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You're not welcome! Violence and support for a grazing ban policy in Kaduna, Nigeria

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Abstract

This study examined the effect of victimization – i.e., the concrete experience of violence – on support for a policy banning the opening grazing of livestock in the state of Kaduna in Northern Nigeria. This policy, which aims to reduce the incidence of conflicts between nomadic herders and sedentary farmers, has been implemented to various degrees in some states across Nigeria. Kaduna is a suitable case study for investigating this relationship because despite having the third highest incidence of farmer-herder conflicts among Nigeria's 36 states, the state government has not implemented a grazing ban policy there. The regression results showed that the effect of victimization on support for a grazing ban policy depends on who is perpetrating the violence. General victimization (i.e., irrespective of the perpetrator) had no statistically significant effect on support for a grazing ban policy, but victimization by herders did have a significant positive effect. The positive effect was particularly strong among Christians. 78 percent of the respondents who had been victimized by herders were Christians.

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1.0. Introduction

Violent clashes between nomadic herders and sedentary farmers over land and water resources have exacerbated ethnic and religious polarization in Nigeria (Onwuzuruigbo 2023; Ejiofor 2023; Griswold 2018). Even before these conflicts turned violent around 2009, Nigeria was already ethnically and religiously divided (Coleman 1958, p. 351; Laitin 1982; Obilom & Thacher 2008; Ukiwo 2003), which suggests that these conflicts feed into pre-existing fault lines. Because the conflict involves actors with distinct ethno-religious identities, it is often viewed through a religious lens (Parsons 2023; Christian Association of Nigeria 2018). The nomadic herders belong to the Fulani ethnic group and are Muslims. In fact, the Fulani were crucial to the spread of Islam in Nigeria through the 1804 Jihad that led to the entrenchment of Islam in Northern Nigeria and the establishment of the Sokoto Caliphate (Blench 1994; Van Beek 1988; Van Raay 1975).[1] Conversely, the majority of the resident population in the areas where these conflicts are clustered (i.e., the Middlebelt and Southern Regions) is Christian. Christians are also overrepresented in the number of fatalities from these conflicts (Parsons 2023).

The predominantly Christian population in Nigeria's Middlebelt and Southern Regions views the Fulani as settlers/non-indigenes. Mainangwa (2017, p. 285) contends that at the heart of farmer-herder conflicts "is the opposing ideas of indigeneity and how each group – herder and farmer – idealizes its relation to the land." According to Onwuzuruigbo (2023, p. 14), "pastoralists may be Nigerian citizens but hardly 'indigenes' of the several communities they settle or reside in." Similarly, Ejiofor (2023, p. 13) observes that "Indigeneity has thus become a permanent feature of the Nigerian political system. Its permanence is evident in the fact that 'non-indigene' is a permanent status: one rarely ever becomes an 'indigene' of a locale no matter how long one lives in a locale." Commenting on the tense relationship between nomadic herders and resident populations in Nigeria's Middlebelt Region, Balarabe (2021, p. 1837) noted: "The indigene-settler

[1] The jihad, which lasted from 1804-1808, was launched by an Islamic cleric of Fulani ethnicity named Usman dan Fodio. The jihad is also referred to as the "Fulani War" because dan Fodio's army consisted mainly of people of Fulani ethnicity.

dichotomy is a heated issue, particularly where the two [actors] belong to different ethnic groups or religious beliefs."

Tuki (2023) posits that religion is crucial in understanding the dynamics of farmer-herder conflicts. Using representative survey data for Nigeria, he shows that both Muslim self-identification and Muslim domination (i.e., a scenario where the resident population in a municipality is predominantly Muslim) reduces the likelihood of being concerned about farmer-herder conflicts. He explained his findings on the grounds that Islam, the religion shared by the resident population and the nomadic herders, makes it easier for conflicts over land and water resources between both actors to be resolved peaceably. Blench (1994, p. 201) made a similar observation: "In regions where Islam has had virtually no impact among the Igbo and Cross River peoples such relationships [i.e., coexistence between Muslim nomadic Fulani herders and Christian sedentary populations] are harder to build and conflicts more likely to arise."

Because of the nomadic nature of herders, blame is usually attributed to them for these conflicts owing to the fact that it is often their livestock that strays into farmlands and destroys crops (Balarabe 2021). The skew in blame attribution is also evident in news reports where herders are mostly portrayed as the perpetrators of violence, hence obscuring the fact that they have also been victims of violent attacks perpetrated by resident populations and of cattle rustling (Chiluwa 2022; Chiedozie 2021). This has led to the social construction of nomadic herders as being backwards, uncivilized, unwilling to embrace modernization, and having a high predisposition toward violence. Such perceptions hinder the development of trust and meaningful relationships between herders and resident populations (Eke 2020; Maiangwa 2017). Okoli & Ogayi (2018, p. 133) argued that "[t]he existing state land-use policies and practices have largely alienated the herdsmen, who are widely perceived as land usurpers in many settled localities." However, nomadic herders have not always been in a marginal position. In fact, they were a privileged group during the period when Nigeria was under British colonial rule. Blench (1998, p. 5) observed: "[I]n Nigeria, many non-Muslim populations were placed under a local juridical system controlled by the

Hausa/Fulani during the colonial period. Court cases between herders and farmers tended almost invariably to be decided in favor of herders." Mainangwa (2017, p. 284) has also pointed out that "the colonial policy of indirect rule through the urban Fulani and Hausa aristocrats led to the marginalization of many local non-Muslim communities in northern Nigeria." With Nigeria's independence from British colonial rule in 1960, the minority non-Hausa/Fulani ethnic groups in Northern Nigeria, most of who reside in the Middlebelt Region, had a greater say in the affairs of the larger Northern Region.[2] A point worth highlighting is that farmer-herder conflicts were not violent at that time and legal remediation was often used to resolve disputes between farmers and herders.

In present-day Nigeria, violence has replaced legal remediation as a means of dispute resolution. The competing narratives of victimhood between farmers and herders has further exacerbated farmer-herder conflicts: Herders feel marginalized because of their settler status and the fact that they and their livestock have been attacked by resident populations. Herders have also been victims of cattle rustling. Farmers, on the other hand, feel that the state has not done enough to protect them from attacks perpetrated by nomadic herders who destroy their crops and threaten their livelihoods. Referencing the colonial and pre-colonial past, the resident Christian population in the Middlebelt Region view members of the Fulani ethnic group as their "long-term oppressors" (Olumba 2023; Maiangwa 2017, p. 286). Relative deprivation and the feeling of marginalization has heightened grievances among herders, prompting some of them to become radicalized and establish ties with terrorist groups like *Boko Haram* and the Islamic State West Africa province (ISWAP) (Ejiofor 2022, 2022a). According to a 2019 report by the Institute for Economics and Peace (2019, p. 21), "Fulani extremists were responsible for the majority of terror-related deaths in

[2] Nigeria's Middlebelt Region is part of Northern Nigeria. Majority of this area, though proximate to the Muslim emirates during the precolonial period, were neither captured by Muslim jihadists nor subjected to emirate rule. This was due to the strategic military advantages provided by geography and the skill that the ethnic groups residing there possessed in warfare. This enabled them to better resist jihadist incursions. Slaves were crucial for the functioning of the Muslim emirates. Since it was forbidden for Muslims to enslave fellow Muslims due to the brotherhood they shared under the banner of Islam, the pagan tribes in proximity to the Muslim emirates who had not embraced Islam – i.e., unbelievers – were frequently attacked by jihadists who sought to capture slaves. After the British captured Northern Nigeria (then called the Sokoto Caliphate) in 1903, they abolished slavery and slave trade (Vaughan 2016; Morrison 1982; Van Beek 1988).

Nigeria at 1,158 fatalities." Resident populations have also resorted to carrying firearms for protection (Sahara Reporters 2021; Kasa et al. 2022; The Citizen 2021; Nigerian Tribune 2021; Sunday 2021).

To address farmer-herder conflicts, the Nigerian federal government proposed a Grazing Reserve Bill in 2016, which sought to establish grazing reserves in all Nigeria's 36 sates; in these reserves, nomadic Fulani herders would reside with their livestock. The bill, which was eventually abandoned, was vehemently opposed by the state governors in the Middlebelt and Southern Regions. Similar policies – like the establishment of cattle colonies, Rural Grazing Areas (RUGA), and the National Livestock Transformation Plan – have also been met with stiff resistance in these Regions (Babajide 2023; Olumba 2022; Nnodim & Alagbe 2021; Ele 2020). These proposals, though well intentioned, have failed because they are perceived as land-grabbing attempts by the Nigerian government in favor of the Fulani and as a move towards ethnic domination and the Islamization of Nigeria (Ejiofor 2023, 2022b; Onwuzuruigbo 2023; Ele 2020; Chukwuma 2020; Tauna 2019; Nwankwo 2016). The skepticism towards these policies was exacerbated by the fact the Nigerian President at that time, Muhammadu Buhari, was a Muslim and belonged to the Fulani ethnic group.[3] In fact, Onwuzuruigbo (2023 p. 15) asserted that "Fulani pastoralists are tacitly supported by the Fulani-dominated federal government." Ejoifor (2023, p. 13) has highlighted the close association between land and ethnic identity in Nigeria: "Ethnic groups in Nigeria prefer to engage in unending conflicts than lose ancestral lands tied to their ethnic and cultural identities."

In response to these "bad" policies, some state governors in the Middlebelt and Southern Regions passed legislations banning the open grazing of livestock. The state of Benue, which is located in the Middlebelt Region and has the second highest incidence of farmer-herder conflicts out of Nigeria's 36 states, was the first to pass such a law in 2017 (Godwin 2017; Kwaja & Ademola-Adelehin 2017). The law criminalizes the free movement of livestock, mandates the adoption of ranching methods, and imposes huge fines for infractions (Balarabe (2021). Different requirements

[3] Muhammadu Buhari was Nigeria's president from 2015 to 2023.

apply to indigenes and non-indigenes for the establishment of a ranch in Benue. To lease land for ranching purposes, non-indigenes must gain approval from the landowner, from the landowner's family and kindred head, from community leaders, from the chairman of the local government area where the land is located, and from the state governor. Only when these authorities grant approval can a non-indigene set up a ranch. The lease, which cannot exceed one year, is subject to renewal. These requirements do not apply to indigenes of Benue state (Onwuzuruigbo 2023; Balarabe 2021; Kwaja & Ademola-Adelehen 2017). Commenting on the discriminatory nature of the grazing ban law, Onwuzuruigbo 2023 observed: "It would appear that the hidden intention of the Benue State anti-grazing law is to remind the Fulani of their status as non-indigenes."

Given that the law only applies to nomadic Fulani herders, coupled with the fact that they already constitute a minority in the Middlebelt and Southern Regions, the Fulani perceive the law as discriminatory and as a violation of their right to free movement within Nigeria. This right is enshrined in Nigeria's 1999 constitution. Balarabe (2021) faulted the grazing ban policy on the grounds that it portrayed nomadic herding merely as an occupation and completely ignored the fact that the centuries-long practice is an integral part of Fulani culture and identity. Conversely, the state government contends that the grazing ban policy only restricts the movement of livestock, not people (Abah 2017). The government also argues that the grazing ban policy is a necessary intervention to reduce farmer-herder conflicts, protect the lives and property of the population, and encourage the adoption of modern ranching methods among herders (Shobayo 2022; Ugwu 2022; Akoni & Alu 2021; Odunsi 2021; Mac-Leva & Emmanuel 2020; Silas 2017, 2021).

But what are the perceptions of ordinary Nigerians towards a grazing ban policy? To what extent do they think it would be effective in reducing the incidence of farmer-herder conflicts? What factors determine their support for such a policy? Are there religious patterns behind their perceptions towards the effectiveness of a grazing ban policy? Relying on novel survey data collected from the state of Kaduna as part of the Transnational Perspectives on Migration and Integration (TRANSMIT) research project, I address these questions by examining the effect of

victimization on support for a grazing ban policy.[4] Kaduna, which is in Northern Nigeria, is an interesting case study for investigating this relationship because despite having the third highest incidence of farmer-herder conflicts out of Nigeria's 36 states, such a law has not been passed by the state government.[5] Furthermore, mirroring Nigeria, Kaduna's population is evenly split between Christians and Muslims. The predominantly Muslim Northern part of the state was under emirate rule during the precolonial period. It was called *Zaria Emirate* at that time. Conversely, the Southern part of Kaduna which has a predominantly Christian population, though subject to slave raids, was an indigenous territory that was never captured by Muslim jihadists. Kaduna has a history of religiously motivated conflicts between Christians and Muslims; farmer-herder conflicts in the state also tend to erupt along ethno-religious lines (Tuki 2023a; Griswold 2018; Angerbrandt 2018, 2011).

Although some studies have examined the effect of the grazing ban legislation on farmer-herder conflicts in Nigeria, they mostly employ qualitative methods and rely on secondary information (e.g., Onwuzuruigbo 2023; Ejiofor 2023, 2022b; Vanger & Nwosu 2020; Balarabe 2021). The originality of this study lies in the novel large-N dataset employed in the analysis, the quantification of support for a grazing ban policy among the ordinary Nigerian population, and the use of econometric techniques. Moreover, unlike previous quantitative studies on conflict in Nigeria which use data from the Armed Conflict Location and Events Database (ACLED) (Raleigh et al. 2010) to construct a measure for conflict exposure (e.g. Tuki 2023a, 2023b; George et al. 2022, 2020; Odozi & Oyelere 2019), this study focuses primarily on the concrete experience of violence by the respondents and their family members. I only use the conflict exposure variable derived from ACLED as a control variable. Besides examining the heterogenous effects of

[4] For more information about the TRANSMIT research project, visit: https://www.wzb.eu/en/research/migration-and-diversity/migration-integration-transnationalization/projects/transmit-transnational-perspectives-on-migrant-integration

[5] Data from Armed Conflict Location and Events Database (ACLED) (Raleigh et al. 2010) shows that between 1997 to 2022, there were 2,533 conflict incidents in Nigeria where at least one of the actors was a pastoralist or belonged to the Fulani ethnic group. The three states with the highest number of incidents – i.e., Plateau, Benue, and Kaduna – had 410, 406, and 289 incidents respectively.

victimization on support for a grazing ban policy among Nigeria's two major religious groups (i.e., Christians and Muslims), I also examine how support for a grazing ban policy varies among respondents depending on whom the perpetrator of violence is (e.g., herders, robbers/bandits, and religious extremists).

This study finds that general victimization – i.e., irrespective of the perpetrator – has no effect on support for a policy banning the open grazing of livestock in Kaduna. The null effect persists when I break down the data based on religious affiliation and estimate models using the Christian and Muslim subsamples of respondents. I also find that Muslim self-identification increases the likelihood of supporting a grazing ban policy. This might be due to a contagion effect: The population in Kaduna (especially Christians) tend to attribute farmer-herder conflicts to religion and conflate members of the Fulani ethnic group with Muslims.[6] The conflation of both groups might make Muslims more eager to see an end to the conflict, which translates into increased support for a grazing ban policy. However, when I focus specifically on victimization by herders, I find that it has a robust positive effect on support for a grazing ban policy. The effect is particularly strong among Christians. This is likely because 78 percent of the respondents who have been victimized by herders are Christians.

This study proceeds as follows: Section 2 discusses the sampling strategy, operationalizes the variables that will be used to estimate the regression model, and specifies the general form of the regression model to be estimated. Section 3 presents the regression results and discusses them, while section 4 summarizes the paper and concludes.

2.0. Data and methodology

2.1 Sampling strategy

As part of the Transnational Perspectives on Migration and integration (TRANSMIT) research project, the WZB Berlin Social Science Center conducted a survey in the state of Kaduna

[6] The TRANSMIT data shows that 52 percent of Christians in Kaduna agree that farmer-herder conflicts are caused by religion. Only 17 percent of Muslims hold this view.

in 2021. 1,353 households were interviewed. To select the interview locations, multi-stage clustered random sampling was employed. Four of the 23 local government areas (LGAs) in Kaduna (i.e., Giwa, Birnin Gwari, Kauru, and Zangon Kataf) were unsafe areas for the enumerators to conduct interviews in due to the high risk of intercommunal conflict, thus they were excluded from the sampling frame.

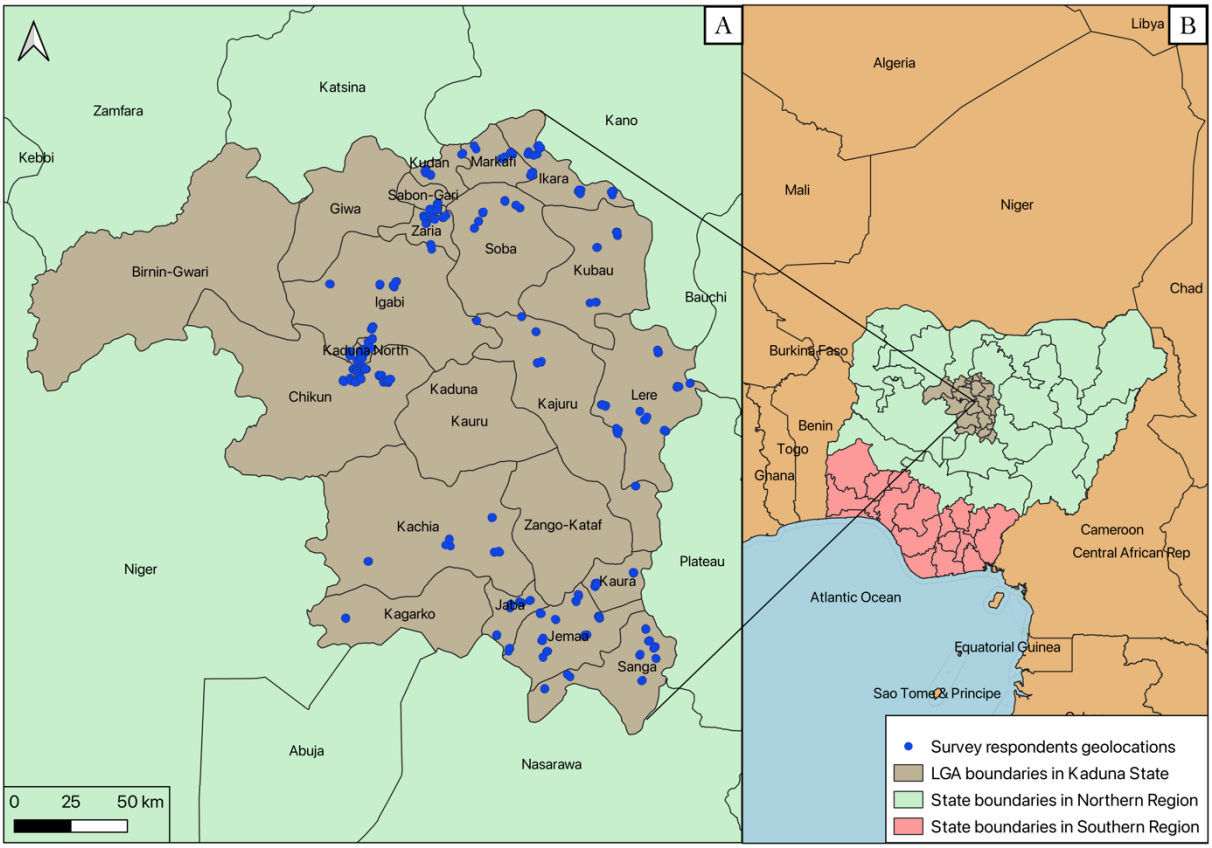

Figure 1: Geolocations of survey respondents in the state of Kaduna

Note: Panel A shows the geolocations of the survey respondents and the administrative boundaries of the local government areas (LGAs) (i.e., municipalities) in the state of Kaduna, which is in Nigeria's Northern Region. Panel B shows the state of Kaduna and the two main regions that constitute Nigeria – i.e., the Northern and Southern Regions.

Grid cells of 5 x 5km, which were called precincts, were developed using QGIS software. These precincts were overlaid on a shapefile of the administrative boundaries of Kaduna's senatorial districts and LGAs. Each precinct was comprised of smaller 0.5 x 0.5km grid cells. Precincts were randomly drawn with replacement, with probabilities corresponding to the population sizes within them. From each of the selected precincts, smaller 0.5 x 0.5km grid cells were randomly selected with probabilities corresponding to the population size within them. The smaller grid cells were drawn without replacement. Within each of the smaller grid cells, an average

of 12 households were interviewed. The households were selected using a random walk approach. The interviewee within the household, who was selected for the individual component of the survey, was chosen using a simple random draw.

To ensure that the exclusion of the four LGAs did not skew the sample, the sample was stratified according to the population size in the senatorial district. Samples were drawn within each of the senatorial districts in relation to their respective population shares. Due to the difficulty in obtaining recent population estimates from official government sources – because Nigeria's last population census was conducted in 2006 – the population used for the sampling was obtained from the 2020 Worldpop gridded dataset (Bondarenko et al. 2020).

2.2. Operationalization of the variables

2.2.1. Dependent variable

Support grazing ban: This measures to degree to which respondents think a grazing ban policy would reduce the incidence of farmer-herder conflicts. It was derived from the question, "Some state governors have proposed a ban on the open grazing of cattle and the adoption of modern ranching methods to address the clashes between farmers and herders. Do you think this policy would be effective in reducing the clashes between farmers and herders?" The responses are measured on an ordinal scale with five categories ranging from, "0 = Strongly disagree" to "4 = Strongly agree."

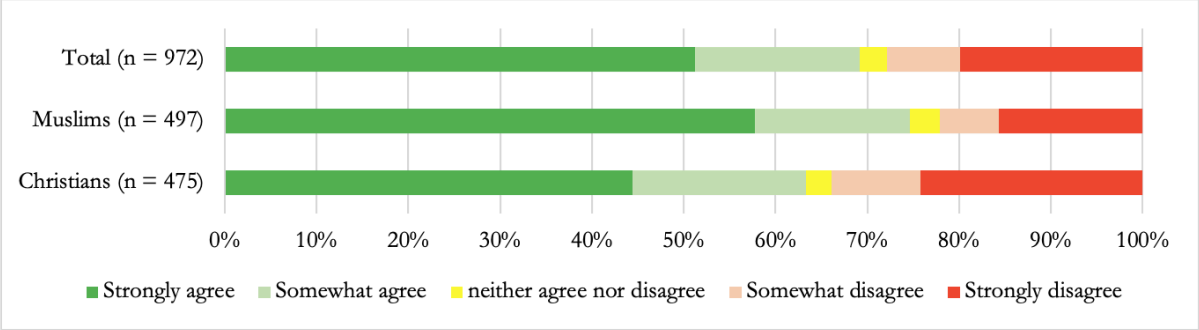

Figure 2: Support for a grazing ban policy in Kaduna State

Note: The vertical axis shows the total number of survey respondents and the religious subsamples of respondents (i.e., Christians and Muslims) who were asked the relevant question about the potential for a grazing ban policy to reduce the incidence of farmer-herder conflicts. The horizontal axis shows the percentage of respondents who chose a particular response category when asked the relevant question.

The question on the grazing ban policy was preceded by one where respondents were asked whether they were aware of the conflicts between nomadic herders and sedentary farmers. Of the 1,298 respondents who were asked this question, 326 of them said they were unaware of the conflict. This led to a 25 percent decline in the sample size. Given the high incidence of farmer-herder conflicts in Kaduna, coupled with the topic's prominence in public discourse in Kaduna and Nigeria at large, it is likely that most of the respondents who said they were unaware of the conflict had said so because they did not want to discuss it. Farmer-herder conflicts are a sensitive topic in Kaduna, especially because of the religious dimension along which they play out. A closer examination of the data revealed that six of the 326 respondents who said they were unaware of the conflict had mentioned in an earlier violence-related question that they had been victimized by herders.

As shown in figure 2, support for a grazing ban policy is high in Kaduna. 69 percent of the population either "strongly agree" or "somewhat agree" that such a policy would be effective in reducing the incidence of farmer-herder conflicts. Breaking down the data based on religious affiliation shows that Muslims are more supportive of the policy than Christians. 75 percent of Muslims either "strongly agree" or "somewhat agree" that the policy would reduce farmer-herder conflicts. The estimate for Christians is 63 percent. I also developed a reduced form of the dependent variable where I coded the "strongly agree" and "somewhat agree" response categories as 1 and coded the "neither agree nor disagree," "somewhat disagree," and "strongly disagree" response categories as 0. I used this binary version of the dependent variable to conduct a robustness check.

2.2.2. Explanatory variable

Victimization (all): This is a dummy variable that takes the value of 1 if the respondent or a family member has experienced any form of violence during the last decade (i.e., irrespective of the perpetrator) and 0 otherwise. It was derived from the question, "During the last 10 years (2011–2021), have you or your close family members been affected by violence? By 'affected' I mean (a)

you or your close family were threatened by violence, (b) you or one of your close family members was injured or killed, or (c) your home or property was destroyed by an attacker." The responses were measured on a binary scale, "1 = yes" and "0 = no". 232 respondents reported that they had been victimized, which is equivalent to 18 percent of the total respondents. Put differently, one in five households in Kaduna was directly affected by violence between 2011 to 2021.

Table 1: Perpetrators of violence

Perpetrator	Total	No. of Muslims	No. of Christians	% of Muslims	% of Christians
Religious extremists	66	23	43	35	65
Herders	58	13	45	22	78
Bandits/Robbers	56	22	34	39	61
Cattle rustlers	16	7	9	44	56
Army	4	2	2	50	50
Farmer	3	1	2	33	67
Police	0	0	0	0	0
Family member	1	0	1	0	100
Others (not listed)	54	24	30	44	56

Note: *The first column lists the perpetrators of the violent incident that had affected the respondents or a close family member. The second column shows the total number of respondents who have been victimized by the respective perpetrators. Breaking down the data based on religious affiliation, columns 3 and 4 show the number of Muslim and Christian respondents respectively who have been victimized by a particular perpetrator. Columns five and six show the percentage of Christian and Muslim respondents respectively who have been victimized by a particular perpetrator. Suffice to add that respondents were allowed to select multiple perpetrators of violence during the survey.*

The respondents were then asked to identify the perpetrators of the violent incident that had affected them. They were allowed to specify more than one perpetrator. As shown in table 1, religious extremists were reported as the main perpetrators of violence. This is not surprising because Kaduna is polarized along religious lines and the state has a history of violent conflicts between Christians and Muslims (Scacco & Warren 2021; Angerbrandt 2018, 2011). The TRANSMIT data shows that the population in Kaduna is almost evenly divided between Christians and Muslims in the ratio 44:56 percent respectively. Some studies have found that polarization peaks in a society when the population is evenly split between two cultural groups, which in turn increases the risk of conflict (Montlvo & Reynal-Querol 2005, 2003). Nomadic herders were the second main perpetrators of violence, while robbers/bandits came in third place. I developed dummy variables for each of the three main perpetrators of violence. For example, in the case of herders, the variable took the value of 1 if the respondent had been victimized by herders and 0

otherwise. The reference category thus consists of the subsample of respondents who had not been victimized and those who had been victimized by other perpetrators besides herders.

A closer examination of the data revealed a religious pattern: More Christians reported that they had been victimized than Muslims. Of the 232 respondents who had been victimized (i.e., irrespective of the perpetrator), 64 percent of them were Christians while 36 percent were Muslims. Examining the religious distribution of the of the victims based on the perpetrators of violence reveals that more Christians have been victimized than Muslims in almost all the categories. 78 and 22 percent of those who had been victimized by herders were Christians and Muslims respectively. The predominance of Christians among those who have been victimized by herders is likely because farmer-herder conflicts are concentrated in the southern part of Kaduna, where the population is predominantly Christian. The religious difference between nomadic herders and the resident population makes it more difficult for trust to be established between both actors, which in turn reduces the likelihood of disputes over land and water resources to be resolved peaceably. 65 and 35 percent of those who had been victimized by religious extremists were Christians and Muslims respectively. 61 percent of those victimized by robbers/bandits were Christians while the remaining 39 percent were Muslims.

2.2.3. Control variables

Pastoral conflict: This measures the total number of pastoral conflicts within the 20km buffer around the respondents' dwellings from 1997 to 2020 (See figure 3). I was able to draw the buffers around the geolocations of the respondents using QGIS software because I relied on the TRANSMIT and Armed Conflict Location and Events Database (ACLED) (Raleigh et al. 2010) datasets, both of which are georeferenced. Based on the ACLED data, I define pastoral conflicts as incidents where at least one of the actors is a "pastoralist" or belongs to an ethnic group renowned for pastoralism – i.e., "Fulani." I am able to identify both the occupation and ethnicity of the conflict actors because the ACLED dataset provides this information. Almost all pastoralists

in the dataset belong to the Fulani ethnic group. They are specifically defined as "Fulani Ethnic Militia," which makes the two terms almost synonymous.

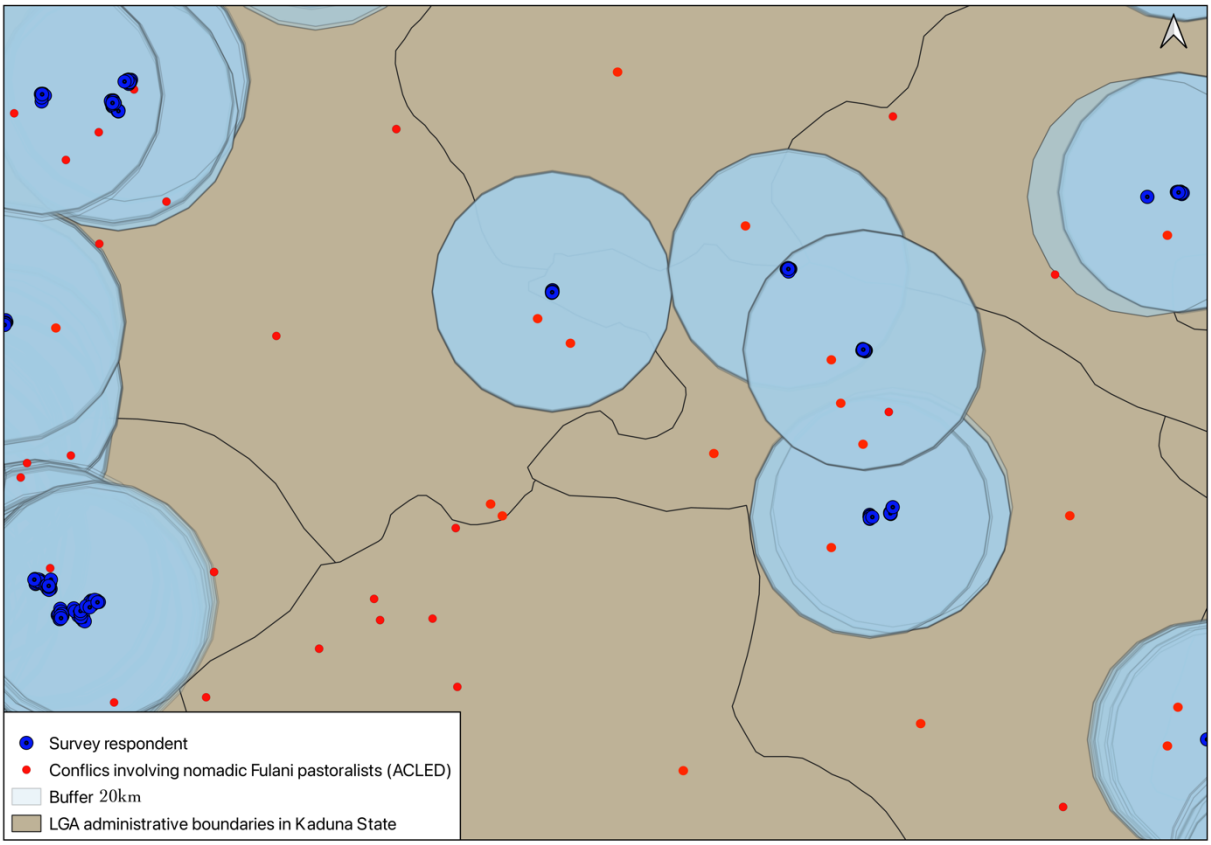

Figure 3: Measuring exposure to conflicts involving nomadic Fulani pastoralists

Note: The figure shows the geolocations of the conflict incidents involving nomadic Fulani pastoralists, the geolocations of the survey respondents, the 20km buffer around their dwellings, and the administrative boundaries of the local government areas (LGAs) (i.e., municipalities) in the state of Kaduna.

I considered the conflicts within the buffer beginning from 1997 because the ACLED dataset is available starting from that year. Although the ACLED dataset is updated in real time, I excluded all incidents that occurred after 2020. This lags the variable measuring exposure to pastoral conflicts, since the dependent variable is measured in 2021. I considered all the conflicts within the buffer from 1997 to 2020 because I am particularly interested in the cumulative effect of pastoral conflicts. Some studies have shown that memories of past conflicts can still influence behavior in the present (Olumba 2023). I included exposure to pastoral conflict as a control variable in the regression model because it could influence both the dependent and explanatory variables: Higher exposure to pastoral conflicts might increase the likelihood of being victimized, especially

because majority of these conflicts are violent in nature.[7] A high incidence of pastoral conflicts might also prompt people to support a grazing ban policy in the hope that it would reduce the conflict incidence. 88 percent of the respondents had at least one pastoral conflict within the 20km around their dwellings. 43 percent of them had at least 14 incidents within the buffer.

Demographic covariates: This includes the age, gender, religious affiliation, and marital status of the respondents. Religious affiliation is measured using a dummy variable that takes the value of 1 if the respondent self-identifies as Muslim and 0 if Christian. Gender takes the value of 1 if the respondent is female and 0 if male. Marital status takes the value of 1 if the respondent is married or has ever been married, and 0 otherwise. Respondents who were divorced or widowed were categorized as married. This is because a divorce or the demise of a spouse does not necessarily do away with familial responsibility, especially if the union produced offspring.

2.3. Summary statistics and analytical technique

Table 2: Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
Support grazing ban$^{\phi}$	972	2.726	1.606	0	4
Support grazing ban (binary)	972	0.691	0.462	0	1
Victimization (all)	1298	0.179	0.383	0	1
Victimization (herders)	1353	0.043	0.203	0	1
Victimization (religious extremists)	1353	0.049	0.215	0	1
Victimization (bandits/robbers)	1353	0.041	0.199	0	1
Religious affiliation	1298	0.561	0.496	0	1
Age	1321	34.391	14.004	15	85
Gender	1321	0.557	0.497	0	1
Marital status	1298	0.74	0.439	0	1
Pastoral conflict	1353	9.738	10.761	0	49

Note: ϕ *is the dependent variable. "Support grazing ban (binary)" is a reduced form of the dependent variable where the five response categories are collapsed into two main categories. The dependent variable has fewer observations than the other variables because the relevant question was asked to only respondents who had said they were aware of farmer-herder conflicts. This exacerbates the problem of listwise deletion in the regression models.*

Table 2 presents the summary statistics of the variables that will be used to estimate the regression models. The general form of the model could be expressed thus:

$$Y_t = \beta_0 + \beta_1 Victimization_t + \beta_2 X'_t + e_t$$

[7] Of the 2,533 pastoral conflicts that occurred in Nigeria between 1997 to 2022, 77 percent of them caused at least one fatality.

Where Y_t is the dependent variable that measures support for a grazing ban policy, X'_t is a vector of control variables that have been discussed in the preceding section, β_1 and β_2 are the coefficients of the explanatory and control variables respectively, β_0 is the intercept, e_t is the error term, and t denotes the year in which the variables are measured. Since the dependent variable has five ordinal categories, I estimated the model using ordered logit (Ologit) regression which is based on maximum likelihood estimation (MLE). I conducted a robustness check where I treated all the variables as continuous and re-estimated the model using ordinary least squares regression (OLS). Using the binary version of the dependent variable, I conducted another robustness check using linear probability model (LPM) and logit regression as alternative estimation methods. To allow for the possibility of correlation between respondents residing within the same local government area (LGA) (i.e., municipality), I clustered the standard errors at the LGA level.

3.0. Results and discussion

3.1. General victimization – irrespective of perpetrator

Table 3: Effect of general victimization on support for grazing ban policy

Support grazing ban$^{\phi}$	**Full sample**						**Religious subsamples**	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7) (Muslim)**	**(8) (Christian)**
Victimization (all)	-0.007	0.115	0.126	0.05	0.029	0.007	0.127	0.135
	(0.201)	(0.198)	(0.204)	(0.162)	(0.245)	(0.05)	(0.485)	(0.183)
Religious affiliation		0.578***	0.714**	0.611**	0.966***	0.181***		
		(0.198)	(0.296)	(0.22)	(0.352)	(0.06)		
Age		-0.009**	-0.009*	-0.009*	-0.017***	-0.003***	-0.013	-0.005
		(0.005)	(0.005)	(0.004)	(0.006)	(0.001)	(0.008)	(0.008)
Gender		-0.004	0.014	-0.000	-0.055	-0.012	0.144	-0.172
		(0.121)	(0.132)	(0.115)	(0.145)	(0.029)	(0.167)	(0.164)
Marital status		0.174	0.058	0.105	0.21	0.04	-0.291	0.219
		(0.149)	(0.166)	(0.144)	(0.192)	(0.037)	(0.241)	(0.229)
Pastoral conflict		0.005	-0.027	-0.013	-0.021	-0.004	0.05***	-0.042***
		(0.006)	(0.018)	(0.011)	(0.013)	(0.002)	(0.008)	(0.009)
Constant				2.618***	1.528	0.769***		
				(0.557)	(1.257)	(0.227)		
Estimation method	Ologit	Ologit	Ologit	OLS	Logit	LPM	Ologit	Ologit
LGA FE	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Ethnic group FE	No	No	Yes	Yes	Yes	Yes	No	No
Observations	972	972	972	972	957	972	497	475
Pseudo R^2	0.00	0.01	0.045		0.075		0.054	0.037
R^2				0.095		0.102		
Log pseudolikelihood	-1243.004	-1230.799	-1186.861		-547.301		-562.287	-614.473
AIC statistic	2496.008	2481.597	2411.723	3617.378	1130.602	1187.989	1162.574	1244.947

Note: *ϕ is the dependent variable, clustered robust standard errors are in parenthesis, *** p<0.01, ** p<0.05, * p<0.10. All models are estimated using ordered logit (Ologit) regression, except for model 4 which is estimated using ordinary least squares (OLS) regression, and models 5 and 6 which are estimated using logit and linear probability model (LPM) regressions respectively. The intercepts of the Ologit models have not been reported.*

Table 3 presents the results of regression models examining the effect of general victimization (i.e., irrespective of the perpetrator) on support for a grazing ban policy. In model 1 – the baseline model where no control variables were added – victimization was statistically insignificant. This suggests that general victimization has no effect on support for a grazing ban policy. Suffice to add that the reference category here is the subsample of respondents who have not been victimized. The model had only 972 observations because the 326 respondents who had said that they were unaware of farmer-herder conflicts and thus were not asked the relevant question from which I derived the dependent variable, were dropped. This exacerbates the problem of listwise deletion. In model 2 where I added the control variables, the Akaike Information Criteria (AIC) statistic declined from 2,496 to 2481, indicating that model 2 has a better fit than its predecessor. However, victimization remained statistically insignificant.

In model 3, where I added fixed effects for the local government areas (LGAs) (i.e. municipalities) where the respondents reside and the ethnic groups to which the respondents belong, victimization remained statistically insignificant. The LGA fixed effects account for time invariant factors within the LGAs like the geographical terrain or the unique way in which the society within a specific LGAs is organized. Since religion and ethnicity overlap to a great extent in Nigeria, the fixed effects for the ethnic groups enable me to better isolate the effect of religious affiliation on support for the grazing ban policy. Among the control variables, only religious affiliation and age were statistically significant. Age was significant at the 10 percent level and carried a negative sign, which indicates that older people are less likely to support a grazing ban policy. Religious affiliation was significant at the five percent level and carried a positive sign, which suggests that Muslim self-identification increases the likelihood of supporting a grazing ban policy. Keeping all covariates that their mean levels, the analysis showed that compared to Christians, Muslims are 17 percent more likely to choose the "strongly agree" response category when asked whether a grazing ban policy would reduce the incidence of farmer-herder conflicts.[8] The higher

[8] Table A1 in the appendix reports the marginal effects at the mean for model 3.

support for a grazing ban policy among Muslims might be because the population in Kaduna tend to conflate members of the Fulani ethnic group with the larger Muslim population (Tuki 2023a). Moreover, the TRANSMIT dataset shows that 34 percent of the population in Kaduna agree that farmer-herder conflicts are caused by religion. Breaking down the data based on religious affiliation shows that Christians are more likely to attribute the conflict to religion than Muslims: 52 percent of Christians agree that the farmer-herder conflicts are caused by religion; only 17 percent of Muslims hold this view.[9] Moreover, the conflation of Muslims with members of the Fulani ethnic group, coupled with the fact that blame is often attributed to Fulani nomadic herders for the conflict, might make Muslims keener to see an end to the conflict, which manifests in their greater support for a grazing ban policy.

As a robustness check, I treated all the variables as continuous re-estimated the model using ordinary least squares (OLS) regression. As shown in model 4, the results were consistent with those in the preceding models that are based on MLE. I conducted another robustness check where I used the binary version of the dependent variable and estimated regressions using logit and linear probability model (LPM) techniques. As shown in models 5 and 6, the results were consistent with those reported in the earlier models. To check for heterogeneous effects based on religious affiliation, I estimated models using the Muslim and Christian subsamples of respondents. As shown in models 7 and 8, victimization had no statistically significant effect on support for a grazing ban policy among both Muslims and Christians. Except for exposure to pastoral conflict, all the control variables were statistically insignificant. Pastoral conflict carried a positive sign in model 7, which suggests that among Muslims, exposure to pastoral conflicts increases the likelihood of supporting a grazing ban policy. A reason for this could be that Muslims who are exposed to pastoral conflicts have much trust in the state's institutions and believe that a grazing ban would put an end the conflict. Conversely, exposure to pastoral conflict had a negative effect

[9] Conversely, Muslims are more likely to attribute farmer-herder conflicts to climate change (i.e., droughts) than Christians. 22 percent of the population in Kaduna agree that farmer-herder conflicts are caused by droughts. Breaking down the data based on religious affiliation shows that 26 and 18 percent of Christians and Muslims respectively, agree that the conflicts are caused by droughts.

on support for a grazing ban policy among Christians. This might be because Christians who are exposed to pastoral conflicts have low institutional trust, and thus do not see a grazing ban policy as an effective measure that can end the conflicts. Moreover, passing a grazing ban law is only one side of the equation, enforcement is another. In states like Benue where a grazing ban policy already exist, farmer-herder conflicts still persist.

3.2. Perpetrator-specific victimization

Table 4: Effect of victimization by herders on support for grazing a ban policy

Support grazing ban$^{\phi}$	**Full sample**						**Religious subsamples**	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7) (Muslim)**	**(8) (Xtian)**
Victimization (herders)	0.691**	0.907***	0.779**	0.52**	0.748*	0.13**	-0.195	1.058***
	(0.302)	(0.285)	(0.306)	(0.194)	(0.419)	(0.06)	(0.523)	(0.304)
Religious affiliation		0.593***	0.715**	0.614**	0.979***	0.183***		
		(0.19)	(0.298)	(0.215)	(0.335)	(0.055)		
Age		-0.01**	-0.01**	-0.009**	-0.018***	-0.003***	-0.013	-0.008
		(0.005)	(0.005)	(0.004)	(0.005)	(0.001)	(0.008)	(0.008)
Gender		0.001	0.012	-0.004	-0.054	-0.013	0.142	-0.177
		(0.119)	(0.133)	(0.118)	(0.151)	(0.03)	(0.166)	(0.151)
Marital status		0.169	0.067	0.115	0.213	0.042	-0.291	0.244
		(0.151)	(0.167)	(0.146)	(0.195)	(0.038)	(0.242)	(0.236)
Pastoral conflict		0.003	-0.028	-0.014	-0.023*	-0.004*	0.049***	-0.046***
		(0.006)	(0.017)	(0.01)	(0.012)	(0.002)	(0.007)	(0.009)
Constant				2.667***	1.593	0.78***		
				(0.55)	(1.234)	(0.222)		
Estimation method	Ologit	Ologit	Ologit	OLS	Logit	LPM	Ologit	Ologit
LGA FE	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Ethnic FE	No	No	Yes	Yes	Yes	Yes	No	No
Observations	972	972	972	972	957	972	497	475
Pseudo R^2	0.002	0.013	0.047		0.079		0.053	0.044
R^2				0.099		0.106		
Log pseudolikelihood	-1240.074	-1226.308	-1183.965		-545.293		-562.343	-610.179
AIC statistic	2490.149	2472.617	2405.932	3612.5	1126.588	1184.211	1162.686	1236.359

Note: *ϕ is the dependent variable, clustered robust standard errors are in parenthesis, *** p<0.01, ** p<0.05, * p<0.10. All models are estimated using ordered logit (Ologit) regression, except for model 4 which is estimated using ordinary least squares (OLS) regression, and models 5 and 6 which are estimated using logit and linear probability model (LPM) regressions respectively. The intercepts of the Ologit models have not been reported.*

It is possible that the statistically insignificant effect of victimization on support for a grazing ban policy in the regression models reported in table 3 is because I have conflated the various perpetrators of violence into a single category. Respondents' attitudes towards a grazing ban policy might vary depending on whom the perpetrator of violence is. I thus disaggregate the victimization variable and consider the three main perpetrators of violence: Herders, religious extremists, and bandits/robbers (see table 1). I begin by estimating models where I focus specifically on herders. Table 4 reports the results. The variable "Victimization (herders)" takes the value of 1 if a respondent has been victimized by herders and 0 otherwise. The reference category

here includes people who have not been victimized plus those who have been victimized by other perpetrators besides herders.

In model 1 – the baseline model – victimization by herders was significant at the five percent level and carried a positive sign. This suggests that being victimized by herders increases the likelihood of supporting a grazing ban policy. In model 2 where I added the control variables, the AIC statistic declined from 2,490 to 2,472, which indicates that model 2 has a better fit than its predecessor. Victimization by herders retained its positive sign and its significance level increased to one percent. In model 3 where I added the LGA and ethnic group fixed effects, victimization by herders retained its positive sign, but its significance level dropped to five percent. Keeping all covariates at their mean levels, the analysis showed that being victimized by herders increases the likelihood of respondents choosing the "strongly agree" response category by 11 percent when asked whether a grazing ban policy would reduce farmer-herder conflicts.[10]

Among the control variables, only religious affiliation and age were statistically significant. Their respective positive and negative signs are consistent with earlier results reported in table 3. I conducted a robustness check where I treated all the variables as continuous and re-estimated the model using OLS regression. As shown in model 4, neither the sign nor significance level of victimization by herders changed. I conducted another robustness check where I measured the dependent variable binarily and used logit and LPM regressions as alternative estimation techniques. As shown in models 5 and 6, victimization by herders remained statistically significant and retained its positive sign.

To check for heterogeneous effects based on religious affiliation, I estimated models 7 and 8 using the respective Muslim and Christian subsamples of respondents. As shown in model 7, victimization by herders had no statistically significant effect on support for a grazing ban policy among Muslims. Among Christians however, it did. As shown in model 8, victimization by herders, which was significant at the one percent level, had a positive effect on support for a grazing ban

[10] Table A2 in the appendix reports the marginal effects at the mean for model 3.

policy. Keeping all covariates at their mean levels, the analysis showed that among Christians, being victimized by herders increases the likelihood of choosing the "strongly agree" response category by 26 percent when asked whether they think a grazing ban policy would reduce the incidence of farmer-herder conflicts.[11] Worth emphasizing is that the reference category here is Christians who have not been victimized plus Christians who have been victimized by other perpetrators besides herders. The positive effect among Christians might be because they are overrepresented among the victims of attacks perpetrated by nomadic herders. It is imperative to highlight that Christians respond differently to exposure to pastoral conflict and victimization (i.e., the concrete experience of violence) by herders: While exposure to pastoral conflict reduces the likelihood of Christians supporting a grazing ban policy, victimization by herders has the opposite effect. This is likely because victimization and conflict exposure measure different things. Exposure to pastoral conflict does not necessarily imply victimization. It is possible for people to live in a conflict zone and develop coping strategies that enable them to carry on with their "normal" lives despite the ongoing conflict. It is possible that Christians who have been victimized by herders become more desperate to see some action on the part of the government geared towards resolving the conflict, even if this involves the adoption of a grazing ban policy. Given the statistical insignificance of victimization by herders on support for a grazing ban policy among Muslims (i.e., model 7), it is likely that the positive effect found in models 1 to 6 which was driven by the inclusion of the Christian subsample of respondents in the regressions.

Although this study focuses primarily on victimization perpetrated by herders, I also check for the effect of victimization perpetrated by religious extremists and bandits/robbers on support for a grazing ban policy. Table 5 reports the regression results. Models 1 to 3 focus on victimization by religious extremists. As shown in model 1, which was estimated using the full sample of respondents, victimization by religious extremists had no statistically significant effect on support for a grazing ban policy. In models 2 and 3 which I estimated using the Muslim and Christian

[11] Table A3 in the appendix reports the marginal effects at the mean for model 8.

subsamples of respondents respectively, victimization by religious extremists remained statistically insignificant.

Table 5: Effect of victimization by extremists and bandits on support for a grazing ban policy

Support grazing ban$^{\phi}$	**Religious extremists**			**Bandits/Robbers**		
	(1) (All)	**(2) (Muslim)**	**(3) (Xtian)**	**(4) (All)**	**(5) (Muslim)**	**(6) (Xtian)**
Victimization	-0.249	0.408	-0.49	-0.031	-0.84**	0.523**
	(0.203)	(0.374)	(0.301)	(0.336)	(0.414)	(0.261)
Religious affiliation	0.676**			0.691**		
	(0.298)			(0.297)		
Age	-0.009*	-0.012	-0.005	-0.009*	-0.012	-0.003
	(0.005)	(0.008)	(0.007)	(0.005)	(0.008)	(0.008)
Gender	0.005	0.149	-0.184	0.006	0.162	-0.144
	(0.136)	(0.168)	(0.161)	(0.133)	(0.17)	(0.167)
Marital status	0.071	-0.315	0.232	0.063	-0.32	0.198
	(0.167)	(0.236)	(0.241)	(0.169)	(0.248)	(0.235)
Pastoral conflict	-0.025	0.047***	-0.039***	-0.026	0.042***	-0.042***
	(0.017)	(0.007)	(0.01)	(0.017)	(0.008)	(0.009)
Estimation method	Ologit	Ologit	Ologit	Ologit	Ologit	Ologit
LGA FE	Yes	Yes	Yes	Yes	Yes	Yes
Ethnic group FE	Yes	No	No	Yes	No	No
Observations	972	497	475	972	497	475
Pseudo R^2	0.045	0.054	0.039	0.045	0.056	0.038
Log pseudolikelihood	-1186.695	-562.088	-613.45	-1187.16	-560.806	-613.74
AIC statistic	2411.39	1162.176	1242.899	2412.319	1159.612	1243.48

Note: *ϕ is the dependent variable, clustered robust standard errors are in parenthesis. All models are estimated using ordered logit (Ologit) regression, *** p<0.01, ** p<0.05, * p<0.10. The intercepts of the Ologit models have not been reported.*

Models 4 to 6 focus on victimization by bandits/robbers. As shown in model 4 which was estimated using the full sample, victimization by bandits had no statistically significant effect on support for a grazing ban policy. I subsequently estimated models 5 and 6 using the Muslim and Christian subsample of respondents respectively. As shown in model 5, victimization by bandits/robbers was significant at the five percent level and carried a negative sign. This suggests that among Muslims, victimization by bandits/robbers reduces the likelihood of supporting a grazing ban policy. Among Christians however, as shown in model 6, victimization by bandits/robbers rather increases the likelihood of supporting a grazing ban policy.

Why does victimization by bandits/robbers have opposite effects on support for a grazing ban policy among Muslims and Muslims? To answer this question, it is necessary to first identify whom the bandits/robbers are, and the areas where they operate. During the last five years, Nigeria's Northwest geopolitical zone (which includes the state of Kaduna) has witnessed a high rate of banditry and ransom-driven abductions. Members of the Fulani ethnic group are

overrepresented among the bandit groups operating in the region. Ejiofor (2021, p. 88) observed that "the term 'armed bandit' in the northwest zone is, in local parlance, shorthand for nomadic pastoralists of Fulani extraction who have taken to criminality in the absence of economic opportunities beyond cattle herding." Armed banditry claimed more lives than the radical Islamist group, *Boko Haram,* in 2019. This prompted the Nigerian government to proscribe the bandit groups as terrorist organizations (Ochojila 2022; Mac-Leva & Ibrahim 2019). Given this premise, the lower support for a grazing ban policy among Muslims who have been victimized by bandits might be because they think the policy would threaten the livelihood of nomadic herders, heighten grievances among them, and thus push more of them into banditry as a means of survival. The support for a grazing ban policy among Christians who have been victimized by bandits/robbers might be because they make no distinction between bandits and nomadic herders, and thus think that the same policy tool – a grazing ban – would end violence perpetrated by both bandits/robbers and herders. While these explanations are plausible, I am unable to test them using the TRANSMIT dataset because the survey instrument did not have a question focusing specifically on the association between banditry and nomadic herding.

4.0. Conclusion

This study examined the effect of victimization – i.e., the concrete experience of violence – on support for a policy banning the open grazing of livestock in the state of Kaduna, which is in Northern Nigeria. Kaduna is a suitable case study for investigating this relationship because despite having the third highest incidence of farmer-herder conflicts out of Nigeria's 36 states, such a law has not been passed by the state government. The regression results showed that general victimization (i.e., irrespective of the perpetrator) had no effect on support for a grazing ban policy. However, when I disaggregated the victimization variable based on whom the perpetrators of violence were, I found that victimization by herders had a positive effect on support for a grazing ban policy. The positive effect was particularly strong among Christians. This might be because

majority of those who have been victimized by herders are Christians. Among Muslims however, victimization by herders had no statistically significant effect on support for a grazing ban policy.

The regression results also showed that Muslims are generally more supportive of a grazing ban policy than Christians. This might be because the population in Kaduna tend to conflate members of the Fulani ethnic group with the larger Muslim population. The population (especially Christians) also associate farmer-herder conflicts with religion. This leads to the attribution of blame to Muslims for the attacks, which in turn makes them more eager to see an end to the conflict. Another finding worth highlighting is that among Christians, exposure to pastoral conflicts and victimization (i.e., the concrete experience of violence) by herders have different effects on support for a grazing ban policy: While victimization by herders increased the likelihood of supporting a grazing ban policy, exposure to pastoral conflict rather reduced the likelihood of supporting such a policy. This discrepancy is likely because the two variables do not measure the same thing: Exposure to pastoral conflict does not necessarily imply victimization.

Taken together, my results suggest that there is a religious dimension to support for a grazing ban policy in Kaduna. Although most studies on farmer-herder conflicts in Nigeria tend to focus on how the adverse effects of climate change like droughts and rising temperatures fuel the conflict, my results show that it is also important to take the cultural dimension of the conflict into account. I acknowledge that the topic of religion, especially within the context of Nigeria, is sensitive. However, I also think that its neglect in the analysis of the conditions under which farmer-herder conflicts occur prevents a holistic understanding of the problem. A limitation of this study is the cross-sectional nature of the dataset, which hinders me from examining the changes in support for a grazing ban policy over time. Future studies could investigate the relevant relationships using panel data.

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Appendix

Table A1: Marginal effects at the mean for model 4 in table 3

Support grazing ban$^{\phi}$	Strongly agree (0)	Somewhat agree (1)	Neither agree nor disagree (2)	Somewhat disagree (3)	Strongly disagree (4)
Victimization (all)	-0.017	-0.006	-0.002	-0.006	0.031
	(0.028)	(0.009)	(0.003)	(0.01)	(0.051)
Religious affiliation	-0.099**	-0.032**	-0.014**	-0.036**	0.178**
	(0.041)	(0.016)	(0.004)	(0.016)	(0.073)
Age	0.001*	0.00	0.00*	0.00*	-0.002*
	(0.001)	(0.00)	(0.00)	(0.00)	(0.001)
Gender	-0.002	-0.001	-0.00	-0.001	0.004
	(0.018)	(0.006)	(0.002)	(0.007)	(0.033)
Marital status	-0.008	-0.003	-0.001	-0.003	0.014
	(0.023)	(0.008)	(0.002)	(0.009)	(0.041)
Pastoral conflict	0.004	0.001	0.00	0.001	-0.007
	(0.002)	(0.001)	(0.00)	(0.001)	(0.004)

Note: *Standard errors are in parentheses, ϕ is the dependent variable, *** p<0.01, ** p<0.05, * p<0.10. The numbers below the response categories denote the ordinal values assigned to each of them.*

Table A2: Marginal effects at the mean for model 3 in table 4

Support grazing ban$^{\phi}$	Strongly agree (0)	Somewhat agree (1)	Neither agree nor disagree (2)	Somewhat disagree (3)	Strongly disagree (4)
Victimization (herders)	-0.107**	-0.035**	-0.011**	-0.04**	0.194**
	(0.045)	(0.015)	(0.005)	(0.015)	(0.076)
Religious affiliation	-0.098**	-0.032**	-0.011**	-0.037**	0.178**
	(0.042)	(0.016)	(0.004)	(0.016)	(0.074)
Age	0.001**	0.00	0.00*	0.001*	-0.003*
	(0.001)	(0.00)	(0.00)	(0.00)	(0.001)
Gender	-0.002	-0.001	-0.00	-0.001	0.003
	(0.018)	(0.006)	(0.002)	(0.007)	(0.033)
Marital status	-0.009	-0.003	-0.001	-0.003	0.017
	(0.023)	(0.008)	(0.002)	(0.009)	(0.042)
Pastoral conflict	0.004	0.001	0.00	0.001	-0.007
	(0.002)	(0.001)	(0.00)	(0.001)	(0.004)

Note: *Standard errors are in parentheses, ϕ is the dependent variable, *** p<0.01, ** p<0.05, * p<0.10. The numbers below the response categories denote the ordinal values assigned to each of them.*

Table A3: Marginal effects at the mean for model 8 in table 4

Support grazing ban$^{\phi}$	Strongly agree (0)	Somewhat agree (1)	Neither agree nor disagree (2)	Somewhat disagree (3)	Strongly disagree (4)
Victimization (herders)	-0.178***	-0.048**	-0.011***	-0.026***	0.262***
	(0.056)	(0.023)	(0.004)	(0.008)	(0.076)
Age	0.001	0.00	0.00	0.00	-0.002
	(0.001)	(0.00)	(0.00)	(0.00)	(0.002)
Gender	0.03	0.008	0.002	0.004	-0.044
	(0.027)	(0.006)	(0.002)	(0.004)	(0.038)
Marital status	-0.041	-0.011	-0.002	-0.006	0.06
	(0.041)	(0.01)	(0.002)	(0.006)	(0.059)
Pastoral conflict	0.008***	0.002*	0.00***	0.001***	-0.011***
	(0.001)	(0.001)	(0.00)	(0.00)	(0.002)

Note: *Standard errors are in parentheses, ϕ is the dependent variable, *** p<0.01, ** p<0.05, * p<0.10. The numbers below the response categories denote the ordinal values assigned to each of them.*