of Policy Research*, 2(1), 41–51.
- Ramírez, R. (1999). Stakeholder analysis and conflict management. In D. Buckles (Ed.), *Cultivating peace. Conflict and collaboration in natural resource management* (pp. 101–128). Ottawa: International Development Research Centre.
- Sangare, B. (2019). Fulani people and Jihadism in Sahel and West African countries. F O N D A T I O N Pour La R E C H E R C H E S T R A T É G I Q U E
- Sassen, S. (2002.) Global networks/linked cities. New York: Routledge
- Schareika, (2010). Pulaaku in action: Words at work in Wodaabe clan politics. Ethnology, 49(3), 207-227.
- Scheffran, J. (2006). Tools for stakeholder assessment and interaction. In S. Stoll-Kleemann & M. Welp (Eds.), *Stakeholder dialogues in natural resources management. Theory and practice* (pp. 153–185). Berlin: Springer.

- Schepis, D. (2011). Social network analysis from a qualitative perspective. Paper Presented at the Australia and New Zealand Marketing Academy Conference, 28-30 November 2011. Perth, Australia.
- Schiffer, E., & Waale, D. (2008). *Tracing power and influence in networks: Net-map as a tool for research and strategic network planning* (IFPRI Discussion Paper No. 00772).
- Scott, J. (1999). Social network analysis (2nd ed.). London: SAGE Publications.
- Tonah, S. (2002). *The politics of exclusion: The expulsion of the Fulbe pastoralists from Ghana in* 1999/2000 (Max Planck Institute for Social Anthropology Working Papers, No. 44). Halle: Max Planck Institute for Social Anthropology.
- Tonah, S. (2003). Integration or exclusion of Fulbe pastoralists in West Africa: A comparative analysis of interethnic relations, state and local policies in Ghana and Côte d'Ivoire. *The Journal of Modern African Studies*, *41*(1), 91–114.
- Tonah, S. (2005a). The unholy alliance between chiefs and Fulani herdsmen in the middle Volta Basin. *Ghana Social Science Journal*, 2(1&2), 71–93.
- Tonah, S. (2005b). Fulani in Ghana: Migration history, integration and resistance. Legon-Accra: Research and Publication Unit, Dept. of Sociology, University of Ghana.
- Tonah, S. (2006). Migration and farmer-herder conflicts in Ghana's Volta Basin. *Canadian Journal of African Studies*, 40(1), 152–178.
- Tonah, S. (2008). Migration, resource use conflicts and stakeholders in the middle Volta Basin. In C. M. Amoah, G. S. K. Adiku, & E. O. Owusu (Eds.), *New developments of health, agricultural resources and socio-economic activities in the Volta Basin, Ghana* (pp. 136–154). Legon Accra: Volta Basin Research Project University of Ghana.
- Vassilev I., Rogers, A., Kennedy, A., & Koetsenruijter, J. (2014). The influence of social networks on self-management support: A meta-synthesis. *BMC Public Health* 14(1),719
- Wilson, W. (1995). The Fulani model of sustainable agriculture: situating Fulbe nomadism in a systemic view of pastoralism and farming. *Nomadic Peoples*, *36*(37), 35-51.
- Yembilah, R., & Grant, M. (2014). The political ecology of territoriality: Territorialities in farmer–herder relationships in northern Ghana. *GeoJournal*, 79(3), 385–400.

Appendices

Appendix 1 - List of respondents

Key Informant Interview Participants	Focus Group Discussion Participants
 Fulbe chiefs, leaders, pastoralists, cattle owners, Rugas, community members, youth leaders, Fulbe groups, e.g. Thabital Pulaaku, Fulani Youth Association, Ghana Cattle Farmers Association, Council of Fulani Chiefs, Fulbe local associations, Community members, Government, police and immigration officials Local cattle owners and butchers, Traditional/local community chiefs/leaders 	 Local community members, Fulbe pastoralists Fulbe youth, Butchers, Local cattle owners

Appendix 2 - Theoretical framework

Social Network Theory

The term 'social network' refers to informal arrangements based on social ties. Social networks are a major vehicle for resource access: vulnerable individuals may be highly reliant on network members for instrumental, emotional and informational, as well as evaluative support. Networks serve three important functions in any social organization. First, they deliver private information. Second, they allow individuals to gain access to diverse skill sets and resources. Third, they can help create power. These are especially useful to Fulbe internal networks where internal competition for resources and power both constrain and determine group interactions, trust, unity and cohesion. Diversity of network members is an asset, which allows individuals with vulnerabilities to access a range of different types of support. Depending on their location in the network, some individuals' ability to access and maintain networks may be compromised due to their limited networks. Social network theory drives the mapping of key actors, both internal and external, in Fulbe relations in northern Ghanaian communities and the understanding of how the networks influence power distribution, politics and resource use.

Theory of Needs

Human needs are central to the formation and continuous existence of social networks. Individuals draw on their social networks to respond to a variety of needs that are relevant for their existence and for maintaining the social group. This theory provides the basis for

understanding the various needs that inform the formation of networks and how they are mobilized and or utilized to achieve individual and group interests. According to the theory, individuals are motivated to satisfy their needs ranked in a hierarchy according to their level of importance: physiological needs, safety needs, belonging and love needs, esteem needs, and finally, self-actualization needs.¹⁸

Theory of Planned Behavior

The beginning of behaviors evolves from the intention to satisfy a need, which is, in part, facilitated by social networks and group structures. The 'theory of planned behavior' states that an individual's decision to engage in a specific behavior is grounded by their intent. The main constructs of the theory are that people engage in a behavior based on the influence of attitudes, subjective norms and behavioral control. An individual's personal attitude towards a particular behavior, action or conduct is the personal attitude variable, which is the sum of all our knowledge, manner, prejudices (positive and negative) that are thought of when the behavior is considered. Subjective norms connote the idea that key members of the collective will approve and support a particular behavior. Fulbe social organization therefore relies on influential persons within their networks to govern and direct the behavior, which determines what is seen as acceptable or not. The use of the 'theory of planned behavior' helps inform the motivations of Fulbe interactions and highlights the complexity of factors that contribute to Fulbe decision making processes.

Appendix 3 - Primary data collection statistic

Variables	Frequency	Percent
Sex		
Male	178	95.7
Female	8	4.3
Total	186	100
Age Group		
15 - 35 years	40	21.5
36 – 60 years	121	65.1
Above 60	25	13.4

¹⁸ Brooks, I. (2006). *Organisational behaviour*. London: Pearson Education Limited.

Total	186	100
Educational Level		
Basic	12	6.5
None	144	77.4
Secondary	9	4.8
Tertiary	3	1.6
Other	18	9.7
Total	186	100
Marital Status		
Single	4	2.2
Married	181	97.3
Divorced	1	0.5
Total	186	100
Occupation		
Farming	3	1.6
Cattle dealer	6	3.2
Farming and Nomadic livestock	14	7.5
Farming and sedentary livestock	64	34.4
Nomadic livestock	8	4.3
Sedentary	62	33.3
other	29	15.6
Total	186	100
Religious Affiliation		
Christianity	2	1.1
Islam	184	98.9

Total	186	100
Mobility Status		
Seasonal/regular migration	19	10.2
Sedentary	157	84.4
Other	10	5.4
Total	186	100

Appendix 4 - Social network graph divided by region

Following from Figure 2, social network graph of Fulbe relations in northern Ghana divided across the 5 surveyed Regions of Ghana.

