[HIDDEN CONFLICT IN NIGERIA: THE ESCALATION OF THE HERDER-FARMER CONFLICT IN NIGERIA]

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ABBREVIATIONS

ACLED: The Armed Conflict Location & Event Data Project and UCDP GED

CAN: Christian Association of Nigerian –

DST: dynamical system theory

ECOWAS: Economic Community of West African States.

HURIWA: Human Right Writers Association of Nigeria

OYC: Ohaneze Ndigbo Youth Council.

MAFO: The movement against Fulani occupation

MACBAN: Miyetti Allah cattle breeding association

MASSOB: Movement for the Actualisation of the Sovereign State of Biafra

RUGA: Rural Grazing Area

ABSTRACT

The research explores the escalation of the herder-farmer conflict in Nigeria to identify the significant patterns of escalation. Relying on a mixed-method analysis of secondary data and aligning with the analytical anchorage of dynamic systems theory, the research argues that the although Benue and Enugu observe the same herder-farmer the patterns of conflict escalation is neither similar, linear or recurrent. This research submits ethnoreligious antagonism, lawlessness, and exclusionary politics as reasons why the conflict escalated into widespread violence. Adding that each of these elements self-reinforces and influence each other to sustain a coordinated state of violence or maintain peace. It makes a case for pragmatic policies that captures the history and political, economic, and social interaction of states and local government.

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CHAPTER 1

BACKGROUND TO THE STUDY

It is no secret that Nigeria is plagued with insecurity; the most popular are the Boko Haram insurgency and Niger Delta militancy. While a fair amount is known about this internal security, there are other security threats in Nigeria with a direct significant negative impact on Nigerians' socio-cultural, political and financial lives. Of these threats, the nascent herder-farmer conflict is a case in point—the clash between farmers and pastoral livestock herders essentially developed in the pre-1990s (Davidheiser and Luna 2008). Scholars and government officials neglected destructive trends in the conflict development because of how low intensity and insignificant/ local the conflict actors are. It should be pointed that despite the frequent conflicts which now characterise farmers-herders relations in Nigeria, both farmers and herder's production systems have previously mutually benefited from each other's interaction. However, high-level disagreement and competition over grazing land, movement space, and water pots exist (Moritz, 2006).

In the mid-2010s, the conflict crystallised and culminated in an explosive eruption resulting in more than 10,000 deaths in the last decade (Foreign Affairs, 2019). The Armed Conflict Location & Event Data Project (ACLED) database (2019) describes the conflict as the 6th most hidden but dangerous conflict in Africa because it produces more fatalities than the Boko haram by 1,949 deaths (International Crisis Group, 2018). The frequency of the attacks has increased over the years. According to the 21st Century Wilberforce Initiative (cited in Okoli and. Ogayi, 2018), between 1997 and 2010, there were 18 attack incidents involving herders and farmers; from 2010 and 2013 death toll was 80 deaths. In 2014 the conflict got notoriety when a sum of 1,229 persons died in Benue, Taraba, Nasarawa, Plateau, Kaduna and Katsina state. In the first four months of 2016, Olaniyan, and Yahaya (2016), accounts for 55 attacks in 14 different states resulting in over a thousand deaths. Therefore, showing that by 2016 the conflict had spread from six to fourteen states. Apart from fatalities, there is an influx of 620,000 people in the north-central states of Benue, Kaduna, Nasarawa and plateau, where the conflict is heated (Kwaja and Ademola-Adelehin, 2018). The economic costs have been grim; Benue, for instance, incurred a financial loss of 400 billion Naira from the property damage (Ortom, 2019), which in turn heightens

inflationary and food pressures and, causing further political instability. The increasing political, economic and humanitarian costs make understanding why and how herder-farmer conflict escalated into widespread violence urgent.

The issue of herder-farmer conflict has assumed a phenomenon of international interest. On an Academic level, the conflict was discussed in a historical and causal approach (Iro 1994). Interest in the conflict has been to determine why the friction began (Adekunle and Adisa 2010; Odoh and Chigozie 2012; Audu 2013, Olayoku, 2014). Scholarship on the conflict has focused on 4 clusters- structural violence (Benjaminsen and Ba, 2009; van Leeuwen and van der Haar, 2016), climate change (Blench and Dendo, 2010; Al Chukwuma and Atelhe, 2004; Odoh and Chigozie 2012), agro-capitalism (Eke, 2020 and Ajala, 2020) and psychological and cultural conflict drivers (Mortiz, 2008; Conroy 2014). These debates highlight causal milieu but failed to explain why the interactions between the groups intensified into violence after its onset (what factors sustained the conflict after its commencement); neither does literature provide the significant point of the conflict. The present study aims to fill this gap by identifying critical escalation paths which are likely to occur to challenge the conception of herder-farmer conflict as a uniform and linear contest between farmers and herders for resources. Selecting the herder-farmer Conflict in Nigeria is also based on the observations that previous research on escalation is predominately on international conflict. Still, escalation regarding a resource conflict is yet to be dealt with (with few exemptions highlighted in chapter 2). Before outlining the study's organisation, we shall state the basis/rationale for the study, research questions, and analysis method, then explain why the study is significant.

RATIONALE TO THE STUDY

While the herder-farmer conflict is widely written about, many authors do not explain why the conflict escalated; if they do, they identify the significant escalation paths, let alone treat the topic empirically. We also adopt a Markov chains approach to the study for each stage of escalation. Markov chain is a forecasting tool that calculates a particular stage of conflict escalation, transforming to the following stages. The Markov approach to conflict escalation is beneficial for this study as it directly identities the significant patterns of escalation.

We view the conflict from a dynamical system theory (DST) position, arguing that the factors that organise herders and farmers into more conflict are mutually

reinforcing and self-perpetuating, and therefore resistant to constructive change. Despite these factors supporting the produce different intensities and patterns of escalation, DST is appropriate because it acknowledges the diversity of factors relevant to the farmer-herder conflict in Nigeria without sacrificing its complexity over time.

RESEARCH QUESTIONS AND METHODOLOGY

A mixed-methods approach guides the research strategy described below. This study combines qualitative and quantitative data to achieve the research objective. The research questions are as follows:

1. *How and why did the farmer-herder Conflict in Nigeria escalate into widespread violence?*

How the farmer-herder Conflict in Nigeria escalated is a question about the sequential development of events. Historical background from articles, books and newspapers, journal articles, unpublished theses, and internet sources are utilised to answer the question. A sequential study of events exposes problematic behaviours causing escalation and the possibility of alternative choices that actors have. To synthesise why conflict escalated, a combination of conflict spiral and structural change model from conflict theory is adopted to identify critical factors that led to changes in the actor's psychology and actor's interaction between and among each other.

2. *What are the significant patterns of escalation in the conflict?*

Identifying the patterns of escalation is crucial for conflict termination and further prevention of the spread of violence. For that reason, the research purposively selects 2 case studies (Benue and Enugu). This is to identify significant escalation paths and test Mortiz's (2010) postulation, herder-farmer conflict is non-linear and uniform. A qualitative content analysis of each case study is conducted to identify the stages of escalation using NVIVO software. Regarding content analysis, the researcher focused on secondary sources of newspaper articles from 2015-2020. Drawing on Yasmi, Schanz, and Salim's (2006) thesis that highlights the significant patterns of escalation in forestry conflict, the results from NVIVO is collected and coded into Phyton to perform a Markov chains analysis. The analysis will then assign numerical code for each stage of conflict manifestation (such as debate, protest, court, access restriction, anxiety, lobby and persuasion). I will then arrange these stages sequentially to reflect escalation development and use the

Markov Chain approach to identify significant patterns of escalation and the probabilities of each stage of conflict escalation to transform to the next stages. The Markov chain approach will be taken using the phyton.

3. *How does the factors of escalation influence the de-escalation process of these conflict?*

The question of whether escalation factors influence the de-escalation process of conflict came from our observation that the escalation from 2016 is not progressive but somewhat sporadic and inconsistent (see figure 1)
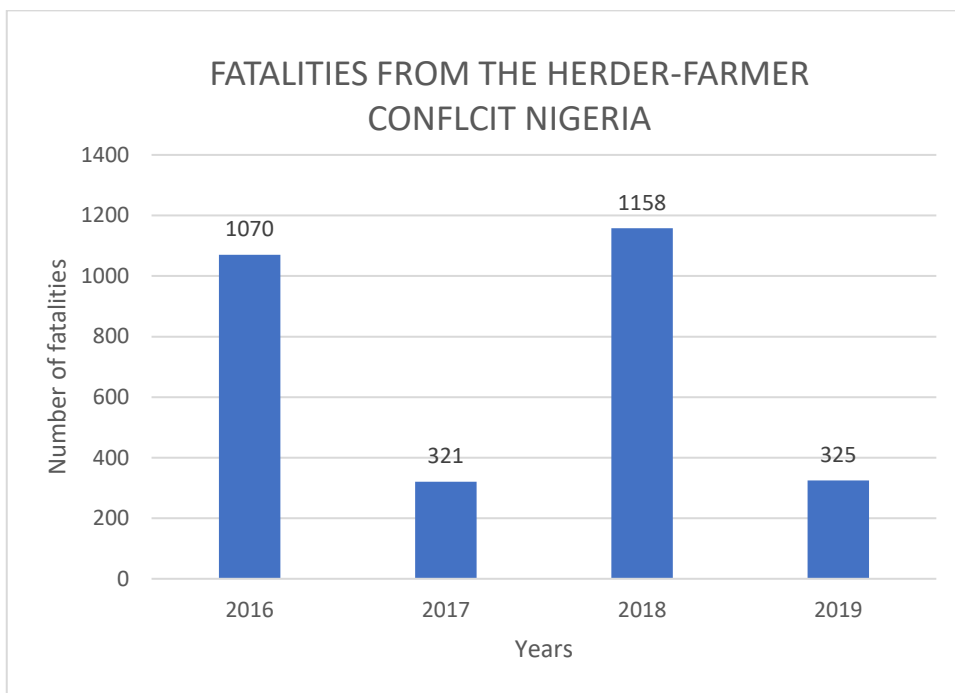
Source: Institute for Economics and Peace, 2017, 2018, 2019, 2020

The chat shows the number of fatalities from the herder-farmer conflict from 2016 to 2019. What can be seen in this chart is an up-down effect on fatality rates; A drastic increase in fatality rates in 2016 at 1070 that is followed by a sudden decrease in 2017 at 321 and vis- versa. According to Mortiz (2010), the sequence of escalation may or may not resolve to de-escalation. Hence, the study employed a dynamic systems approach to mapping out relationships between each stage of escalation over time. To quantify whether temporal changes in the actor's tactics, perceptions, capacity, or rhetoric impact de-escalation (Vallacher, Coleman, and Nowak, 2011; Bui-Wrzosinska, Nowak, Vallacher, 2006).

RESEARCH HYPOTHESIS

The propositions guiding this research are

1. The escalation of the herder-conflict is not linear nor similar in different states in Nigeria

SIGNIFICANCE OF STUDY

This study expands the range of empirical inquiry on conflict escalation related to resource conflict for a better theoretical understanding of escalation and de-escalation patterns in the herder-farmer Conflict in African society. It also makes a significant methodological contribution using mixed methods that address quantitative gaps in conflict escalation studies related to resource conflict. Future studies can apply these models and approaches to any country to establish trends or patterns for early-earning predictions; to prevent herder-farmer conflict in other countries like Ghana, Mali, Benin, Tanzania, CAR, and Somalia from escalating.

ORGANISATION OF STUDY

This research is broken down into six chapters. The first chapter introduces the study and highlights the study's rationale, research questions, methodology, and significance.

The theoretical and conceptual frameworks employed to solve the research question are developed in chapters two and three. Chapter two reviews literature on resource conflict and conflict escalation by identifying the gaps in the literature that the research aims to address. It also adopts the dynamic system theory as a theoretical framework to explain the study objective—chapter three gives background knowledge to the herder-farmers conflict in Nigeria and also relevant changes over time. This chapter concludes with reviewing the literature on the drivers of conflicts to address the imbalances in literature.

Chapter four outlines the methodology guiding this exploratory sequential mixed method design and summarises the data analysis's scope, justification, and limitations. Chapter five presents the empirical findings by first showing the summative content analysis results of Benue and Enugu. It proceeds to explain why the conflict escalated, de-escalated and the concluding results from Markov chains will be presented. Chapter six states the dissertation's conclusion and suggestions for further studies. The research closes in chapter seven with references.

CHAPTER 2

HERDERS, FARMERS, AND CONFLICT

Blench (1996) draws attention to the prevalence of resource conflict in almost every environment. In the same vein, Hellstrom (2001) maintains, there is no particular setting where natural resources are present that is conflict-free. Brosius, Tsing, and Zerner (2005) adding that the rapid socio-political changes (such as urbanisation, globalisation) and biological changes (such as population growth and climate change) brought enormous competition over scarce resources to the front lines of conflict studies. Glasl (1999) emphasised the destructive tendency of resource conflict expanding and escalating in scope from local to international competition, increasing the need to conceptualise resource conflict and thoroughly understand conflict escalation constructively. Adding that, reviewing escalation allows for delineating the "point of no return" to manage conflict constructively. Therefore, this section will review the literature on resource conflict and conflict escalation and adopt the dynamic system theory as a theoretical framework to explain the study objective.

RESOURCE CONFLICT

Environmentalists have identified resource conflict as a causative result of environmental shortage (Bachler 1999; Homer Dixon 1999). The effects of climate change (ecological degradation, migration) lead to environmental resource shrinkage, creating an atmosphere of environmental scarcity that increases environmental resources' value that leads to violent competition. Hence, making conflict an inevitable means of survival (Al Chukwuma & Atelhe, 2004; Odoh and Chigozie, 2012). The literature by environmentalist security expanded its argument that resource scarcity plays a role in spreading sub-national and global conflicts in Africa. They cited the Horn of Africa example, where drought and resource shortages have caused insecurity (Bennett, 1991).

Another example was the Border conflicts between Senegal and Mauritania in 1989, cited as induced by resource competition among rural producers in the Senegal River Valley (Homer-Dixon, 1994). However, Gleditsch (1998) and Hartmann (2001) challenge these examples for cherry-picking cases where all elements of environmental theory (resource scarcity) were present. Madu and Nwankwo (2020) also observed that some places of resource abundance have conflict, and places of resource scarcity are with no conflict, further refuting the arguments of environmental

literature that resource conflict results from resource depletion. Environmentalists' views indicate less concern with the interconnectivity between the environment, politics, and economy but in identifying critical driving factors to conflict. For them, resource-related conflict escalates into a violent engagement when resource scarcity is combined with resource capture and ecological marginalisation (unequal distribution).

With a similar aim to environmental literature of supply/demand view to resource conflict, common property theorist Turner (1999) adds that in a world of ecological scarcity and increasing demand, open competition over resources only occurs when property laws are ill-defined or ill-governed. Simply put, resource conflict is contestation over the authority and legitimacy of resources (van Leeuwen and van der Haar 2016). This definition suggests resource conflict as a sign of institutional failure, which means that the contestation for resources is socially-produced and, if not rectified, would escalate from latent conflict to manifest acts of violence. Turner (2004) and Moritz (2006) disapproved of institutional failures as the causal effect of resource conflicts, arguing that the conflicts often have a political basis linked to pastoral marginalisation (Benjaminsen and Ba 2009, 2019). For instance, in Taraba and Benue State of Nigeria, farmers claim that when pastoralists have the upper hand in casualties, the government delays intervening. Still, when farmers lead the killings, the government interferes with 24hours (Vanguard, 2017). These assertions draw attention to concerns of national identity, subjectivity, and belonging in which pastoralists, particularly nomadic Fulani herders, are perceived as outsiders or intruders, resulting in discrimination and marginalisation of pastoralists in local communities (Nwankwo, 2019)

In line with Nwankwo's (2019) views, political ecologists like Peluso and Watts (2001) and Turner (2004) expose environmentalist and common property theorists' conceptualisation of the complex empirical realities of opposing parties as primitive and simplistic. Presenting disputes over resources as "a theatre where conflicts or claims over land, policies, property, security, and recognition take place" (Peluso and Watts 2001, 25). In this perspective, a resource conflict is created in environments where stakeholders have social differences, political ambitions and economic benefits, and not ecological deprivation. Peluso and Watts's definition highlights the struggle between herdsmen and farmers for access and control over resources in the historical, political, and cultural contexts, particularly the cultural aspect of competition between conflicting parties. Breusers and Van Rheenen (1998)

posited that we cannot ignore the ethnicities of farmers and herders as ancient or primordial in a resource conflict. The dimension of farmer-herder conflicts must be studied in the context of the larger political economy, citing that some ethnics express resource conflicts as xenophobia, which can be exploited by national politicians (Bassett 1993, 147).

Subsequently, the farmer-herder conflicts can have more significant relations with other tensions and conflicts. Thus, the competition culture induced by the scarcity that environmentalists refer to can be motivated by mutual distrust or disdain of the different production systems rooted in historical events that shaped relations between the conflicting parties (Arditi 2003). Additionally, Leach, Mearns, & Scoones (1999) refer to conflict as being multifacetedly shaped by shifts in the processing of particular historical contexts and various non-material spheres attached to changes.

After this, Turner (2004) then cited the herder-farmer conflict as less focused on the lack of resources and more on the interplay between moral and material motivations to retain access and power to the production system. Thus, the complex political, economic existence of resources reveals broader ethnic tensions between and within social groups. In investigating this complexity, Moritz (2006) noted that conflict had intensified in Nigeria, where herders and farmers had coexisted peacefully in the scarcity. While these conflicts between farmers and herders manifest as a struggle for natural resources, their underlying reasons are not mainly about resource scarcity, even though they are expressed as resource-related conflict. Findings from literature and Sahelian herders and farmers' testimonies suggest that these conflict's genesis and development are different and more complex than environmentalist and common property theorists postulated. However, recent literature has clutched to environmental literature and common property theory to explain why farmer-herders conflict in Nigeria began, identifying the conflict's key factors and implications (Audu 2013, Olayoku 2014), failing to explore how interactions between the groups evolved after the onset into violence. Despite the attempts of political ecologists at presenting a dynamic interpretation of resource conflict related to the farmer-herders conflict in Nigeria, political ecologists' moral concern is the disputants' motivation with a focus on linking historical political processes to resource scarcity, marginalisation, and exclusion of certain groups. Political ecologists, however, prescribe vague descriptions to actors, their motives, and actions (Turner 2004). Meaning their interpretation of conflict in semi-arid areas and multi-ethnic areas can easily be interpreted as a

resource conflict. According to Yasmi (2007), the failure to precisely define resource conflict is linked to the vague definition of the concept of conflict as incompatibility or disparities in interests, aims, power, beliefs, or perceptions (Coser 1956; Bartos and Wehr 2002); therefore, making distinguishing resource conflict and its antecedent conditions difficult (Fink 1968; Dadrian 1971; Glasl 1999). Environment framing theorists (Lewicki, Gray, and Elliot. 2003) attempted to reconceptualise conflict, arguing that conflict results from a constructed interpretation of the world around us. Schmidt and Kochan (1972) established that incompatible goals, interests, or views are shared and do not represent conflict situations but people's interpretation or classification of change in broader spheres over time. For instance, the differences in perception over the access and control of natural resources constitute the source of resource conflict. Framing scholars use the identity frame and characterisation frame to interpret resource conflict. The "identity frame" sees conflict as occurring due to people's perception that their identities are threatened. Simultaneously, the characterisation frame results from attributing blame based on previous experiences and interactions with various parties. Based on this research, conflict is not devoid of subjective beliefs. Although this model allows for dynamic and complex reflection of the resource conflict, it overlooks the possibility of over-framing and over-representing identity or position as too violent or too peaceful, which could escalate the perception of differences among conflicting parties.

CONFLICT ESCALATION

The literature on conflict escalation was first constructed based on inter-individual conflicts within organisational settings such as schools, factories, and government organisations and then moved to the social sciences. From the sociologists who study the conflict between and among social groups; to a psychological study of interpersonal and intrapersonal behaviour; to peace researchers in international relations analysis of armed conflict to explain why and how conflicts such as international conflicts, civil wars escalate (Byrne and Senehi, 2009). However, this has not been the case for resource conflict. More recently, Raleigh and Choi (2017) highlight an overall absence of literature on conflict escalation. Instead, there is an extended focus on uncovering the source and causes of conflict from its onset and a limited study on its termination or resolution. But the absence of literature on how conflicts evolve after the start, the changes in volatility and types of violence at different stages of escalation are ignored. Ayling and Kelly (1997) highlighted that in

conflict, specifically resource conflict, scholars and government officials tend to neglect or ignore indicators and patterns of escalation because of how local and sometimes low intensity or insignificant the actors of resources conflict are. As a result, conflict worsens and becomes violent. The few research on the escalation of resource conflict is from Mortiz (2006) with his Processual analysis of why the herder-farmer conflict escalates in Southwest Burkina Faso and Northwest Cameroon. Adding to Mortiz (2006), Yasmi, Schanz, and Salim (2006) move further from the descriptive analysis of Mortiz to quantitatively analyse the stages and sequence of conflict escalation in forestry conflicts.

Notwithstanding Ayling and Kelly's (1997) observation, conflict escalation in resource conflict is the "step-by-step transformation of the conflict from low intensity to direct violent engagement" (Yasmi and Heiner, Schanz 2007: 131). Put differently, escalation is a process of increased intensity. The general assumption of escalation theorists (Richardson 1960; Collins, 2011; Smyth, 2012; Bösch, 2017) is that open aggression is the climax of the conflict life-cycle. At the initial stage, each interaction is characterised by conflict potentials that the parties may or may not be aware of, and as interaction deepens, it may show conflictful characters. In other words, each encounter leaves an imprint that affects the subsequent encounters. Nonetheless, Coleman (1957) and Aubert (1963) note that conflicts do not just turn violent and that the same conflict in different locations passes through different stages to open aggression. Citing that parties may never perceive a possible conflict as a conflict or perceived, the conflict may be resolved before hostilities break out.

In the same vein, parties can have irrational reasons to escalate the conflict, but escalation is not constantly an outcome of conflict (Smyth, 2012). The escalation of an incident is, therefore, neither linear nor similar. The actions and responses of stakeholders play an important part in the conflict's escalation and the general transformation model to widespread violence (Mortiz, 201). These findings suggest that conflict can be involuntary, self-motivated, and subject to change in frequency and intensity, making escalation a dynamic process of increased intensity. According to Kriesberg (1998), the escalation indicators are increases in the severity of force, and increases in the number of participants within a conflict. Expanding on Kriesberg's indicators of escalation, Yasmi (2007) included the increase in the magnitude of immediate issues, the tactics of engagements, the perception of what's at stake, and the increasingly hostile attitude towards the other side. The scholarship of Pondy (1967),

Pruitt and Rubin (1994), and Glasl (1999) moves more further from identifying the indicators of escalation to adopting several models of escalation that shows the stages of escalation and a general understanding of conflict escalation in resource conflict as a sequence of dynamic processes within a time.

To properly understand the escalation models, it is important to note Galtung's (1996) conceptualisation of conflict. For him, every conflict is conceptualised by contradiction, attitude, and behaviour. The incompatibility of interests or intentions perceived by the actor is contradiction. Behaviour is the collaboration or disruptive attack actions of the parties. Attitudes are the beliefs and misunderstandings of the groups and their critics about themselves. In the events of escalation, all three elements have to be present. Having established conflicts as a dynamic process, the three elements of contradictions, attitudes, and behaviours continuously change positively or negatively, influencing one another and the conflict's outcome (Ramsbotham, Woodhouse, & Miall, 2011). The same is true of the processes of de-escalation, which, according to the hourglass conflict-resolution model of Ramsbotham and Woodhouse (1999), reduces the political space that characterises conflict escalation and increasing the political space that represents conflict de-escalation. The actions of conflicting parties and third parties produce unexpected setbacks and breakthroughs in one stage that offsets relapses at other stages, changing the conflict's dynamics with any advances of resolution made, reinforcing the dynamism of conflict.

Pondy (1967:300) distinguishes five major stages of escalation "(1) latent conflict (conditions), (2) perceived conflict (cognition), (3) felt conflict (affect), (4) manifest conflict (behaviour), and (5) conflict aftermath (conditions)". Pondy explains the stages of escalation using the role model (latent conflict), semantic model (perceived conflict), tension model (felt conflict). Unfortunately, Pondy does not explain the "manifest conflict" stage using any model or with behavioural norms to describe the conflicting parties' behaviours at and among each other. Hence, it is difficult to discern what happens at that stage.

Pruitt and Kim (2004:89) offer the "structural change model" as another description for escalation stages using the parties' tactical and strategic motivation. Escalation is described as a process in which conflict: "(1) shifts from small to large (increased value of an investment in the conflict); (2) shifts from light to heavy tactics (for instance from debate to open aggression); (3) shifts from specific to general (like from crop damage to ethnic conflict); (4) shifts from few to many (increased

involvement in the conflict); and (5) shifts in goals from doing well to winning or hurting the other party (from wanting a peaceful resolution to killing all opponents)" (Moritz 2010, 141). For Pruitt and Kim (2004), as actors lose control of their resources and power/flexibility towards their opponent, they need to defend their position, and resources violently. Ultimately, as "issues proliferate, parties become increasingly committed to the struggle, specific issues give way to general ones, the desire to succeed turns into a desire to win, which turns into a desire to hurt others. Positive feelings give way to negative feelings, and both sides grow by recruiting formerly neutral individuals and groups." (Pruitt and Kim, 2004: 99–100). The views expressed here indicate escalation as a change in intensification across time and a change in intensification degree.

However, Glasl (1997) provided a more detailed description of escalation stages but still in line with Pruitt and Kim's arguments. Glasl (1997, 1999) propounded a nine-stage model of escalation. Not only did he give descriptions of the stages of escalation like Pruitt and Kim, and Pondy, he offers a threshold to the next stage, In-group/out-group cognition, and attitudes and forms of escalation manifestation for each step. Glasl looks at conflict escalation as a descent into an ever deeper primitive and inhuman form of conflict. If left unresolved, it has a cost on the human, organisation, and economic levels. He describes it as a swamp that slides further down, and counterparties get more stuck in the conflict. The focus is less on the persons involved in conflict and more on the internal logic of conflict relationships that results from the failure of benign approaches to dealing with divergent interests and viewpoints.

GLASL'S NINE ESCALATION MODEL
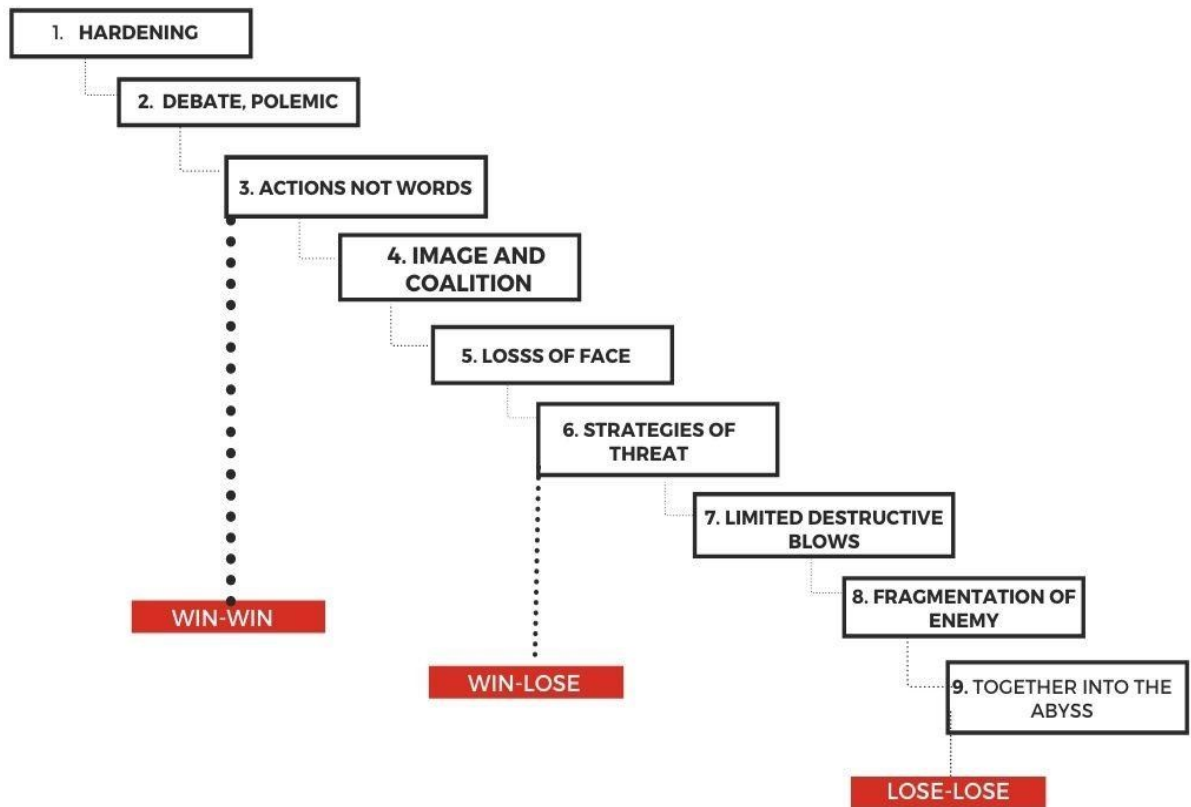
Figure 2: The nine stages of escalation Glasl (1997)

The model is divided into three major phases, with three steps for each phase. There are nine stages throughout the model. The problem is the source of conflict in phase one. The problems, not the parties involved, are at the heart of the disagreements. Both parties attempt to create a situation where they win. The problem is no longer at the heart of the conflict in phase two; instead, the counterparties are. The parties in the conflict feel that the other counterparties are unfair and incompetent. The only solution is at counterparty's expense, creating a win-lose situation. In phase three, the conflict is deepens the parties' only goal is to destroy the other counterparties even if it causes the parties to lose, as long as the counterparties are hurt more than themselves. The parties at this phase are in the form of war. They are prepared to lose the conflict around the issue as long as the counterparties lose more. It is pure self-destruction or lose-lose.

The table below clarifies the escalation stage, the behavioural norms, the in-group/out-group cognition and attitudes, and the next level's threshold.

STAGE	CONFLICT ISSUES	BEHAVIOURAL NORMS	IN-GROUP/OUT GROUP COGNITION AND ATTITUDES	THRESHOLD TO NEXT STAGE
1. Hardening	Hardening of standpoints	Straight argumentation, resistant to resolution	Aware of their inescapable mutual dependency that allows for fairness in interaction, the Formation of perspectives, positions, group boundaries that are visible but salient	Tactical tricks used in argumentation
2. Debates and Polemics	Personalisation of the dispute: The party's ego/self-image is at stake	Open debate, feint in argumentation	Verbal confrontation and rhetorical tricks, Point scoring; winning the argument Need to appear strong and defend self-image	Action without confrontation
3. Actions Not Words	Self-image, prove one's mastery, Blocking other counterparts	Action without confrontation. Reduced Verbal communication, Increased nonverbal communication, Extended social arena	Blocked empathy, In-group sense of shared predicament; pressure for in-group conformity	Denial punishment behaviour aimed at the identity of counterpart
4. Image and Cognition	Counterpart is the problem, Save reputation	Full-blown attacks on stereotypical images or identity; formation of the coalition; deniable punishment behaviour	Attribution of collective characteristics to counterpart, Self-image as only reacting to counterpart	Loss of face

5. Loss of Face	Fundamental value: expose counterpart rehabilitate dignity	Attacks on the public face of the counterpart; Public attack on honour/integrity of parties	Enemy "unmasked" and are perceived as morally corrupt; This conflict is about holy values; between angels and demons; Demands for public apology	Strategic threats
6. Strategies of Threats	Control of counterparts	Self-binding statements Extension of conflict; Possible panic-ruled actions	Party issues threats and actions are only reactive to establish control	Execution of Attacks on counterparts' sanction potential
7. Limited Destructive Blows	Hurt counterparts more than one's group, nothing to gain survival	Attacks at potential sanction Threats. Communication ends	Counterparties are power hunger. Malice and revenge are the dominant motives At this point, it is impossible to conceive of a solution that would include other	An effort to shatter enemy
8. Fragmentation of The Enemy	Annihilate counterpart	Attacks at vital blocks to divide, counterpart attempts to fragment the enemy	Possible attempt to fragment the enemy, Tightening of in-group discipline	Self-preservation abandoned: together into the abyss
9. Together into The Abyss	Total destruction of the enemy at all cost.	Total war with all means Limitless violence	Accept one's destruction if the counterpart is destroyed	-

Table 1: Glasl's nine-stage model (1999)

Moving further, Yasmi (2006) adjusted Glasl's escalation model to reflect eight recurrent patterns of escalation he identified after a comparative analysis of 118 case studies of natural resource conflict. These eight categories of escalation stages are as follows:

Stage	Manifestation dimension
1. Feeling anxiety	Feelings of worry, complaints, rumours, unhappiness, anger, grievance, discontent, disagreement over decision/issues, fear of job lost
2. Debate and critique	Open debate, intense debate, verbal clash, accusation, quarrel, critiques to government policies
3. Lobby and persuasion	Lobbying government, lobbying for compensation, persuading government to acknowledge local rights, lobbying politicians
4. Protest and campaigning	Protest by local people, protest against logging plan, demonstration, mass protest, street rally, convoy of tractors, farmer rally, public rally, logger rally, truck convoy, marching, strike, campaigning and protest by environmental groups, media campaign, letter-writing campaign, protest by religious leaders, protest against a particular plan
5. Access restriction	Squatter invasion, picketing of companies, peaceful take over of the park, blockading logging road, preventing from working on particular areas, imposed restriction on subsistence activities, blockading ports, removal by force, eviction, forced resettlement, displacement, relocation by force, fencing land by big land holders, invasion by landless, closing the road, occupation
6. Court	Court appeal, litigation, regional court case, federal court, lawsuit
7. Intimidation and physical exchange	Threat, death threats, intimidating, threat of boycott, confiscation, machete fight, killing, injury, shooting, ambushing, murdering, attacking, strife, fight, war, violence clashes, bandit attack, damaging district forestry office, assassination, vandalism of park officials' vehicle, burning base camp, arresting, burning opium fields, hiring gunmen, military retaliation, police arrests, putting fire on forest, destroying pipeline, detention, seizing company's equipment, mobilizing soldiers and military hardware, military action, police involvement
8. Nationalization and internationalization	Protest in national and international media (e.g., newspapers, magazine, video), National High Court, State Superior Court, national referenda, bilateral negotiation, influencing national congress, widespread international protest, appeal to International Court of Justice, fight in WTO and NAFTA

Table 2:conflict manifeatation dimension (Yasmi, Schanz, and Salim, 2006 pp. 542)

The "feeling anxiety" is the first stage where emotional reactions are shared within the group to gather intra-group solidarity towards the opposing group. The emotions expressed are; anger, unhappiness, complaints, rumours, and suspicion, which provides a fertile ground for conflict. At the "debate and critique" stage, parties criticise and accuse each other of not taking their priorities into account. At this stage, their livelihood and survival are threatened by their opponent. "Lobby and persuasion" stage stakeholders are hopeful that their stake will be protected, and they present their positions in a structured debate conveying their concerns with argumentation and evidence. The "Protest and campaigning" stage is accompanied by campaigns, rallies, and protests ranging from small protests on-site to big demonstrations. Here opponents are condemned and labelled as irresponsible and non-cooperative. The fifth stage, "Access restriction", is met with limited access to the opponent to secure one's access. Here stakeholders attempt to consolidate power, and they achieve this in various ways, including but not limited to; forceful eviction, resource occupation, invasion of land,

closing or blockading lands or roads. The "Court" stage is reached when parties cannot resolve their issue peacefully. They present their evidence to a court, either a local court or a higher court. As conflicts escalate, "intimidation" is used to destroy their opponent. A range of physical exchange is allowed, such as raping, killing, burning of farms, looting, etc. At the last stage, the conflict reaches a "national or international" level. The conflict becomes nationally or internationally known by the media, and sometimes, it gets international courts ruling to resolve the dispute.

Yasmi et al.'s (2006) model moves from Glasl's behavioural norms to mention each escalation stage's exact action and behavioural manifestation that reflects the realities of resource conflict and even conflict overall. His model makes for easy identification of how a conflict develops from one stage to another because all the manifestation dimensions of his model are direct, observable, and measurable. Hence, making the identification of patterns escalation possible.

Despite the attempts of Yasmi et al. (2006), Glasl (1999) model, and other scholars mentioned above to explain the escalation stage, they fail to detail what stage in the development of conflict is significant to prevent the conflict from reaching a point of total destruction. Therefore, this thesis intends to bridge the gap by empirically identifying significant escalation patterns in Nigeria's farmer-herder conflict. However, the thesis findings are limited to the land conflict in Nigeria but are still an advancement in literature as it concerns resource conflict and natural resource management.

THEORETICAL FRAMEWORK

The theory considered applicable to this study is the dynamical system theory (DST). The escalation of the farmer-herder conflict in Nigeria is influenced by interconnected elements that change over time. Therefore, the dynamical system theory (DST) is appropriate because it acknowledges the diversity of factors relevant to the farmer-herder conflict in Nigeria without sacrificing its complexity over time.

The dynamic system approach to conflict processes is new, but it has roots in various fields of study, including peace and conflict studies, social psychology, and complexity science.The dynamic systems analysis is initially traced back to a mathematician from the 19th century, Henri Poincaré. The method became important in mathematics and physics in the 1960s and 1980s. The system of dynamics in the sciences is how things change under some governing laws over time. Instead of

defining anything as static properties, the pattern they observe shifts over time (Aubin and Dalmedico, 2002). The dynamical structure is used to describe the phenomena over time.

Researchers have recently begun to apply the dynamical systems approach to the study of conflict systems, coining the term "dynamical systems theory." (Bui-Wrzosinska, 2013; Coleman, Bui-Wrzosinska, Vallacher, & Nowak, 2006; Coleman, Vallacher, Nowak, & Bui-Wrzosinska, 2007; Nowak, Vallacher, Bui-Wrzosinska, & Coleman, 2007; Coleman et al., 2010; Vallacher et al., 2013). The dynamic system is characterised as any system whose behaviour depends in some way on its state at a previous point in time at one point in time (Elman et al., 1998 p210). Bui-Wrzosinska, Coleman, and Nowak (2006, 63) further describe a dynamic system as having a collection of interconnected elements (such as values, emotions, and behaviours) that evolve and develop in time. The system's evolution is the direct product of elements that influence each other to attain a coordinated state that characterises the system. A change in each variable relies on factors from other components. Thus, a shift in the degree of trust is affected by factors such as the intentions, behaviours, and values of the counterparty that affect the general pattern of interactions of the disputants or stakeholders (positive or negative). The definitions of dynamic structures are mainly used to conceptualise and analyse complex phenomena related to conflict (such as sentiment, stereotyping, change of attitude, cooperation versus competition in social dilemmas), which the theory calls "intractable conflicts." Intractable conflicts are conflicts that are difficult to settle. Persistence, destructiveness, and aversion to resolution separate intractable from tractable disputes (Kriesberg 2005). High and low cycles of severity are also correlated with intractable disputes. Kriesberg (1999), however, argues that disputes do not occur as intractable, but as relationships gradually become negative, they escalate, creating intractable qualities. Various factors and events cause any conflict's intractability, but mainly issues such as disparities of morality, identity, high-stakes capital, power struggles, and self-determination (Coleman, 2003; Putnam & Peterson, 2003).

Conflicts become intractable in the dynamic systems model of constructive engagement, according to Coleman et al. (2007), as their different elements (thoughts, emotions, behaviours, challenges, norms, symbols, etc.) bind and organise into clear patterns or attractors for destructive interactions. The elements become mutually reinforcing and self-perpetuating, and therefore resistant to change. DST is therefore

used by Coleman et al. (2007) to explain how interests, motivations, and identities in conflict change over time. The goal is to investigate complex conflict dynamics and why conflicts resist resolution (Lake & Rothchild, 1996). DST provides an understanding of prolonged conflicts with critical issues of interest such as identity, the security dilemma, fear of extinction, and the fear of the future (Horowitz, 1985), thereby making the theory suited for my study of farmer-herder conflict. Looking at the farmer-herder conflicts from the DST perspective, we can map out the farmer's and herders' social processes and postures. Presenting the issues, their interrelations, and how it influences each other over time to create complexity.

DYNAMICAL-SYSTEMS THEORY IN INTRACTABLE CONFLICT

From a dynamic systems point of view, conflict is a relational process influenced by incompatible activities. These incompatible activities, therefore, shape relationships, processes, and situational outcomes. Thus, making no conflict similar in history, issue, or context. A dynamical system theory sees conflict as a unique system of interconnected actors, problems, and processes (Coleman, Vallacher, Nowak, Bui-Wrzosinska, & Bartoli, 2013). This means that conflict functions as interdependent of a more extensive system with changing properties. If a dispute becomes intractable, a shift in some particular problem, such as an effort to address the initial problem that created the dispute, is likely to exacerbate the dispute rather than terminate or dampen the conflict. Consequently, the constant determining variable is the interaction between psychological and social processes between persons or groups in intractable conflicts (Vallacher, Coleman, Nowak, Lan Bui-Wrzosinska, Liebovitch, Kugler, Bartoli 2013).

DST is used to characterise the management of change by "providing frame-breaking insights into the nature of such patterns [of thinking, feeling, and acting], and thus can offer new tools to move [conflicts] beyond intractability" (Coleman et al., 2006, p. 61). It accomplishes this by explaining the general trends of potential conflict dynamics over time, mapping out a conflict's ecology with all its events, and visualising how conflict dynamics have evolved in the past and could evolve in the future to elicit conflict management reflections for negotiators. "This method not only captures the multiple sources and complex temporal dynamics of such systems, but it can help identify central nodes and patterns that are unrecognisable by other means" (Coleman, 2006, p. 338). Ultimately, the language developed in DST allows conflict management and conflict resolution to be reformulated. By claiming that it is possible

to alter the dynamics of conflict processes through attempts to "introduce negative feedback loops that deescalate the conflict once it reaches a certain threshold. Creating conditions for alternative peaceful attractors to emerge, and work actively to disassemble strong negative attractors" (Coleman, 2006, p. 330).

Furthermore, dynamic system theory is used to interpret people's social dynamics, describing circumstances in which individuals or groups with diverse ideas take alternative action over time as 'attractors'. Adding that when individuals and groups take the thoughts and actions compatible with violent disputes, they justify it as credible, which can escalate to an intractable state. The word 'attractors' is used by Coleman and Vallacher (2010) to define disruptive agents in a competing society. There are 'positive attractors' and 'negative attractors.' We refer to those elements that promote peace as 'positive attractors' and negative attractors to those that generate tension'. There are various conflict attractors, Coleman and Vallacher (2010), however, identities four main elements which are attracting positively or negatively. They include conflict management efforts, anonymous killings, communal content over time, and the media. Anonymous killings are an extremely negative attractor of these four. The other three are fluid and function as positive or negative attractors according to their timing, nature, and circumstances.

Concerning the Farmer-herders conflict in Nigeria, the conflict falls under the intractable conflicts that DST studies. The farmer-herder conflict has spanned for centuries and covers issues such as, identity, fear of extinction, and competition for resources. The conflict is composed of a various actor from the primary actors of herders and farmers to secondary actors such as the traditional rulers, the federal government, Boko haram, state governors, civil societies like Miyetti Allah Kautal Hore, All Farmers Association of Nigeria (AFAN), and others. The wide variety of actors shows it cut across different levels (individual, group, societal, and cultural). The non-linear fashion of the conflict has sustained violent hostilities over time, resulting in thousands of deaths. Overall, Nigeria's stability hangs in the balance as ethnic, regional, and religious polarisation intensifies the herder-farmer conflict. As far as the escalation of the farmer-herder conflict in Nigeria is concerned, the dynamic system theory seeks to understand (1) the causes of conflict from latent conflicts to active conflicts; (2) how the pattern of behaviour develops between constructive and destructive counterparties; (3) to measure comparatively whether past conditions produce similar conflicts or behaviours in the other conflict; (4) to assess or predict the

characteristics of a conflict; (5) to determine whether a seemingly random event affects the outcome of a conflict (Coleman, Bui-Wrzosinska, Vallacher and Nowak, 2006). The theory will give focus to the conflict structure, actors, and dynamics by mapping out and weighing the tension sources at different escalation stages.

In short, the theory of a dynamic system supposes that the conflict between farmer and herder has a self-organising aspect of thoughts, emotions, actions, standards, beliefs, and symbols. These components are built around the incompatibility of resources. These elements function as stable states of peace or of war for the system. The collapse of psychosocial complexity forces counterparties to adopt elements that contradict the inherent self-organising survival or dominance systems. At this point, the external forces' efforts are not responsive and, in most cases, escalate the conflict.

CHAPTER 3

BACKGROUND OF THE HERDER-FARMER CONFLICT IN NIGERIA

This chapter gives background knowledge to the herder-farmer conflict. The aim of this section is not to establish a final truth about the herder-farmer conflict. Instead, it destabilises dominant understandings, exposes the biases and imbalances in the study of the conflict, and suggest other ways of understanding interactions between the two groups. This kind of critical destabilisation is useful for opening new avenues of future studies to ask analytical and normative questions to pursue alternative intellectual and political projects. In seeking to address the research question: *How and why did the farmer-herder Conflict in Nigeria escalate into widespread violence?* And contributing to validating the framing hypothesis, this thesis aims to contribute to the literature by exploring first the historical development of herder-farmers in Nigeria to uncover interaction/ relational changes over time. Secondly, this section proceeds to review previous literature's reasons for escalation at the onset of the conflict; here, imbalances in the study of the conflict are exposed and balanced. This dissertation will still provide its reasons why the herder-farmer conflict escalated in chapter 4

HISTORICAL BACKGROUND TO THE HERDER-FARMER CONFLICT

Relations between farmers and herders precede the creation of the Nigerian state in 1914. The relationship was that of mutual dependency. Herders relied on farmers' crops for their livestock and basic food, whilst farmers rely on dung manure for their farms and cow meat and dairy products (Shettima and Tar 2008). The centuries of cooperation between the two communities can be traced back to this symbiotic relationship (Olayoku 2014, 2).

It's worth noting that, among the several herding groups in Nigeria, the Fulbe or Fulani are the most dominant in terms of herd size and ownership. Furthermore, not all the Fulani communities are herders the main groups are Daneeji, Pagaya'en, Sisilbe and Bargu'en, Rahaji and Sirifa'en (Blench, 1994). The identity of these Fulbe communities in Nigeria is typically described as nomadic groups scattered across West and Central Africa that engages in both herding and crop production (Bello, 2013). This agro-pastoralist feature, often overlooked in herder-studies, has been resurrected by ethnographies on Fulbe cultures to disrupt Fulani identity stereotypes (Botte, Boutrais, and Schmitz, 1999). On the other hand, Farmers are sedentary indigenes

who, despite their localities, base their livelihood on the cultivation of the soil for different crops. Coincidently, both herders grazing and farmers cultivation overlap during the rainy season, putting farmers and herders at loggerheads as Farm trespass and crop damage are on the rise.

During the pre-colonial period, there was a possibility of violence between farmers and herders. Nonetheless, intentional steps were taken to avert it and preserve mutually beneficial partnerships (Higazi and Yousuf, 2016). For example, the RUGA leadership system, which is still in use in parts of modern-day Nigeria, ensured that herder's grazing operations were coordinated. Community leaders enacted rules prohibiting crimes such as assault against women and children and murder during rustling to avert chaos. By electing an official to control herder's grazing and pasture use, this system of coordination ensured that possible conflict triggers were non-existent or, at the very least, negligible (Davidheiser and Luna 2008). During the colonial period, new laws affecting land ownership and the judicial system were adopted. The changes reduced customary land tenures, and resource usage weakened cooperative structures and decreased farmer-herder relationship compatibility. (Davidheiser and Luna 2008:82). The 1914 amalgamation brought non-pastoral peoples from the south into Nigerian territory with pastoral peoples from the north. Unlike the northern environment, which was not conducive to cow grazing all year, the southern climate was conducive to cattle grazing for most of the year, including the months when the weather was particularly harsh.

The colonial period prompted far-north livestock herders to begin migrating southward. This signalled the start of a massive herdsman grazing migration across Nigeria. Herders made arrangements with local community authorities on migratory routes, which local governments oversaw, thus, preventing conflict during the colonial period (Blench 2010). Even though, in 1923, Farmers in the North-eastern states complained about cattle trampling their crops. The colonial authority was thought to be more sympathetic to Fulani herders and other pastoral tribes than farming communities as colonial regimes provided herder with security to enable their safe migration down to the Middle Belt (north-central) regions (Migeod 1925, cited in Blench 2010:4).

By 1960 Blench (1994) records the migration of herders, especially the Fulbe community, into the north of Oyo town in southwest Nigeria. Their migration was encouraged by the growth of Islam in the southwest, herding contracts between local

Yoruba cattle owners and Fulbes' without herders. This helped build stable contacts with the local populace. They also established permanent farms where they farmed a variety of crops for food. At the same time, Fulbe pastoralists in the southeast faced difficulties because of cultural differences and the civil war (Aguilar, 2003). Despite realational difficulties herders continued to move south seasonally. This was aided by lush pasture, rice residues, local authorities' and crop farmers' tolerance, and the region's meat demand (Blench, 1994)

By 1965 conflict in the country's north-central regions were first mentioned. (Adekunle and Adisa 2010). Conflicts at the time was rare and low-intensity; despite that fact, the federal authorities recognised the dangers that grazing would represent to the country. As a result, efforts were made across the country to limit grazing. The plan was to restrict some areas and provide practical agriculture and livestock production resources in the form of boreholes, veterinary services, and roads. The grazing arrangements appeared to crumble with the fall of the country's regional organisation and the creation of states.

Military rule shortly followed independence in 1966 and resulted in extensive socioeconomic and political upheavals that influenced the spread and intensity of the Nigerian farmers-herders conflict. The primary change factor to herder-farmer relations was the local government reform (Iro, 1994). In the early years of military administration, the country's leadership was perceived as a northern hegemony dominated by the Fulani. Herders, majority of which were Fulani, reportedly took advantage of this scenario and soon migrated throughout Nigeria. Herders were under the impression that since the military leaders were the kin of the herders, they would migrate unchallenged. This changed with the introduction of the 1976 Local Government Reforms that unified the country's local government system and reduced traditional rulers to essentially ceremonial roles. Before the reforms, traditional authorities had controlled grazing activities and had the power to penalise and imprison. Local Government Chairmen deposed these traditional rulers, and financial and legislative powers were given by the new laws (Blench 2010:7). The rise of local government chairmen and the utilisation of people's representation gradually changed the earlier laws favouring pastoralists over farmers. Because itinerant herders were rarely permanent inhabitants of the areas they grazed their cattle, they found it challenging to organise and send representatives to government structures. The "game

of numbers "played to the advantage of the local farmers, who were able to control herders' activities (Onah and Olajide 2020).

Local farmers used their newfound power to send delegates into the various government institutions between 1979 and 1983 and continued to make laws that favoured them. The civilian rule fell apart in 1983, and the military retook authority in the country. By the late 1980s and early 1990s, a Middle-Belt upper echelon had emerged in Nigeria's military and administration. This circumstance quickly galvanised kinsmen of the new military elite to confront herders encroachment on their land. Violence erupted throughout the region. Guns and other advanced weaponry played a significant role in several of these conflicts. From this point, the employment of firearms became a characteristic of the farmers-herder conflict in Nigeria. During this time also, governance standards collapsed, and governance norms became ethnicity and citizenship contestations. Strong emphasis was placed on nativity as a concrete indication of who owned the property all over the country. (Onah and Okeke 2017)

By 1999, autochthony increased as many herders made their way from South-western settlements and villages to South-east and South-south regions, where they created permanent abodes in the 2000s and beyond. The conflict mainly was between indigenes and outsiders across the country. The former, referring primarily to individuals born on the land. In many cases, the crises began in the cities and spread to the neighbouring rural areas when retaliatory attacks were carried out against diverse communities (Higazi and Yousuf, 2016). The new hostile attitude that engulfed the country was part of the ongoing ethnic and citizenship disputations that has sparked fresh clashes in communities where natives and strangers formerly coexisted.

From the 2000s, the two groups' relationships were no longer seen in the basic terms of herders and farmers. Farmers became Southern (or Middle-Belt/Northcentral), Igbo or Yoruba or (any South-south/or Middle Belt/Northcentral group), and Christian, while herders became Northern, Hausa-Fulani, and Muslim. In essence, the farmers-herders conflict evolved to the point where ethnic and cultural incompatibility became the primary motivators of conflict (Obioha, 2008). Conflict is practically unavoidable in situations where one group regards itself as indigenous and the other as strangers or settlers, according to Conroy (2014). By 2015. the farmers-herdsmen dispute, which began in the North and Middle Belts, has now extended to all 36 states in Nigeria, including the Federal Capital Territory, resulting in a national

catastrophe. The phenomena, which began as sporadic and periodic outbursts of violence in the country's far north and middle belt, has become a frequent occurrence of violence in all parts of the country.

REVIEW OF HERDER-FARMER CONFLICT LITERATURE

From the historical background of the conflict, scholars posit four factors as the direct cause of the farmer-herder conflict's occurring and escalation. The factors include climate change, structural violence, psychological and cultural and, more recently, agro-capitalism.

Climate change factors

Climate change or environmental security scarcity scholars such as Bachler (1999) and Homer Dixon (1999) highlight the impact of climate change (drought, erosion, desertification) compounded with population growth and the modernisation of cities creates an atmosphere of eco-scarcity that shrinks the quality and quantity of resources in the north. This forces herders to move south with their cattle during the dry season, thus, grazing outside their traditional grazing routes. These migratory movements of herders have been occasioned by violent clashes between them and farmers along the routes. Each party is claiming a violation of their rights. Herders claim a violation of 'cow rights' and farmers claiming a breach of 'land rights'. Odoh and Chigozie (2012) argue that because the value of ecological resources from these groups is high, conflict between farmers and herders is inevitable (Al Chukwuma & Atelhe, 2004). This survivalist strategy is a do-or-die approach for the sustainability of livelihood. However, it is undisputed that climate change is a trigger factor. Still, it is difficult to argue that it is the only singular cause of escalation because, since 1970, the affected areas have experienced climate changes. Even as access to riverbanks became limited to herders due to the increased cultivation along the river basin in 1980. But even then, the conflict was manageable (Gürsoy, 2019). Also, history shows that migration due to climate is not the reason for escalation but rather the change of pastoral migration pattern from temporary migration to permanent relocation to the south; Olaniyan, Francis and Okeke-uzodike (2015) reinforces this claim. Therefore, it is clear this academic perspective does not explain the increasing lethality associated with the conflict.

Structural violence factors

The second scholarship is the institutional/ structural violence perspective. According to Vanger and Nwosu (2020), the development of new institutional institutions at different times has contributed to the escalation of conflicts between farmers and herders. This assumption is built around the historical trajectory of relations between farmers and herders. From their historical account, peace disintegrated when traditional institutions of conflict resolutions such as traditional rulers, community leaders were replaced with new political institution arrangements and laws. These arrangements include the Land Use Decree of 1978, the ECOWAS Protocol on Transhumance 1988, the fundamental human rights provision of the Nigerian 1999 Constitution (as amended), and the Benue State Open Grazing Prohibition and Ranches Establishment Law of 2017 (van Leeuwen and van der Haar, 2016). The Land Use Decree of 1978 to farmers is discriminatory and restricting to their farming activities. By placing all lands under the government's jurisdiction, the Land Use Decree of 1978 weakened existing customary land ownership. Herders could no longer afford to maintain their old habit of negotiating entrance into villages to pursue their livelihood because of this new arrangement. ECOWAS' regional agreement on transhumance unified the land use law to support livestock production in West Africa by facilitating animal movement within the sub-region. Farmers have traditionally been inclined to conventional institutional norms that appear to facilitate their customary ownership of land (Benjaminsen and Ba, 2009).

In contrast, herders prioritise modern political institutions that appear to provide them unrestricted access to fields that previously required the approval of farmers. Vanger (2015) averred that the breakpoint was enacting the Open Grazing Prohibition and Establishment of Ranches Law by the Benue State in 2017, causing herders to be marginalised, which has fostered a sense of anger, which often leads to aggressiveness (Okoli, 2016). From this perspective, Okoli draws a nexus between insecurity and governance, arguing that the reoccurrence of violence is rooted in the government's incapacity to manage agricultural relations through effective land- and resource-use law. As a result, in the lack of a well-established framework for resource security and governance, anarchy and criminal impunity reign in the agricultural sector, as seen by herders' aggression. This viewpoint agrees with the governance-deficit theoretical paradigm, which puts resource-based violence on "state failure" (Ibeanu, 2009). The conflicting postures of the federal government and certain affected

states in dealing with the crisis have further shown the Nigerian state's seeming slowness in finding a realistic solution to the raging herder-farmer problem. While the federal government favours livestock colonies and the revitalisation of inactive grazing reserves, the affected states want open grazing restrictions and a ranching method of husbandry (SB Morgen, 2015).

Considering all of this evidence, it seems that the inception and continuation of farmer–herder conflicts are linked to the clash between traditional land ownership norms and the state's modern political and legal regulatory capability. Vanger's study is not necessarily incorrect. However, like climate change scholars, structural violence scholars fail to explain the reason for increased lethality, sophistication and frequency of clashes. Given that after a decade of implementing both the Land Use Decree of 1978 and the ECOWAS Protocol on Transhumance 1988, the intensity level remained low.

Psychological and cultural factors

Diverging from the two scholarships above, the psychological scholars (Nisbett and Cohen, 1996; Mortiz 2008) present a non-objective driver of escalation. Most of the focus is on the herder's personality and psychology, explaining that violence and aggression are central social characteristics of a herder identity (McCabe, 2004). This identity is traced to Greek and Roman writing describing Nomadic herders as a man-eater (kein, 2015), a primitive man, an uncontrollable savage beast having no use or regard for laws (Noyes, 2004). This depicts herder as intrinsically barbaric and dangerous. Historians like Nisbett and Cohen (1996) explain that because a herder's honour and reputation are linked to having and keeping his herds, Herders must defend their herds aggressively. Mortiz (2008) takes its further to explain conflict escalation pointing to Goldsmith 1965's argument that herders require that people adjust their lives to the requirements of the animals: pastures and water. This means that farmers and the society would remain permanently unchanged to accommodate the herder's lifestyle. Any chance of alternative land use, such as urban development, tourism, or nature conservation, could necessitate the eviction of herding communities from critical areas to their livelihood, which causes herder to rely on codes of vengeance and self-help (Salzman 2004). In the case of Nigeria, Akinyetun (2016) explained that the Boko haram attack in the north stole millions of cows from breeders and evicted herders from their communities to the south of Nigeria. Herders who have lost their herds in the north must now be ready to protect their flock at all times, publicise this

preparedness, and reply to the suggestion that they are too weak to do so. With an increased need to defend their honour and livelihood.

Mortiz (2008) attributes this response to the socialisation of herders from childhood to defend their honour by fighting. Rioux and Redekop (2013, 7) posit that a person's identity is his life and is protected to death; thus, when a group's identity is threatened, repressed or downgraded, they resort to violence to protect who they are. This description of herders being embedded with flocks in an uncontrollable savage way is what farmers use to explain why herds invade their farm and commit scores of deaths. However, these violent responses leave a memory on their victims (farmers) that causes them to stand on the defence during future interaction. Esptein (1939) adding that because a nomads identity is untouched for generations past, farmers and government officials have a sense of bias that impacts their response/interventions, thereby escalating the conflict (Eke, 2020). The examples of the Ebonyi State House of Assembly, Hon. Oliver Osi, calling his constituents (farmers) to 'defend themselves in accordance with the laws of the land giving the perception that herders are violent and farmers need to be secured. Eke (2020) accounts that lawmakers' responses gave the impression that herder's attacks are unprovoked as nomads are savages. This perception is reinforced across generations by the media's framing. Adisa and Ahmad (2010) take it further to argue that these politicians' conflict-inducing behaviours were influenced by media representations of herders and the politicisation of the interethnic relations in Nigeria.

A broader perspective is adopted by Nwachukwu, Amadi, and Barigbon (2021); they argued that the media portrayal of herders as wild animals floods the minds of citizens. The notion about the nature of herders – one of barbarism and cruelty implicates an ethnicised and emotion-based attitude from citizenry towards herders. In this conflict, the conflict imports ethnic and religious conflagrations that sees the conflict as a way of empowering one party over the other. Real and imagined community divisions are formed from Nigeria's long history of intercommunal conflict, and civil war has complicated this identity way of thinking of the herder-farmer conflict. In most regions of Nigeria, the agricultural and herding groups are divided into two main categories: Christian and Muslim, respectively. They are also classified as either nomadic Fulani and indigenous tribe members. In this regard, relevance is given to property and power relations in connection to the social life of farmers and herders. In Nigeria, herders are essentially a landless migrant who relies

on the generosity of landed farmers and the protection of the state to graze his herd and support his livelihood. As a result, of the asymmetrical nature of power connections between farmers and pastoralists, whoever defines power relations seeks to use violence to correct their experienced injustice in allocating scarce resources. We observe that Nigerian lawmakers regard herders as criminals who must be punished, while ordinary Nigerians define herders as savages who must be removed from their land.

This academic literature on the psychology of herders related to the escalation of the herder's conflict gives the in-group disposition of herder to violence and reasons for lethality. This study would have been more interesting and balanced if a similar psychological study of farmers identity or personality was conducted. Despite the need for more research on the identity of farmers, an anthropological study of the Igbo farming society by Korieh (2007), on the other hand, link the reputation and musicality of Igbos to their ability to produce crops, specifically Yams. In the same vein, Achebe (1958:26) supports this claim when he writes, "he who could feed his family on yams from one harvest to another is a very great man". In precise terms, Igbo's are "ori mgbe ahia loro – that is, one who is dependent on the land and market for subsistence and pride" (Korieh 2007: 1). Achebe (1958) probes deeper to explain that a wealthy farmer is revered in Igbo cultures than an aged elder—adding that a man is judged right by the gods based on the works of his hands. That is why they "pray for life, children, good harvest and happiness" (P.15). Although Korieh does not link violence to farmers, Achebe highlighted that because farmers reputation comes from his ability to provide when his subsistence is threatened, he draws his matchet to avoid being weak in front of his wife and children. This shows that for farmers, their lives and socioeconomic essence proceeds from farming and casts doubt on Adekunle and Adisa (2010) presentation of farmers as pacifying victims taking the destruction of herders on their farms. Ultimately the primacy of cattle to herder and crop production to farmers makes violent conflict not only inevitable but a manifestation of cyclical retaliation resulting in the death of thousands of people and the incurred cost of 13.7 billion dollars to herder-farmer conflicts (Mercy Corps, 2015).

Agro-capitalism factor

Turning to a more recent scholarship, Eke (2020) and Ajala (2020) presents the concept of agro-capitalism as a driver of escalation. Their literature builds on the observations of various writings, such as Akinyetun (2016), who detected a change in herders' tactics. He notes that Pre-independence herders were described as affable, moving with their staffs or sticks and herds, but the 2010s herders move differently with guns, Ak-47 to be specific. The observed change in tactics explains the increased lethality in clashes. Ajala (2020) argues that the increased lethality is due to establishing new patterns of cattle ownership and management by agro-investors. Ajala posits the new form of cattle ownership as neo-pastoralism. He characterised neo-pastoralism as a large cattle ownership by non-pastoralists and managed by hired herdsmen. They typically involve sophisticated guns and ammunition to hide stolen income and revenues from illegal activities such as human trafficking and terrorism. Pastoralism has traditionally featured small-scale, family-run livestock operations, which were typically linked with few ethnic groups due to the hazards of holding cattle and the work necessary to move cattle hundreds of miles for pasture. Neo-pastoralism differs in terms of cow ownership, typical herd sizes, and the usage of weaponry. At the same time, conventional herd sizes range from 16 to 69 (Kubkomawa, 2017). neo-pastoralism herds generally range from 50 to 1000 (FAO, 2018). In addition, neo-pastoralism frequently incorporates the use of firearms.

Furthermore, while traditional pastoralists seek to establish positive connections with farmers to maintain their symbiotic relationship, hired herders to have little motivation to do so because they have weapons that may threaten farmers (Ajala, 2020). The increased interest in neo-pastoralism comes as cattle ownership is increasingly seen as a profitable investment. In Nigeria, an adult cow may cost as much as N350,000 ($1000), making it attractive for potential investors (Ajala, 2018). Arrested herders admit that they were recruited by current or former government officials, military officers, or even senior customs officers (PM news, 2016). They were hired and equipped to protect the livestock of elites. Eke (2020) explains this transitional change from subsistence to profit as the underlying cause of the barbarism of herders. I suggest that the difficulty in finding resolutions is explained by the governing elite's ownership of cattle. While potential solutions such as expanding grazing lands, disarming armed pastoralists, compensating farmers, addressing climate change issues, and combating cattle rustling (kwaja and Ademola-Adelehin, 2018)

have all been proposed, they have not been implemented. This is because the conflict has been fraught with political calculations to benefit the commercial and ruling elite. As with other conflicts in Nigeria, politicians often exaggerate ethnic motivations for conflict to boost their popularity and gain patronage (Berman, 1998). Furthermore, influential religious, ethnic, and political leaders frequently engage in political and ethnic manipulations while purporting to address a problem but actually intensifying the conflict (Obogo, 2018).

Princewill (2018) cites the debate on open grazing and ranching as an example to explain how neo-pastoral actors escalate the conflict—postulating that discussions are dependent on which ethnic groups engages in the argument. The dispute on overgrazing and ranching are sometimes politicised and presented as either marginalisation of the Fulanis or preferential treatment of the Fulanis. In June 2018, when many states impacted by the dispute chose to enact anti-grazing laws on their territories, Nigeria's federal government announced plans to invest N179 billion to create ranches in ten states in an attempt to end the conflict and give a cohesive solution (Obogo,2018). While the farming communities argued that herding is a private business that the government should not subsidise,84 the herder's community rejected the idea, claiming that it is intended to oppress the Fulani community by restricting their freedom of movement (Akpeji, Wantu, and Ande, 2017). Several pastoralists said that the planned ranching legislation was being utilised as a campaign by some persons to win votes in the next elections (Erunke, 2017). For fear of losing electoral and kinship patronage, politicians have chosen to politicise the problem, along with the government's tepid response, to render any attempt to resolve the disagreement unappealing to the parties concerned. This argument puts the economic interests of stakeholders as the central reason for the escalation of the conflict

Although Ajala (2020) does not present a case for how agro-investors in farming communities influence escalation, I observed that the same economic interest of agro-investors in farming communities influence escalation as elites are providing farm vigilantes with arms. The literature of Davidheiser and luna (2008) identified changes in farming techniques. Farmers are adopting modern farming methods, such as irrigation agriculture and sedentarisation schemes for transhumant pastoralism, which have increased cash crops' marketisation. The Central Bank of Nigeria (2018) reports that the agricultural sector is driven mainly by crop production, and any decrease in production affects Nigeria's gross domestic product. Benue state reports

claim that farmers have lost 20,000 tonnes of grains to the conflict (Egbuta, 2018). Adding to this is the governor's losses; Samuel Ortom lost 100 million Naira worth of rice and 250 hectares of land to arson started by herders. The fallout of these losses was a 64 per cent decrease of income to farming households in the north-central, a reduction in Stakeholders' socioeconomic and political interests in tax revenue generation, bribery, and annual gifts and tributes to state officials traditional leaders (Jabiru, 2017). This disruption in client-patron benefits has resulted in increased lobbying from farming unions, state governors, socio-cultural organisations for anti-open-grazing law, licence to carry a firearm, and establishment of armed vigilante groups as an essential solution to stopping over-grazing and crop destruction. This is instead causing additional conflicts rather than addressing the roots of the conflict.

Given the aforementioned so far, this dissertation observes that environmental change, scarcity and institutional parameters are triggers to the conflict, not sustaining volatility factors. However, psychological works of literature gave an interesting in-group observation into herder's innate responses to threat and attitude to their occupation. In highlighting these, it explains the increased need to resort to violence as a resolve but overall pointed the need for published literature on farming communities to have a fuller picture of how the perceptions and attitudes of the groups cause scores of deaths. The agro-capitalism literature, although newly developed, presents the most convincing argument as to why the conflict deteriorated into widespread violence but similar to the psychology literature, more work is needed in the farming market as it relates to the herder-farmer conflict. Overall, we observe that even though the conflict between herder and farmers presents itself as a resource conflict, it consists of economic, social, political, snd ecological variables that are self-reinforcing each other into widespread violence

CHAPTER 4

METHODOLOGY OF THE STUDY

This thesis explores the conflict drivers in the herder-farmer Conflict in Nigeria, identifying critical escalation patterns and how they influence the escalation and de-escalation process. To achieve this, I pose three research questions:

4. How and why did the farmer-herder Conflict in Nigeria escalate into widespread violence?
5. What are the significant patterns of escalation in the conflict?
6. How does the factors of escalation influence the de-escalation process of these conflict?

This chapter reports the first step: introducing the research design and then the justifications for data analysis methods. Third, the selection process is described with the scope of data analysis, and, finally, this chapter ends with the study's potential limitations.

RESEARCH DESIGN

This research is designed as an Exploratory sequential mixed method design based on the theoretical framework of the Dynamical-Systems Theory and, to a minor degree, conflict escalation models and conflict theory as outlined in the literature review in Chapter 2. This research design is characterised by an initial qualitative phase, followed by a quantitative phase, and the two methods are integrated during the interpretation of the results (Schoonenboom and Johnson, 2017). Mixed-method research is suited for the research as it allows more profound levels of exploration and understanding (McEvoy and Richards, 2006). Additionally, the study of resource conflict creates various tension levels and oppositions that reflect the multiple ways of understanding the herder-farmer conflict, making mixed-method research appropriate.

We characterised the escalation of farmer-herder Conflict in Nigeria via the qualitative phase (answering the first two research questions). Secondary sources are utilised for this phase, such as books, newspapers, journals, articles, unpublished theses, internet sources (for questions 1 and 3), and newspapers, especially for question 2. Qualitative results then inform the second quantitative method as the qualitative results are Collected and analysed in quantitative data. The disadvantage of sequential designs is that they take longer for data collection (Halcomb and Andrew, 2009).

| 0 1 | QUALITATIVE PHASE (R 2) | A summative content analysis Manifestation expression of the conflict are categorized into 8 themes to reflect Yamsi's 2006 pattern of escalation identifiers (see chapter 2) |
| 0 2 | QUANTATIVE PHASE (R2) | Markov chains approach using Phyton (Hastie, Tibshirani, Friedman, 2009). Applying the lower bound rules all probabilities with 0 lower bounds are not significant |

Research Design

JUSTIFICATION OF STUDY

This research aims to expand the range of empirical inquiry on conflict escalation related to resource conflict for a better theoretical understanding of escalation and de-escalation patterns in the herder-farmer Conflict in African society. Selecting the herder-farmer Conflict in Nigeria was based on two observations. First, the conflict had produced high fatality numbers that drawn public and academic attention to literature and policy on the causes and drivers of the conflict, but no empirical research on how the conflict evolved after its onset has developed. Secondly, previous research on escalation had observed predominately international conflict but had not yet dealt with escalation regarding a resource conflict (with few exemptions I found highlighted in chapter 2). Overall, the analysis of resource conflict precisely the herder-farmer in Nigeria had not been treated empirically in detail.

Considering the above mentioned, selecting the Nigerian herder-farmer conflict as a research subject is insightful and particularly interesting on the theoretical, empirical, and regional analysis levels. Since the research question focuses on the significant patterns of escalation and how it influences the de-escalation of the conflict, for empirical purposes, it is pertinent to deduce the changing dynamics of the conflict and why. The insights will guide future government officials, agencies, researchers and, policy analysts in early warning predictions and conflict prevention mechanisms.

As outlined in previous chapters, the herder-farmer Conflict in Nigeria has maintained progressive volatility and frequency rates since 2014; however, literature

does little to reveal the influence of the escalation process on the de-escalation of the conflict. This is directly link to the absence or lack thereof of literature on the escalation of resource conflict. According to Mortiz (2010), the escalation sequence may or may not result in de-escalation. As a result, the dynamic systems approach enables mapping relationships between each escalation level over time. To measure temporal changes in an actor's strategies, expectations, abilities, or rhetoric that affect de-escalation (Vallacher, Coleman, and Nowak, 2011; Bui-Wrzosinska, Nowak, Vallacher, 2006).

SELECTION AND ANALYSIS PROCESS

This is a mixed-method analysis whose objective is to identify and understand the significant patterns of escalation and the probabilities of each stage of conflict escalation to transform to the next stages in the herder-farmer conflict.

According to Mortiz (2010), the study of conflict escalation is not linear nor similar. The transformation pattern into widespread violent engagement is measured in the actions and reactions of actors who hold stakes in the Conflict (Mortiz, 2010). Therefore, the research answers the research questions and achieve the research aim in the following:

R1: how and why did the farmer-herder Conflict in Nigeria escalate into widespread violence?

How the farmer-herder Conflict in Nigeria escalated is a question about the sequential development of events. Looking back at the sequence of the conflict highlights the development during the past time and where it stands today. To create a reliable framework for this question, the nine-stage model of escalation by Fredrick Glasl (1999) is utilised. From chapter 2, we saw many escalation models, but none is as detailed as Glasl's model. Despite being detailed, the Glasl model stands out because it defines the actors' in-group and out-group cognition and attitudes at each escalation stage. Glasl's model equally allows for a systematic study of the conflict using secondary data (newspapers, books, journal articles, unpublished theses, and internet sources) to expose problematic behaviours causing escalation and the possibility of alternative choices that actors have, making answering the second part question of why the conflict escalated easy as the model gives a blueprint to map out the drivers of the violence. To further synthesise why conflict escalated, a combination of conflict spiral and structural change model from conflict theory is adopted to

identify critical factors that led to changes in the actor's psychology and actor's interaction between and among each other. Accordingly, the focus will be on mapping out the drivers of the violence.

R2: What are significant patterns of escalation in the conflict?

Identifying the patterns of escalation is crucial for conflict termination and further prevention of the spread of violence. However, as noted earlier, conflict is not linear nor similar. This research purposively selects 2 case studies (Benue and Enugu). To identify significant escalation paths and test Mortiz's (2010) postulation, herder-farmer conflict is non-linear and uniform. Purposive sampling is a deliberate selection technique of respondents or cases by the investigator to meet the research requirement (Kothari, 2004:15). The reason for using the purposive sampling technique in this research necessitated from the need for data. Benue and Enugu were selected because they are both food-producing states; secondly, they have the most available information. Lastly, high levels of violence are caused by the clashes between farmers and herders. The research would have been more interesting if a broader range of states had been explored. However, for representation and validity purposes, the cases are drawn from different geo-political zones in Nigeria (North-Central, Benue; South-East, Enugu) with enough data given the research time.

To identify significant patterns of escalations in each case study, a qualitative content analysis of each case study is conducted to identify the stages of escalation using NVIVO software was conducted. Using NIVO, the secondary data, especially newspapers. The Covenant University (Ogun State, Nigeria) newspaper archive was used to collect newspaper articles related to herders-farmers conflicts in Benue and Enugu. The newspaper selected for content analysis was "The Guardian". Criteria for choosing this paper over others are: firstly, it is privately owned and said to be independent of ethnic, religious, and party politics established to primarily present balance in the coverage of events (Bello, 2020). Considering how politicised the herders-farmers are conflict is coverage balance is necessary for accuracy. Another significance of The Guardian is unlike other print media that give news of herders-farmer conflict as straight news. The Guardian gave context as it why confrontation or arrest was made; this provided the researcher with a deeper understanding of the situation in each case. Additionally, the newspaper articles collected were from 2016

to 2020, spanning five years. Despite being short, the timeframe covers critical periods of high-intensity and low-intensity, which is significant to the study.

The qualitative content analysis was used to categorise the conflict's manifestation expression into themes that reflect Yasmi, Schanz, and Salim (2006) conflict escalation model. Qualitative content analysis is a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns (Hsieh and Shannon 2005, 1278). The content analysis is appropriate because it allows for further statistical analysis. Its limitation of not extracting deeper meaning or explanation from data patterns is not applicable because the content analysis is needed to show the frequency of the manifestation expressions of the conflict such as debate, protest, court, etc.

The summative content analysis was chosen among the different types of content analysis (conventional and directed) because it is more exploratory. Summative content analysis began by collating data, familiarising with the data, then assigning labels to texts related by context; this is called themes (Hsieh and Shannon, 2005). The themes are drawn from Yasmi, Schanz, and Salim's (2006) eight manifestation dimensions such are (1) feeling anxiety; (2) debate and critiques; (3) lobby and persuasion; (4) protest and campaigning; (5) access restriction; (6) court case; (7) intimidation and physical exchange; (8) nationalisation and internationalisation. Frequencies are then given to the themes by counting the number of appearances then a table of results is created. The purpose of detecting frequencies was to get a better picture of the most frequent expression of conflict. The most frequent expression of conflict could show the most significant in the conflict escalation chain

In investigating which escalation patterns are significant and the probabilities of each stage of conflict escalation to transform to the following stages, we employed a one-step Markov approach. The results from NVIVO are inputted into Python for the one-step Markov approach. A Markov chain is a stochastic model describing a sequence of possible events in which the probability of each event depends only on the state attained in the previous event (Hastie, Tibshirani, Friedman, 2009). Given that there are eight possible stages in the dataset, we have to find the conditional probability of the next stage given the previous immediate stage as shown by the following formula:

$P (Sn=t|Sc= r)$

Where Sn is the next stage, Sc is the current stage, for all r; t is 1; 2; . . . ; 8 of the stages of escalation.

R3 How does the facors of escalation influence the de-escalation process of these conflict?

On the selected case studies, a dynamic systems analysis using Markov chains and secondary sources such as local newspapers, blogs, ACLED database, and journal publications allows for a dynamic systems analysis of how escalation patterns influence the de-escalation process. The escalation cycle may or may not resolve to de-escalation, according to Mortiz (2010). As a result, the dynamic systems method shows the relationships between each escalation step throughout time. To see if changes in the actor's tactics, perceptions, capacity, or rhetoric impact de-escalation over time. (Vallacher, Coleman, and Nowak, 2011; Bui-Wrzosinska, Nowak, Vallacher, 2006).

EMPIRICAL FRAMEWORK

To answer the question: *R2; what are the significant patterns of escalation in the conflict?* The study considers the Markov chains approach as its empirical framework. This approach to conflict escalation will forecast the probabilities that a certain stage of conflict escalation will transform to the next stages

MARKOV CHAIN APPROACH

A Markov chain is a stochastic model that depicts a sequence of potential occurrences whose probability is exclusively controlled by the state obtained in the preceding event. (Hastie, Tibshirani, Friedman, 2009). The term "stochastic process" refers to a group of random variables $X=\{X_t:t\in T\}$ defined on a shared probability space, accepting values from a joint set S (the state space), and indexed by a set T, usually one of the following N or $(0, \infty)$ and conceived of as time (either discrete or continuous) (Oliver, 2009). Simply defined, a stochastic process is any process that depicts how a random occurrence evolves over time.

It's worth noting that the transition matrix of a Markov chain is used to describe the probability distribution of state transitions. The matrix will be a N x N matrix if the Markov chain has N potential states, where entry (I, J) indicates the

probability of migrating from the state I to state J (Hoek and Elliott, 2012). The Markov definition may be expressed mathematically as follows:

$$X = (X_n)_{n \in \mathbb{N}} = (X_0, X_1, X_2, ...)$$

If the process takes its values in a discrete set E at each moment of time it value is

$$X_n \in E \qquad \forall n \in \mathbb{N}$$

The Markov property then implies

$$P(Z_{n+1} = j \mid Z_n = i_n, Z_{n-1} = i_{n-1}, ..., Z_1 = i_1) = P(Z_{n+1} = j \mid Z_n = i_n)$$

The second formula represents the notion that the probability distribution for the future state (where I move next) is only dependent on the current state (where I am now) and not on previous states (where I was previously) for a given history (Sericola, 2013).

Markov analysis is a method for predicting a variable's value whose projected value is solely impacted by its present state and no previous activity. The stochastic processes begin at the current state and contain all information that might affect the process's future evolution (Gallager, 2013). In other words, it forecasts a random variable simply based on the present conditions around the variable. The chain occurs in a sequence of the time step, each stage randomly selected from a finite set of states. Markov chains are utilised in a wide range of circumstances because they can be constructed to reflect a large range of real-world processes. These areas include population mapping in animals, search engine algorithms, music creation, and voice recognition. They are frequently used in economics and finance to forecast macroeconomic events such as market crashes and recession-expansion cycles (Siu, Ching, Fung, and Ng, 2005). Markov chain analysis is used to gain insight into the life history of an event or anything else that has to do with time.

The study intends to identify the significant pattern of escalation in its selected case studies. This study utilises this approach because the Markov chains are used to calculate the odds of events occurring by seeing them as states migrating into other states or returning to their previous state. In applying Markov chains to conflict escalation, the transition matrix will describe the probabilities that a particular stage of escalation will either remain in its current state of transition into a new state. Markov

also simplifies prediction by considering the future as independent of the past when the process is in its current state (Gallager, 2013).

The major problem with this approach is that it is difficult to determine the transition matrix (Siu, Ching, Fung, and Ng, 2005). This is naturally resolved using historical data, and for this study, the newspaper archives will be utilised to assess the probability. However, if the future does not unfold as smoothly as the past, this might result in inaccurate figures. Based on a mix of factual data and more subjective, qualitative data, such as interviews, books, journals, estimates can be more trustworthy. The study will use secondary data from books, journals, and historical documentation to counter this situation. The second problem with the Markov prediction is it does not explain why the sequence of events happened. However, the objective of this study is to identify the significant patterns of escalation and not explain the patterns of escalation, making this approach suitable for this study.

METHODOLOGICAL REFLECTION

There are methodological limitations to this research, the first limitation seen in selecting only two case studies as it does not cover more states in the farmer-herder conflict. However, the decision not to focus on more states in the conflict was to avoid compromising the validity of the research. Most of the clashes between herders and farmers are in rural areas away from human habitation and media coverage, making data collection difficult. Hence, the decision to focus on states with available data makes the discovery of the project richer.

This research is limited to secondary data, especially newspapers, as its dominant source of data. The researcher did consider conflict datasets like ACLED ACLED, although a more inclusive database, it provides no information distinguishing whether the actor is a farmer or Herders. The database labels herders as Fulani Militias, but there is no label for farmers. ACLED does not also provide Actor ID to clarify. Additionally, approximately 20% of ACLED's African violent events data are missing an actor name entirely (e.g., "unidentified actor"), and a good portion of the remainder are stated only in general terms (e.g., "communal militias") (Eck, 2012). Also, applying the escalation models in chapter 2, the feelings of anxiety, debates and critiques, lobby and persuasion, protests and campaigning, access restrictions, court cases are not recorded in ACLED.

The productive role of the media is situated in the presentation of reality to educate, inform and entertain the public. Media in the form of newspapers could be used to track the behaviour of a warring party. Newspapers were chosen as a data source because it shows the protracted nature of farmers and herders Conflict in Nigeria over time.

The limitation of media is that the researcher is exposed to biased, unfair, sensational, and irresponsible coverage and Reporting (Soola, 2009; Onuegbu, 2012; Basorun, 2015). The Nigerian media promotes prejudicial stereotypes about groups and individuals through selective reporting or sometimes underreporting non-violent events because they do not sell as "herdsmen killings in…". There are also reports of Nigerian newspaper reporters falsifying conflict stories. For example, Luka Binniyat wrote a false story on January 24, 2017, regarding the Southern Kaduna crisis that five students of the Kaduna State College of Education, located at Gidan Waya, Kafanchan in Jema'a Local Government Area of Southern Kaduna, were killed by Fulani herdsmen (Bello, 2020). This presents issues of inaccuracy and bias. The researcher is aware that prejudice cannot be escaped but mitigates this limitation by cross-referencing with at least one other reliable newspaper source. The second newspaper source to cross-reference is "Punch newspaper."

The second limitation is the time frame of the study. The newspaper collected spanned from 2016-2020. I intended to look at 2012 to 2020 to understand the conflict escalation patterns. However, I fall ill while collecting data at Covenant University I was only physically able to collect data for five years. However, the data from the newspapers are used for Markov chains and the five years of data is enough because Markov focuses more on the current time and not the far past.

Although the scope of this study is limited, it is also a researcher's responsibility to draw limitations to ensure the rigour of the analysis. Since herder-farmers conflict is so polarised and controversially discussed, it is essential to conduct the research objectively without displaying personal and media biases towards the conflict.

CHAPTER 5

DATA PRESENTATION AND DISCUSSION

This chapter presents the data and discusses its finding. The chapter will simultaneously present and discuss data from the case studies for easy understanding: first, by organising findings by methodology types (qualitative and quantitative). As above mentioned, the summative content analysis represents the qualitative phase, and the Markov chains analysis represent the quantitative analysis phase. For the first phase, the results from the summative content analysis will be presented in tables. In the second phase, the significant patterns of escalation will be identified, the results from the Markov chains analysis are presented in tables and discussed. Then will proceed to briefly discuss the findings from each theme on a case-by-case basis. This phrase concludes by identifying reasons why the conflict escalated into widespread violence and how escalation influences de-escalation. It discusses this with secondary data from newspaper articles, journal articles, and books, drawing inferences from the case studies and other states relevant to the argument.

Qualitative phase: Summative content analysis

Having established the escalation stages into themes: (1) feeling anxiety; (2) debate and critiques; (3) lobby and persuasion; (4) protest and campaigning; (5) access restriction; (6) court case; (7)intimidation and physical exchange; (8) nationalisation and internationalisation. We conducted a summative content analysis of each theme to answer the second research question.

R2: What are significant patterns of escalation in the conflict?

 Findings will be presented on a case-by-case basis starting from Benue State to Enugu State. This is done by first introducing the result in tables, then will briefly discuss the findings from each theme and conclude with an overall observation from data obtained of all the cases

BENUE CONTENT ANALYSIS FINDINGS

Results

In the case of Benue, there are a total of 98 references showing the frequency of occurrence of each of the themes. We found evidence of all 8 of Yasmi, Schanz, Salim's conflict stages of escalation in the Benue state newspaper article dataset. The table below illustrates intimidation and physical exchange outranks all manifestation dimensions with 47 references. The second was feeling anxiety with 23, and the third-highest was the debate and critique, with 10 having

the highest number of occurrences in Benue. There are few references in lobby and persuasion   (3), protesting and campaigning (3), nationalisation and internationalisation (3), court (4) and access restriction (5) (mentioned from lowest to highest)

Stages of escalation	References	Per cent of total references
Feeling of anxiety	23	23.4%
Debate and critique	10	10.2%
Lobby and persuasion	3	3.1%
Protesting and campaigning	3	3.1%
Access restriction	5	5.1%
Court	4	4.1%
Intimidation and physical exchange	47	47.9%
Nationalisation and internationalisation	3	3.1%

Table 2: total number of references in each manifestation dimension for Benue

The second table below presents the references of conflict manifestation dimensions of each stage of escalation for Benue. This is to give a deeper understanding of the behaviours of herders and farmers. Below, a brief description of each actors'

behaviour at each stage of escalation will be discussed.

Conflict manifestation dimensions for Benue	frequen cies
Feeling anxiety	**23**
Disagreement over decisions against farmers	1
Disagreement over decisions against herders	3
Feeling discontent by herders	1
Feeling discontent by farmer	5
Feeling of worry by farmers	9
Feeling of worry by farmers	0
Rumours against farmers	0
Rumours against herders	4
Debate and critique	**10**
Critiques against government policies by farmers	3
Critiques against government policies by herders	4
Open debates by farmers	0
Open debates by herders	1
Verbal accusation by farmers	1
Verbal accusation by herders	1
Lobby and persuasion	**3**
Lobbying for compensation by farmers	0

Lobbying for compensation by herders	0
Lobbying government by herders	1
Lobbying government by farmers	2
Protesting and campaigning	**3**
Protest against government policies by farmers	0
Protest against government policies by herders	0
Protest by herders	0
Protest by local farmers	3
Access restriction	**5**
Blockading roads by farmers	1
Blockading roads by herders	0
Imposed restriction on herders activities	4
Imposed restriction on farmers activities	0
Restrictive law against farmers activities	0
Court	**4**
Court appeal against farmers	1
Court appeal against herders	3
Intimidation and physical exchange	**47**
invasion by herders	5
invasion by farmers	0
Burning of farmers property	3

Burning of herders property	0
Damage of properties by farmers	0
Damage of properties by herders	4
Killings by farmers	2
Killings by herders	23
Police arrest of farmers	0
Police arrest of herders	8
Threat against herders	2
Threats against farmers	0
Nationalisation and institutionalisation	**3**
Appeal to the international court of justice against farmers activities	0
Appeal to the international court of justice against herders' activities	2
Influencing national congress against farmers	0
Influencing national congress against herders	1
International protest against farmers	0
International protest against herders	0

Table 3: overview of Benue cases

Feeling anxiety:

Farmers: Articles with this theme showed expressions of discontent on how the government was tackling the insecurity in Benue. All solutions proposed by the Federal Government's examples are ranching and RUGA settlement solutions. Heightened also is suspicion and worry over the possibility of a reprisal attack and the

sudden influx of herders. Interestingly, this fear is reinforced with rumours from mainly government officials like the governor Samuel Ortom who claimed that herders were after him, to ethnic and social-cultural group leaders raising alarms of a fresh plot by herders to kill more locals and farmers. There are also demands to tighten security at the border and arrest herders who have damaged properties or killed citizens. Raising claims of mobilising their army with the federal government fails to respect the rule of law and their human rights.

Herders: Reports of discontent are expressed by the Miyetti Allah cattle breeding association (MACBAN) over the 2017 anti-open grazing law. There is no expression of fear, worry, or rumour by the herder's group over what farmers or state governments could do or did.

Debate and critique:

Farmer: Articles in this stage heavily criticise the federal government's decision to set up public funds for the RUGA settlement. Farmers were the primary actors directing criticising claims that the RUGA settlement was a plot by the federal government to take their land and give it to herders. They also criticised the president's decision to use 170 billion Naira in constructing ranches and lastly criticises the government's slow response to the middle belt.
Aside from policy criticism, there are verbal accusations from the Christian Association of Nigeria (CAN) over attempts by herders to dislodge farmers from their land.

Herders: At this stage, articles report herders criticising the state Governments for implementing an anti-open grazing law and called for the suspension of the law. The open grazing law was also a bone of contention that resulted in the open debate between the two groups.

Lobbying and persuasion

Farmers: Articles in this theme came from farmers. They first lobbied that herders be called terrorists and then lobbied for security agents to be deployed to Benue.

Herders: Articles under this theme report herders lobbied that the anti-open grazing law be removed.

Court

Farmers: Farmers in this theme appealed the conclusions of the town hall meeting by the federal government requesting a judicial commission of inquiry. However, we are not told the conclusions of the town hall meeting.

Herders: The articles in this theme conveyed MACBAN, a social-cultural association appealing to validate the Benue State Government's anti-open grazing law in the Federal High Court and lost. Several other members of the group have demanded that the law is overturned but have also lost.

Protest and campaigning

Farmers: The theme records three protests. Interestingly, the first protest was immediately after the Agatu massacre. The people staged a protest, storming the national assembly demanding justice. Another was by Youths that turned violent, and the last was by the movement against Fulani occupation (MAFO) of Benue, which was peaceful but strategic routes were blocked.

Herders: This theme records herders or herding socio-cultural organisations held no protests. *Access restriction*

Farmers: Articles in this theme revealed that fear of an invasion caused farmers to barricade the federal highway at Ikpayongo to restrict herders' access to land. Restrictive laws like the
2017 anti-open grazing law were implemented, and livestock guards impounded Cattles of herders in breach of the anti-open grazing law.

Herders: This theme does not mention herders implementing restrictive laws on farmers by herders or herding social-cultural groups. We suggest this could be mainly because the herders were strangers in Benue and had no power to implement or make laws.

Intimidation and physical exchange

Farmers: In this theme, arrests were made by troops of 72 special forces during an invasion, and the police arraigned and arrested herders in violation of the anti-open grazing law. There are no accounts of farmers arrested for killing, or destroying property or violating rules. However, farmers' records of killings in a clash were killings of 35 herders by military troops.

Herders: Articles from this theme documented that herders did the majority of

killings and destruction of property. The victims killed ranged from women, children, men of all ages. What's striking is that livestock guards and security agents killed were the actors impounding herders' cows and arresting herders. Property burnt was that of Governor Samuel Ortom and other government officials. This is contrary to the debate that herders killing were unprovoked (see chapter 3). This instead shows that the killings and violent retaliation responses and not unprovoked savage killings**.**

Nationalisation and institutionalisation

Herders: The articles present no international and national appeals in support of herders or against farmers for this theme

Farmers: For this theme, the international criminal court is requested to investigate the herder's killings by the Human Right Writers Association of Nigeria (HURIWA). ECOWAS is also called to convene to stop killings in Benue.

CONCLUSION

Farmers

Farmers still heavily rely on state institutions and the rule of law to resolve conflicts with herders and protect them from attacks. This can be traced back to the farmer's reliance on community leaders and traditional leaders to resolve conflict (see chapter 3). However, farmers show discontent towards the Federal Government's failure to protect them, and there was

discontent over all the solutions proposed by the president. Farmers counter herder's violence with non-violent actions like protest**s**, road blockage, lobbying, court appeals. This strengthens Achebe's (1958) claim that when the subsistence of a farmer is threatened, he will draw his matchet. In the case of Benue farmers, they draw their non-violent matchet (see chapter 3). State officials, especially governor Orotm, retaliated attacks from herders by impounding animals, arresting herders, and implementing restrictive laws on herding activities.

Herders

Although Herders are primarily the perpetrators of violence, they relied on non-violent tactics like court appeals, lobbies to seek redress through their socio-cultural association MACBAN. This finding counters Noyes' (2004) notion of herder**s** as uncontrollable savage beast**s** having no use or regard for laws. These non-violent tactics, however, do not favour herders. As such, herder**s** have lost confidence in state institutions to be fair to them, so there is almost a dependency on violence to continue their herding activity.

Themes	Sample articles excerpts
Feeling of anxiety	The MINDA strategic contact group (MSCG) is concerned about the rapid inflow of herders and their cattle into Benue State.
Debate and critique	Buhari's proposal of utilising public funds to establish RUGA farming communities for herders is opposed by the governor. Three socio-cultural organisations criticised the program in Benue as a fresh effort to take over the people's land and give it to Fulani from West Africa.
Lobby and persuasion	Elders from Benue's three major tribes have urged President Muhammadu Buhari to declare the Fulani herdsmen's invasion of the state as acts of insurgency and label the perpetrators as terrorists who the military should route.
Protesting and campaigning	Hundreds of Idoma protestors stormed the National Assembly yesterday, demanding justice for the alleged ongoing slaughter in Agatu, Benue South, senatorial area.

Access restriction	As a result of the recent security breaches, Benue state governor Samuel Ortom instructed security personnel to oversee the evacuation of Fulani herders from Buruku and Gboko local government areas.
Court	The Miyetti Allah Kautak Hore Social-Cultural Association and a group of cattle herders have filed an appeal against the Federal High Court in Abuja's decision to uphold the Benue State Government's anti-grazing legislation.
Intimidation and physical exchange	During a Christian wake, herders invaded several villages in the Guma council, murdering seven mourners and rapping two women of a traditional ruler in the area.
Nationalisation and institutionalisation	President Buhari met in Abuja with the Economic Community of West African States (ECOWAS) to devise a plan to end the murders in Benue.

Table 4: Example of Coding of Data

ENUGU CONTENT ANALYSIS

In the case of Enugu, there is a total of 50 references showing the frequency of occurrence of each of the themes. We found evidence of 7 of Yasmi, Schanz, Salim's conflict stages of escalation in the Enugu state newspaper article dataset. The table below shows the feeling of anxiety outranks all manifestation dimensions with (16) references, the second was intimidation and physical exchange with (12), and the third-highest was Access restriction with (10) have the highest number of occurrences in Enugu. There is no reference to court (0), and few references to nationalisation and internationalisation (1), lobby and persuasion (2), protesting and campaigning (4), and debate and critique (5) (mentioned from lowest to highest).

Conflict manifestation dimensions for Enugu	References	Per cent of total references
Feeling of anxiety	16	32%
Debate and critique	5	10%
Lobby and persuasion	2	2%
Protesting and campaigning	4	8%
Access restriction	10	20%
Court	0	0
Intimidation and physical exchange	12	24%
Nationalisation and institutionalisation	1	2%

Table 5: total number of references in each manifestation dimension for Enugu

The references of conflict manifestation aspects of each stage of escalation for Enugu are included in the table below. This is to have a better understanding of herders' and farmers' behaviour. A brief description of each actor's behaviour at each step of escalation is provided below.

Name	Reference
Feeling anxiety	**16**
Disagreement over decisions against farmers	1
Disagreement over decisions against herders	0
Feeling discontent by herders	0
Feeling discontent by farmers	6

Feeling of worry by farmers	6
Feeling of worry by herders	1
Rumours against farmers	0
Rumours against herders	2
Debate and critique	**5**
Critiques against government policies by farmers	0
Critiques against government policies by herders	0
Open debates by farmers	2
Open debates by herders	0
Verbal accusation by farmers	1
Verbal accusation by herders	2
Lobby and persuasion	**1**
Lobbying for compensation by farmers	0
Lobbying for compensation by herders	0
Lobbying government by herders	1
Lobbying government by farmers	1
Protesting and campaigning	**4**
Protest against government policies by farmers	0
Protest against	0

government policies by herders	
Protest by herders	0
Protest by local farmers	4
Access restriction	**10**
Blockading roads by farmers	2
Blockading roads by herders	0
Imposed restriction on herders activities	6
Imposed restriction on farmers activities	1
Restrictive law against farmers activities	0
Restrictive law against herders activities	1
Court	0
Court appeal against farmers	0
Court appeal against herders	0
Intimidation and physical exchange	**12**
Burning of farmers property	0
Burning of herders property	0
Damage of properties by farmers	1
Damage of properties by herders	2
Killings by farmers	0
Killings by herders	6
Police arrest of farmers	0
Police arrest of herders	1
Threat against herders	1
Threats against	1

farmers	
Nationalisation and institutionalisation	**1**
Appeal to the international court of justice against farmers activities	0
Appeal to the international court of justice against herders' activities	0
Influencing national congress against farmers	0
Influencing national congress against herders	0
International protest against farmers	0
International protest against herders	1

Table 6: overview of Enugu case

Feeling anxiety

Farmers: Articles from this theme expressed discontent over the president's silence in stopping herders killings with serious worry over the frequency of attacks. Civil societies groups such as the HURIWA, CAN, religious leaders from the catholic church, farmers union, refugees. The Igbo socio-cultural organisation Ohanaeze and Movement for the Actualisation of the Sovereign State of Biafra (MASSOB) all expressed shared fear and called on the state government to implement laws that will establish armed vigilante groups and gives farmers the license to bear arms. The issue of primary concern for these groups was self-defence, not justice or respect for the rule of law like in the case of Benue. We also observed a breakdown of a symbiotic relationship as farmers expressed discontent over herders selling unhealthy meat at a high cost. Rumours of attacks were taken seriously as an emergency stakeholder meeting was organised over rumours of herders intentions to attack.

Herders: For this theme, herder, after the Nimbo attack, expressed fear of being stigmatised for being Fulani in Enugu. This group expressed no other feelings of anxiety, discontent, anger.

Debate

Farmers: In this theme, farmers primarily accuse herders of dislodging them from their farmlands and overgrazing on land.

Herders: Articles from this theme verbally accuse farmers of stealing their cows and harassing them

Lobbying and persuasion

Farmers: The theme conveys that lobbying is performed by the socio-cultural organisation Ohaneze Ndigbo Youth Council (OYC). They lobby for the establishment of a vigilante group. Having a self-defence mechanism or group is a significant topic in this theme.

Herders: This theme does not refer to any lobbying or persuasion on the side of herders or by the socio-cultural organisation.

Protesting and campaigning

Farmers: Articles in this theme records protests. The Protests were mainly done by the catholic diocese peacefully. During the protest, herders were labelled as killers and uncooperative. Youths were also involved in the protest; their protest comes immediately after a well-respected hunter and woman were killed, respectively. Their protests result in the burning of vehicles and threats of revenge.

Herders: This theme records no protest or campaign held by herders or in support of herders.

Access restriction

Farmers: For this theme, articles record bans on the herder's movement. The first ban from governor Ugwuanyi, who restricted the movement of herders in possession of Ak47, the second from the MASSOB group was more aggressive as they gave a 48-hour ultimatum for herders to vacate Awgu, a local government attacked by herders. There is also resistance from the state governor and farmers to donating their land for ranching.

Herders: Articles in this theme records no restrictive law and action were imposed on farmers by herders or herding social-cultural groups.

Courts

No court appeal was recorded. This peaks interest as both groups accuse each other of wrongdoing but never legally seek justice for their hurts.

Intimidation and physical exchange:

Farmers: No record of attack from farmers or arrests. There are, however, accounts of damaging property as tempers flared over the death of a woman. I suspect that access restriction is a preferred technique by farmers to consolidate their influence over herders.

Herders: This theme conveys herders did the majority of killings and destruction of property. The victims killed ranged from women, private guards, catholic priests, farmers and hunters.

Nationalisation and institutionalisation

Farmers: The article records Igbos in diaspora protested against the Enugu killing in the United Kingdom and South Africa.

Herders: The articles present no international and national appeals in support of herders or against farmers.

CONCLUSION

Farmers: The primary concern for farmers is self-defence, having a vigilante group and bearing firearms. This is heightened by the Federal Government's silence on the killings in Enugu and the State Government's improvidence in providing anti-open grazing laws. As in Aguilar's (2003) study, the low confidence of farmers in the government is rooted in their cultural differences and the civil war. The civil war specifically left the Igbo people (the Enugus) with a lifetime feeling of anxiety and perceived marginalisation in contemporary Nigeria (Oloyede, 2009). This memory of marginalisation translates to the renewed youth's agitation for the nationhood of Biafra since the government is not protecting their interests.

This memory translates to the herder-farmer conflict as it creates distrust and the

belief that the government will strip them of their lands and property after losing the civil war. Coupled with the relationship disintegration of their symbiotic farmer's relationship with herders, as farmers claim herders are selling unhealthy meat. We observe a lower presence of the State Government in the conflict as in Benue. Rather, MASSOB, farmers union, the Igbo socio-cultural group OYC are more involved. We suggest these actors have a stake in agro-investment or have clients who do, hence, their involvement in the conflict (see chapter 3).

Herders: Herders in the Enugu are not as confident as herders in Benue. They express fear of an attack from farmers with the statement, "I'm prone to attack every time I move out because I am a Fulani man. I am prone to attacks and harassment" (The Guardian, 2016). They also expressed great worry over their cows being stolen but never reported their case nor requested justice or compensation. We highlight their settler identity as reasons for being in fear but not taking legal actions. Unlike in Benue, we observe the killings in Enugu are provoked but irrational. In this case, people were not over things that could be seen as forgivable. For example, the killing of the private guard over not allowing a herder to pluck mangos and the killing of a hunter over a cow accidentally stepping on his traps, unlike the Benue case, which was over the anti-open grazing law that restricted their production systems. This suggests that seemingly random events could affect the conflict outcome.

Both groups live in more fear than violence in Enugu than in Benue. But in both cases, the study observes that fear raises suspicion that creates a perception that action by ''others'' would bring negative impacts to ''my own'' group's interests or performance. The fear further encourages ''intra-group'' coordination to counteract the action to avoid or minimise the perceived negative impacts. In both cases, we observe a significant occurrence of access restriction on herders. Benard et al. (2010) explain that access restriction is a damnatory action to herder's production system, highlighting that the south and north-central states are trading hubs for herders due to demand for beef from these states. As such, I suggest access restriction as a consolidating tactic of the power of farmers; although not violent, is an attack on the sustenance of herders and, according to Mortiz (2008), an attack on herders identity (see chapter3).

Stages of escalation	Sample articles excerpts
Feeling of anxiety	The Archbishop of Enugu Province has cautioned that repeated attacks and killings of innocent civilians by suspected herders are possible elements that might lead to another civil war.
Debate and critique	Herders in Ukpani Nimbo and neighbouring communities in the Uzo-Uwani village reported that their cows had gotten stolen. They accuse the nomads of driving them out of their fields, while ethnic Fulani herdsmen leaders claim that the villagers harass and assault them.
Lobby and persuasion	Following MACBAN's call for a vigilante squad in the zone at a recent security conference hosted by the Southeast Governor's Forum in Enugu, the (OYC) followed the request for a vigilante group.
Protesting and campaigning	Youths from the Nchatancha and Obinagu communities in Enugu state protested the alleged kidnapping and murder of Mrs Pat Ngwu by herders.
Access restriction	MASSOB gave herders a 48-hour deadline to leave the Ogboli-Ohaja village in Enugu state's Awgu local government area
Court	
Intimidation and physical exchange	Suspected herders in Enugu state's Ezeagu council have damaged rice seedlings worth over $8 million.
Nationalisation and institutionalisation	Nigerians in diaspora conducted rallies in the United Kingdom and South Africa.

Table 7: Example of Line-by-Line Coding of Data

WHY DID THE CONFLICT ESCALATE?

A combined break from the secondary data and the articles used for the content analysis on the selected case studies and other states will explain why the conflict escalated after the onset.

Reasons For Escalation

Before providing the reasons for escalation, the researcher points to chapter 3 of the study that established that the herder-farmer conflict involves differences in the following object of conflict: interests (economic benefits, control of resources), need (security, recognition of rights, identity), value (justice, equality, order), rights (that threats their expression of justice). The presence of one or multiple objects causes conflict. This chapter reports factors that intensify these objects to intractable levels.

Politics of fear

Firstly, our study points to the politics of fear as a factor of escalation. Without disputing the role of "big men" – political-military entrepreneurs and their intermediaries – in the driving of violence, the study highlights politicians and agro-investors as core distributors of fear. Bizot (2021) points out that fear creates suspicion and anger that taints the disputant's perceptions and creates mistrust, making resolution challenging to reach. Thus, this study suggests that these agents use fear politics to build counter-responses to herder-farmer conflict and maintain hegemony. The utmost urgency induced by the prospect of intimidation or physical assault and the presence of a dangerous enemy within works to protect the political interests of politicians and the economic profits of investors. The fundamental ideological goal of fabricating such a compelling narrative of threat and danger is to legitimise and normalise the concept of pre-emptive war against the other adversaries while also disciplining internal sources of dissent. These strategies project an ability to protect and guarantee's these leaders a win in their next elections on the state and local levels. These actors do this by drawing on the existing ecological -scarcity that casts doubt on the survival of the agricultural system and the historical trauma of loss and memory of injustice. In the Igbo community, for instance, Smith (2006:37) established that the trauma of loss, especially from Igbos in Northern Nigeria, who were dislodged

from their lands during the civil war, produces memories of victimisation that gives an image that allowing a course of action brings dire consequences (Oloyede, 2009). For instance, Most Rev. Emmanuel Chukwuma, Archbishop of Enugu Province, cautioned that "repeated attacks and killings of innocent civilians by herders are possible elements that might lead to another civil war "(Njoku, 2016:5).

Another example is the Acting Governor of Benue State, Benson Abounu. He expressed concern that hired armed "herders are being placed in five key villages to launch an attack to seize control of the state" (Wantu, 2018: 7). The archbishop is cautious of making a conclusive statement of an outright war but leaves it to the citizen's imagination to recall their losses during the war. At the same time, the governor uses his speech to give the notion that herders are a threat as their interest is power, which incites fear. Although Sultan of Sokoto, Sa'ad Abubakr, Nigeria's top Islamic authority, tries to revoke this conception of herders as a threat by describing herders as "peace-loving and law-abiding," the fear speech on social media and traditional media outweighs the counter notion of herders (Chukwuma, 2020). Ultimately, Adewole (2018) argues that the politics of blame along political party lines inflames conflict to extreme levels.

The speech acts of these actors give a false understanding of a situation that provokes both groups to perceive the other as a threat and act on worst-case scenarios, based on developed negative conceptions by politicians and agro-investors. Ultimately, the conflict escalates based on how much fear is incited onto the parties' object of need and interest. This causes both parties to take defensive actions (protests, arrests, access restriction, court appeal) to reduce perceived losses,

Media

Similar to the politics of fear, media presentation of conflicting parties influences the government and the governed's decision-making and opinion formation. While the media may be commended for bringing to light acts of violence, progress in the conflict resolution process, and promoting the peace movement, it has also been implicated as a negative propaganda weapon for dividing people and inflaming tensions (Tsikata & Seini, 2004). Many words have been exchanged in the media since the dispute began, ranging from press conferences to editorials published by experts and representatives of the conflicting sides. However, the effects of this media frenzy are uneven. Even though media stories are essential in drawing the

attention of the state to acts of violence, they also serve as antecedents to retaliatory action by the parties involved in the dispute. In the case of the herder-farmer conflict in Nigeria, we observe that the public is bombarded with media depictions of herders as savages with no humanity, with newspaper titles like: "#Ebonyi massacre: Herdsmen kill 30 indigenes" (Okutu, 2021), "Fulani Herdsmen Murder 56 In Fresh Killings" (Babajide, 2021), "Nigeria Fulani herdsmen attack: Pregnant woman don die for Ekiti" (BBC, 2018), "We're under siege, war is imminent — Southwest farmers" (Akure, 2021) The stories contain religious and political connotation that portray farmers as being under siege. The concerns were described in the press as repeated acts perpetrated by individuals (the Fulani). This attribution of blame demonstrates that Fulani herders are a dangerous human species that is dominating and invasive. This sensational form of reporting provokes fear making it unlikely that the same individuals who believe Fulani herders are fundamentally violent would be receptive to a meaningful dialogue with them or support any efforts to resolve the conflict.

Popular punishment and vengeance

Our study highlights Popular punishment and vengeance as a factor of escalation. According to Eke (2020), both sides have suffered loss, but it's not just that the incurred loss of property or people but the sudden and gruesome way such loss occurs. For instance, in Nasarawa, Akinloye (2016) reports ECWA pastor Zakariya, killed on his farm with his three sons, their bodies found dismembered. Farmer Uzodimma lost his rice seedlings valued at 8 million to herders in Enugu (Njoku, 2016). In Afikpo North, A farmer Onya-Oko and his wife were found dead on their farm (Okutu, 2020); in Ekiti, herders kill a pregnant woman (BBC, 2021)**.** In the herder-farmer conflict, victims include men, women, children and infants. The victimology of the conflict suggests to community members and farmers that "this could be

any one of us at any time". No one is exempted from the attacks from religious leaders to

children and pregnant women, increasing the sense of fear. Also, we recognise that the conflict's victimology is of individuals regarded by members of their community as vulnerable groups, revered and valuable in their communities. This indicates these acts of physical violence were intentionally carried out to inflict psychological fear and physical hurt that could paralyse or destroy every rational judgment of the other party. The localised aspect of this conflict incites fear and hate accompanied by a vengeance

strategy for managing threats through violent vigilantism. Both parties claim that actions by the other necessitated heavy punishment. For instance, in Ekiti state, the killing of the pregnant women necessitated a security meeting with Hunters by Governor Fayose to protect the community.

Similarly, in Afikpo, traditional rulers banned slaughtering and selling cows in their local government (Ukah, 2021). In Nasarawa, youths staged a protest and threatened to go after herders. At the same time, the murder in 2018 of several individuals in Plateau State in retaliation for the murder of 300 cows by the farmers' communities (Vanguard, 2018). These punishments are essential to protect them from danger while also deterring other potential attackers. They refer to these types of retribution as justice, but Glasl (1997) explains that at this point, the conflict is a zero-sum game; both sides feel the other's loss is their gain. Thomas Jordan (1997) pointed out, these losses provide no advantage to them but the satisfaction that the other is suffering more. For instance, a farmer might rustle cows to see herders suffer and vice versa. At this state conflict management efforts are futile as both parties see no point of turn in their rage.

Government failure

The resort to popular punishment comes as the Nigerian government breaks its social contract to protect. The Federal Government appears to be hesitant on regulating grazing laws across the country, and as a result, no national policy or arrangement has been created. Youth in the North-central and South of Nigeria express discontent with president Buhari's incompetence and silence on killings by herders (Ujumadu and Agbo, 2021). Similarly, the Legislature has shown little ability to resolve conflicts or agree on legislation that improves relations between herders and farmers. For example, in 2012, the National Assembly was torn about introducing the Federal Grazing Reserve Bill (Suleiman 2012). Likewise, in addressing the issue, the justice system has not been able to act efficiently. The absence of a system that checks and balances the activities of farmers and herders have led the conflicting party to consider violence as groups are distrustful of government intentions to protect their interest. Kauffman (1996) describes this as a de facto situation of anarchy. The Nigerian government's perceived and real inefficiency has added to the troubles of farmer-herder victims and helped spread the violence.

Additionally, government security agencies have demonstrated their

unwillingness to defend Nigerians from this menace. The police are accused of incompetence and partiality in the face of the violence and bloodshed between herders and rural farmers. To underscore this view, farmers in the Nimbo community, Enugu, have accused the police of not promptly responding when they are at the receiving end of violence.

Similarly, farmers in Taraba allege that the government intervened within 48 hours after they attacked herders. No such response is coordinated when herders have the upper hand (Vanguard, 2017). This perceived injustice in the provision of security mixed with the historical feeling of marginalisation results in the persistence of self-help and violence to protect land rights. In the absence of national authority to guarantee or balance the activities of each other, herders and farmers are left with no choice but to protect themselves (self-help), making conflicting parties suspicious and fearful of each other's intentions; at this point, escalation is inescapable. Additional, the conflict management efforts does easy suspicion as each group perceive government intervention as an attempt to take their right and downgrade their identity (see chapter 3).

In general, the country's inability to resolve conflict at all levels has not only served as a springboard for conflict between farmers and herders. It also created an opportunity for recurrence and an unhealthy expansion of the conflict. It has also prompted local governments to take matters into their own hands. The two sides in this battle have become so powerful that they are now meticulously preparing for an ultimate clash. The herders are now armed with modern weaponry that they are willing to use for any cause. Farmers are also known to have weapon stockpiles in their villages, which they use during violent clashes. Both sides now employ well-known contemporary warfare methods in their battles, such as sieges, invasions, scorched earth tactics, guerrilla tactics, and mercenary warfare (Onah and Olajide, 2020).

DE-ESCALATION OF THE HERDER-FARMER CONFLICT

We observe that the escalation from 2016 is not progressive but somewhat sporadic and inconsistent (see figure 1)
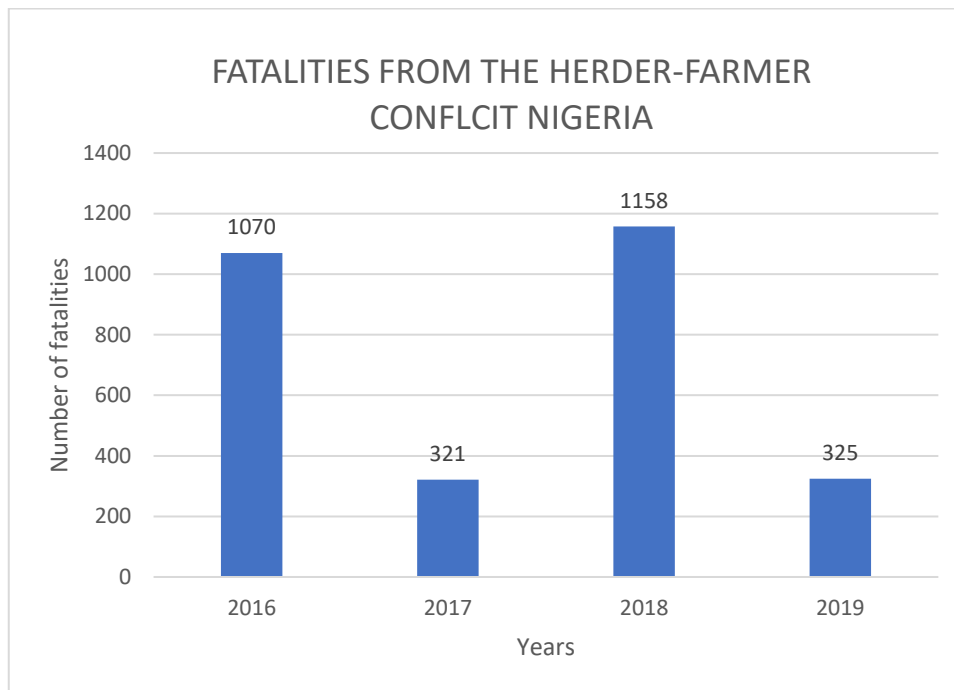
Source: IEP 2017, 2018, 2019, 2020

The chat shows the number of fatalities from the herder-farmer conflict from 2016 to 2019. What can be seen in this chart is an up-down effect on fatality rates; A drastic increase in fatality rates in 2016 at 1070 that is followed by a sudden decrease in 2017 at 321 and vis- versa. We argue that escalation may resolve to de-escalation. According to dynamical system theorists Vallacher, Coleman, and Nowak (2011), the factors that organise herders and farmers into more conflict mutually reinforce and are self-perpetuating and, therefore, resistant to constructive change. The factors identified by this study are politics of fear, media framing, Popular punishment and vengeance and government failure. These factors sustain the conflict by keeping conflicting parties in a frozen state of psychological anger, fear and frustration. Any positive turn in these factors will de-escalate the conflict because these factors address the presenting problems of herders and farmers with economic preservation and their underlying issue of self-actualisation and self-respect. This argument does not apply to all cases in Nigeria as the conflict is dynamic. However, we make this argument based on the combined break from the content analysis and secondary data (books, journals, and newspapers). .

First, Bjork (2015) established that the absence of central authority to impose behavioural standards leaves counter-parties to self-defence. Therefore, anarchy creates an uncontrollable spiral of insecurity. In a situation where there is a system that checks and balances the other party's actions, peace is maintained. In the case of the herder-farmer conflict, we observed the 2019 de-escalation could be attributed to the federal government's absence in guaranteeing stability and fulfilling its duties to protect against violence in terms of fatalities. After the January attack at Aguta, Benue, attacks and reprisal attacks were recorded, and by May, clashes declined. Wantu (2018) attributes this to the deployment of the military operation (Whirl Stroke) on May 18, 2018, and the presidential visit to Benue. Governor Ortom commented that the visit was a signal of the end of the attack, restoration of hope that government will protect.

Similarly, the Senate committed to arresting perpetrators of violence. These renewed commitments to security resulted in the reduction of attacks in Benue. This evidence suggests that signs of commitment to social contract communicate to conflicting parties that their land rights are respected and protected, therefore, preventing both parties to resort to self-defence. As Ramsbotham and Woodhouse (1999) studys', reducing the political space that characterises conflict escalation and increasing the political space that represents conflict de-escalation produces unexpected breakthroughs. Consequently, Awotokun, Nwozor and Olanrewaju (2020) point that the violent interaction between herders and farmers manifests cyclically. Each party is reacting to the others' attack. Therefore, there is no need for self-defence and popular punishment and vengeance as a tool for justice in a situation where there are fewer attacks and killings.

Contrarily, Olumide (2018) credits the government renewed commitment to security to the 2019 election. He explained that the conflict poses a threat for candidates' re-election, especially President Buhari. His silence on the conflict cast a negative perception on his administration. His visit to the North-central States (the most affected region) was a means to protect his political interest (Wantu, 2018). The re-election of the State Governors was also at stake. Governor Samuel Ortom of Benue had to score a political point with his constituents hence the severe disciplining of dissent via arrest, access restriction, animal impound (see content analysis). This reinforces the study's claim that politicians and agro-investors construct a narrative of threat and peace to legitimise and normalise the concept of pre-emptive war against

the other adversaries for their interest,

Lastly, Tsikata and Seini (2004) maintain that media can promote peace movements and serve as an opposing propaganda weapon for dividing people and inflaming tensions. In the herder-farmer conflict case, the stereotypical straight reporting of the conflict provokes fear in others. The more of this reporting, the more the violence and the less the reporting, the lower the violence. Amaadi and Batigbon (2021) records the Frequency

2016	2017	2018	Total
34	27	98	159

Table 8: Frequency of farmers/herdsmen clashes in The Punch newspapers from 2016-2018.

Punch reports more on the herder-farmer conflict in 2016 than in 2017. This dip in reporting is reflected in decline in fatality numbers in 2017 (see figure 1). In 2018, reporting spiked to 98, and so did fatalities.

Adding to their findings, they observed that reports on herder-farmer conflict were mainly published with religious and political connotations, and they essentially portrayed farmers as being under siege (Amaadi and Batigbon, 2021). The press described the concerns as repeated acts perpetrated by individuals (Fulanis). This attribution of blame demonstrates that Fulani herders are a dangerous human species that is dominating and invasive. The Fulani, aware of the power of the media, requested their radio states, but leaders warned that the station would propagate hostile propaganda against other ethnic groups. However, the request for a Fulani radio station was denied in 2019 (Olumide and Jimoh, 2019). We argue This politicisation of ethnic and religious ties intensifies conflict, and any change in framing or reduction in such media reporting de-escalates conflicts.

Conclusion

The section presents empirical results of the content analysis carried out for both Benue and Enugu. The study perceives that clashes (intimidation and physical exchange) prevents the tension (anger, discontent, criticism) from being relaxed and, in turn, the pressure from non-violent tactics maintain the conflict. There is high tension within individuals because their frozen state is sustained by psychological

forces such as frustration, anger, and fear, honour. Here, there is tension between natural tendencies to adapt to the environment and a prevailing, non-functional state. There is also tension between people. The social networks consist of two highly coherent but practically disjointed components (us vs. them), as their interactions are virtually limited to exchanges of hostilities. These actors are locked in a cycle of escalation and de-escalation. This is because the factors that organise herders and farmers into more conflict mutually reinforce and are self-perpetuating and resistant to constructive change.

Quantitative Phase: Markov Chains Approach

We conducted a Markov chains approach of each stage of escalation to answer the second research question.

R2: What are significant patterns of escalation in the conflict?

Findings would be provided on a case-by-case basis beginning from Benue state to Enugu state. This is done by first showing the result in tables then briefly discussing the findings from each stage, and ending with an overall observation from data gathered of all the cases. As mentioned (see chapter 2), the Markov chains analysis does not include explanations of why the patterns escalation are significant, so the researcher using other literature will make meaning of the identified significant patterns of escalation.

Markov chains

In investigating which escalation patterns are significant and the probabilities of each stage of conflict escalation to transform to the following stages, the results from NVIVO are inputted into Python for the one-step Markov approach. We numerically coded each example. We assigned 1 for "anxiety feelings," 2 for "debate and critique," 3 for "Lobby and Persuasion," 4 for "Protest and Campaigning," 5 for "Access Restriction," 6 for "Court," 7 for "Intimidation and physical exchange," and 8 for "national or internationalisation." If a case study is coded as "1574", it should be read as "anxiety feeling," "access restriction," "intimidation and physical exchange." ''protesting and campaigning''.

We used a one-step Markov Chain method to see whether patterns of escalation are significant. The following is a critical assumption in this approach: the

likelihood of the next stage of conflict (Sn) based on the history of conflict stages (S1, S2,..., Sc) is only impacted by the present stage (Sc). Given the dataset's eight potential stages, we calculated the conditional probability of the next stage given the previous immediate stage, as indicated by the formula:

P (Sn=t|Sc= r) for all r, t = 1; 2; . . . ; 8

Where Sn is the next stage, Sc is the current stage, for all r; t is 1; 2; . . .; 8 of the stages of escalation.

BENUE STATE MARKOV CHAINS RESULTS

r

R	T						
	1	2	3	4	5	6	7
1	0.0	0.22	0.12	0.21	0.14	0.19	0.12
2	0.1	0.12	0.12	0.13	0.15	0.13	0.15
3	0.0	0.0	0.1	0.37	0.31	0.22	0.0
4	0.0	0.0	0.0	0.2	0.2	0.24	0.26
5	0.0	0.0	0.0	0.14	0.16	0.24	0.33
6	0.0	0.0	0.0	0.25	0.16	0.0	0.25
7	0.0	0.0	0.0	0.22	0.0	0.37	0.05
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 9: The probabilities of each stage transforming to the next stages

1. Feeling Anxiety

2. Debate and Critique

3. Lobby and Persuasion

4. Protest and Campaigning

5. Access Restriction

6. Court

7. Intimidation and physical exchange

8. National and Internalisation

Based on the premise above, the table above shows the probability for all pairings of (r, t). The table is read in the following way. For example, if r = 1 (anxiety), the chance of the following stage is (t) 2 (debate and critique) is 0.2. on the other hand, if r = 4 (protest and campaigning), the chance of developing to (t) 5 (access restriction)

and (t) 7 (intimidation and physical exchange are 0.2 and 0.26, respectively. While "debate and critique" has a high chance of progressing to all the following stages, "nationalisation/internationalisation" has no chance of progressing to the next stage at all (all probabilities for other stages are 0)

The 95% confidence range was randomly selected in Python for each probability by producing 1000 bootstrap samples of the conflicts data to see which stage transition is not significant (unlikely to occur). The 2.5th and 97.5th percentiles of the bootstrapped is the probability of creating the 95% confidence interval limits. From the table, probabilities with 0 transition matrix are insignificant. The stage transition represented by that probability is unlikely to occur. Put differently, for stage transitions to be significant, each pair of transitions within them must be significant. For example, a shift from the Protest and Campaigning state (4) to the feeling of anxiety (1) is unlikely to occur because the probability from that transition matrix is represented as 0. Similarly, following escalation patterns 4- 1- 3 (Protest and Campaigning- the feeling of anxiety-lobby and persuasion) is not a significant pattern of escalation. The transition from any stage to ''nationalisation and internationalisation" is insignificant in the transition matrix.

Sequence of escalation	Probability of Sequence
'Anxiety' → 'Protest' → 'Court'	0.05
'Anxiety' → 'Access' → 'N/Internationalization'	0.0182
'Anxiety' → 'Intimidation' → 'Protest' → 'Access'	0.00528
'Anxiety' → 'Debate' → 'Access' → 'Protest'	0.00462
'Anxiety' → 'Protest' → 'Court' → 'Protest' → 'Intimidation'	0.003276
'Anxiety' → 'Access' → 'Intimidation' → 'Protest' →'Intimidation'	0.00264
'Anxiety' → 'Court' → 'Access' → 'Protest' → 'Intimidation' → 'N/Internationalization'	0.000398

Table10:significant patterns of conflict escalation in Benue state's herder-farmer conflict

From the table above, we find 30 significant scalation patterns in our dataset. However, some of these patterns exhibit short chains (three transitions), for instance, "anxiety-protest-court" and "anxiety-access restriction-nationalization-internationalization." Two patterns have 5 and 6 transition chains, respectively. The longest chain has six transition chains. We observed that the most significant pattern of escalation in Benue state is "anxiety-protest-court with 0.05 probability of escalating. This is followed by "anxiety-access restriction-nationalization and internationalization with 0.0182 probability. The least significant pattern of escalation on the table is "Anxiety-court-accessrestriction-protest-intimidation physical exchange nationalisation and internationalisation with 0.000398 likelihood of occurring. These patterns suggest that herders and farmers are more likely to rely on non-violence tactics if the yield the desired results, explaining herders and farmers resort to self-help through violence.

Interestingly, all the significant patterns begin with anxiety but do not directly progress to intimidation with the exemption of the "anxiety-intimidation-protest-access restriction" pattern. However, note that even after it moves from anxiety to intimidation, the return to non-violence tactics. This indicates that a situation of outright widespread violence occurs over time when all non-violent tactics have been exhausted. Additionally, what stands out is the first two significant patterns of escalation, "anxiety-protest-court" and "anxiety-access restriction nationalisation and internationalisation. The first pattern advances from feeling angry and discontent to demanding their rights protected in protest and court appeals. This suggests that both parties are happier when there is justice and equality. When the court hearing or appeals are perceived as unjust and taking their right to sustain their lives, both resorts to continue their production systems (see van Leeuwen and van der Haar, 2016).

Furthermore, it is worth noting that in a country like Nigeria with a deep and protracted history of ethnic and religious group marginalisation and injustice, government officials have to be cautious of what happens in this pattern of escalation. The second pattern progresses from anxiety to access restriction. It ends with nationalisation and internationalisation, indicating that international courts or interventions could be used to calm the conflict. Secondly, the immediate nationalisation or internationalisation of media reporting of the conflict poses a problem as there is a heightened likelihood of wrong crisis framing and word construction that demonizes a group against the other or increases pre-existing

stereotypes. This creates a sense of fear of the present and future intentions, forcing conflicting parties to act on their worst-case scenario.

ENUGU STATE MARKOV CHAINS RESULTS

R	T							
	1	2	3	4	5	6	7	8
1	0.0	0.10	0.24	0.15	0.20	0.19	0.12	0.0
2	0.2	0.11	0.12	0.10	0.15	0.16	0.17	0.08
3	0.0	0.0	0.14	0.33	0.35	0.18	0.0	0.0
4	0.0	0.0	0.0	0.34	0.2	0.22	0.24	0.12
5	0.0	0.0	0.0	0.17	0.18	0.17	0.30	0.18
6	0.0	0.0	0.0	0.3	0.11	0.0	0.34	0.25
7	0.0	0.0	0.0	0.20	0.0	0.39	0.1	0.31
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0

Table11: The probabilities of each stage transforming to the next stages

1-Feeling Anxiety

2 - Debate and Critique

3 - Lobby and Persuasion

4 - Protest and Campaigning

5 - Access Restriction

6 - Court

7 – Intimidation and physical exchange

8 - National and Internalization

The table above shows the probability for all pairings of (r, t) occurring. The table reads in the following way. For example, if r = 1 (anxiety), the chance of the next stage is (t) 4 ("protest and campaigning") is 0.15. On the other hand, if r = 4 (protest and campaigning), the chance of developing to (t) 2 (debate and critique) is 0, meaning there is no chance of conflict starting from protest to debate; However, from r (4) to (t) 7 (intimidation and physical exchange are 0.24. While "debate and critique" has a high chance of progressing to all the next stages,

"nationalisation/internationalisation" has no chance of progressing to the next stage at all (all probabilities for other stages are 0).

The 95% confidence range was randomly selected in phyton for each probability by producing 1000 bootstrap samples of the conflicts data to see which transition pattern is not significant   (unlikely to occur). The 2.5th and 97.5th percentiles of the bootstrapped is the probability of creating the 95% confidence interval limits. From the table, probabilities with 0 transition matrix are insignificant. The stage transition represented by that probability is unlikely to   occur. Put differently, for stage transitions to be significant, each pair of transitions within them must be significant. For example, a shift from the Protest and Campaigning state (4) to the feeling of anxiety (1) is unlikely to occur because the probability from that transition matrix is represented as 0. Similarly, following escalation pattern 7- 3- 5 (intimidation and physical exchange-lobby and persuasion-access restriction) is no significant pattern of escalation. It is   also evident that the transition from nationalisation and internationalisation" to any stage is insignificant in the transition matrix

Sequence of escalation	Probability of Sequence
'Anxiety' → 'Lobby' → 'Access'	0.084
'Anxiety' → 'Lobby' → 'Protest'	0.079
'Anxiety'→ 'Access'→ 'Intimidation'	0.06
'Anxiety'→'Court'→'Protest'	0.057
'Anxiety'→'Lobby'→'Court'→'Intimidation'→'Protest'	0.0029
'Anxiety'→'Lobby'→'Access'→'Intimidation'→'Court'→'N/Internationalization'	0.0024
'Anxiety'→'Lobby'→ 'Access'→'Intimidation'→'Protest'→'Court'→'N/Internationalization'	0.00028

Table 12: Significant patterns of conflict escalation in Enugu state's herder-farmer conflict

From the table above, we find 30 significant scalation patterns in our dataset. The longest transition pattern has seven transition chains. However, four transition patterns exhibit short chains of three transitions, for example, "anxiety-lobby-access restriction; "anxiety-lobby protest", and one pattern has 5 and 6 transition chains, respectively. According to Yasmi, Schanz, and Salim (2006), short transition explains that the historical development of the conflict in the state is being understudied or that the cultures of conflict are negative. Thus avoidance might be overemphasised, making conflict escalation observation difficult. We observe that the significant pattern of escalation in Enugu is the "anxiety-lobby-access restriction" with 0.084 probability. This the followed by "Anxiety-lobby-protest" with 0.079. the least significant pattern is "anxiety-lobby-access-intimidation-protest-court-nationalisation and internationalisation with a 0.00028 probability of occurring. It is worth noting that although all the transition begins with anxiety, none of the transition is the same. We highlight that all the patterns displayed above start from anxiety, suggesting that the anxiety stage affects the conflict outcomes. Therefore, government officials and policymakers should listen to the motional reactions of discontent and complaints, and rumours. This finding is reinforced by Glasl (1999) study, which postulates a need to maintain the same attention on incompatibility as irritations; failure to do so leads to the circular reactions of violence.

Sightly similar to the Benue case, all the significant patterns begin with anxiety but do not   directly progress to intimidation. This indicates that a situation of outright widespread violence occurs over time when all non-violent tactics have been exhausted. Interestingly, the most significant pattern of escalation contains lobbying and persuasion. Suppose we recall that from the content analysis of Enugu, lobbying and persuasion was the second-lowest reference with 2. This could bring to question the accuracy of the two significant escalation patterns as "anxiety-lobby- access" and "anxiety-lobby-protest". The study highlights that Enugu is an Igbo state with reliance on traditional systems of leaders to resolve conflict; perhaps lobbies are made to local leaders that have gone unrecorded in media reporting. That said, lobbying and persuasion of conflict are essential because many herder-farmer conflicts exist in serval states.

In addition, what stands out in the Enugu transition pattern is the last two patterns, "Anxiety lobby-access-intimidation   and   physical   exchange-court-nationalisation and   internationalisation" and anxiety-lobby-access-intimidation and physical   exchange-protest   and   campaigning- court-nationalisation   and

internationalisation. The middle of both transition chains is intimidation. It is preceded by access restriction and proceeded by non-violence stages. This suggests that either both or one of the conflicting parties is open to peace; however, the nationalisation and internationalisation stage in these patterns could either negatively or positively impact peace processes.

DISCUSSION OF THE QUANTITATIVE RESULTS

Hypotheses (1): The escalation of the herder-farmer conflict is not linear nor similar in different states in Nigeria

Within the results of the Martov chains, this study supports the hypothesis. *The escalation of the herder-farmer conflict is not linear nor similar in different states in Nigeria*. The Overall results above show that in both Enugu and Benue, none of the transition patterns is identical.   Although both states transition patterns start with "anxiety", the proceeding stages in the chain are different. We can conclude that the escalation of the herder-farmer conflict in both states does not have similar or linear transition patterns.

Additionally, Cox and Miller (2001) explain that if the probability of future return to that state is one, the chain's state is recurrent. Therefore, since none of the patterns from both cases is 1, we conclude that no state or state is recurring. From the following, the study recommends that in tackling the conflict, policymakers make state-specific or local government-specific solutions that capture the area's history and political, economic and social interaction prevent   zero-sum tilts in policy recommendations

Another important conclusion from this study is that there is no substantial transition from any stage to ''nationalisation/internationalisation'' This may be related to the nature of the instances   covered. As with other herder-conflict studies, the primary context of contention is physical violence, institutional management, etc. Therefore, only within certain limits would escalation be observed. Nevertheless, to say that ''nationalisation/internationalisation'' of conflict is not essential is ''unwise'' because many herder-farmer conflicts in serval states do have global dimensions.

CRITICISM

A primary criticism of this study may be that the Markov chains approach does not example why the identified patterns are significant. Giving the why to the

significant patterns of escalation would give urgency to policymakers to intervene. Future works could build models to explain the significance of the patterns of escalation.

As previously indicated, the actor plays an essential part in echoing and numbing conflict. Therefore, an additional area that future research might look into is the framing of conflict from the theoretical perspective of conflict de-escalation. Overall, the Markov chains analysis has proven to be insightful for not solely identifying patterns of escalation but in establishing both internal and external capabilities to cope with it. The scope of this study reinstated dynamic systems theory's incentive to examine the complexity of the conflict over time rather than studying a single event. By taking into account the contextual and historical actions. changes in the actor's tactics, perceptions, capacity, or rhetoric to the Nigerian herder-farmer conflict.

CHAPTER 6

CONCLUSION OF THE STUDY

The research encircles the question "what are significant patterns of herder-farmer conflict" through a mixed method of content analysis and Markov chains analysis. It identified the significant patterns of escalation in Benue and Enugu state and supports the claim that the pattern of conflict escalation is neither similar, linear, nor recurrent.

Having established the dynamism of the conflict, the study gave a historical context in which the herder-farmer conflict in Nigeria occurred to understand the temporal and permanent changes in the interaction between the groups. We observed that in Nigeria, the herder-farmer conflicts are more explosive when they occur within ethnoreligious antagonism, lawlessness, and exclusionary politics. Nigeria is a society deeply split along ethnic, religious, and regional fault lines. These are visible in the public realm, where political authority and resources are shared. Due to claims and counter-claims for group rights by various cleavages in Nigeria, the distribution of public commodities frequently takes on an exclusive character of primarily Christian and Animist farmers, and herders who are predominantly Muslim are rapidly turning the conflict ethnoreligious (Harnischfeger, 2004).

Having analysed why the conflict escalated, the research confirms that the escalation factors influence the de-escalation of the conflict. Pinning this result back to the theoretical framework provided in Chapter 2, the dynamic system perspective on de-escalation remains driven by a collection of interconnected and interdependent elements (such as fear, institutional violence, injustice, and ethnic/religious division) that organise into more conflict that become mutually reinforcing and self-perpetuating event, and therefore resistant to change. Confirming that the escalation and de-escalation of the conflict is a direct product of the country's history, politics, socialisation, economy, and cultural identity. Each of these elements reinforces and influence each other to sustain a coordinated state of violence.

Finally, the study has shown that a general resolution will not end the conflict. Instead, the researcher recommends state-specific or local government-specific solutions that capture the area's history and political, economic, and social interaction prevent zero-sum tilts in policy recommendations.

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Appendix A.

```python
import numpy as np
import random as rm

# The statespace
'''
1 - Feeling Anxiety
2 - Debate and Critique
3 - Lobby and Persuasion
4 - Protest and Campaigning
5 - Access Restriction
6 - Court
7 - Intimidation
8 - National and Internalization
'''
states = ["Anxiety", "Debate", "Lobby", "Protest", "Access", "Court", "Intimidation",
"N/Internationalization"]

# Possible sequences of events
transitionName = [["11", "12", "13", "14", "15", "16", "17", "18"], ["21", "22", "23", "24", "25", "26", "27",
"28"],
            ["31", "32", "33", "34", "35", "36", "37", "38"], ["41", "42", "43", "44", "45", "46", "47", "48"],
            ["51", "52", "53", "54", "55", "56", "57", "58"], ["61", "62", "63", "64", "65", "66", "67", "68"],
            ["71", "72", "73", "74", "75", "76", "77", "78"], ["81", "82", "83", "84", "85", "86", "87", "88"]]

# Probabilities matrix (transition matrix)

transitionMatrix = [[0.0, 0.22, 0.12, 0.21, 0.14, 0.19, 0.12, 0.0],
            [0.1, 0.12, 0.12, 0.13, 0.15, 0.13, 0.15, 0.1],
            [0.0, 0.0, 0.1, 0.37, 0.31, 0.22, 0.0, 0.0],
            [0.0, 0.0, 0.0, 0.2, 0.2, 0.24, 0.26, 0.1],
            [0.0, 0.0, 0.0, 0.14, 0.16, 0.24, 0.33, 0.13],
            [0.0, 0.0, 0.0, 0.25, 0.16, 0.0, 0.25, 0.34],
            [0.0, 0.0, 0.0, 0.22, 0.0, 0.37, 0.05, 0.36],
            [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1.0]
            ]
if sum(transitionMatrix[0]) + sum(transitionMatrix[1]) + sum(transitionMatrix[2]) +
sum(transitionMatrix[3]) + sum(
        transitionMatrix[4]) + sum(transitionMatrix[5]) + sum(transitionMatrix[6]) + sum(transitionMatrix[7])
!= 8:
    print("Please check the Transition matrix")
else:
    print("Transition Matrix, you should move on!! ;)")


# A function that implements the Markov model to forecast the state.
def activity_forecast(stage):
    # Choose the starting state
    activityToday = "Anxiety"
    print("Start state: " + activityToday)
    # Shall store the sequence of states taken. So, this only has the starting state for now.
    activityList = [activityToday]
    i = 0
    # To calculate the probability of the activityList
    prob = 1
```

```python
while i != stage:
    if activityToday == "Anxiety":
        change = np.random.choice(transitionName[0], replace=True, p=transitionMatrix[0])
        if change == "11":
            prob = prob * 0.0
            activityList.append("Anxiety")
            pass
        elif change == "12":
            prob = prob * 0.22
            activityToday = "Debate"
            activityList.append("Debate")
        elif change == "13":
            prob = prob * 0.12
            activityToday = "Lobby"
            activityList.append("Lobby")
        elif change == "14":
            prob = prob * 0.21
            activityToday = "Protest"
            activityList.append("Protest")
        elif change == "15":
            prob = prob * 0.14
            activityToday = "Access"
            activityList.append("Access")
        elif change == "16":
            prob = prob * 0.19
            activityToday = "Court"
            activityList.append("Court")
        elif change == "17":
            prob = prob * 0.12
            activityToday = "Intimidation"
            activityList.append("Intimidation")
        else:
            prob = prob * 0.0
            activityToday = "N/Internationalization"
            activityList.append("N/Internationalization")
    elif activityToday == "Debate":
        change = np.random.choice(transitionName[1], replace=True, p=transitionMatrix[1])
        if change == "21":
            prob = prob * 0.1
            activityList.append("Anxiety")
        elif change == "22":
            prob = prob * 0.12
            activityToday = "Debate"
            activityList.append("Debate")
            pass
        elif change == "23":
            prob = prob * 0.12
            activityToday = "Lobby"
            activityList.append("Lobby")
        elif change == "24":
            prob = prob * 0.13
            activityToday = "Protest"
            activityList.append("Protest")
        elif change == "25":
            prob = prob * 0.15
            activityToday = "Access"
            activityList.append("Access")
        elif change == "26":
            prob = prob * 0.13
            activityToday = "Court"
```

```python
            activityList.append("Court")
        elif change == "27":
            prob = prob * 0.15
            activityToday = "Intimidation"
            activityList.append("Intimidation")
        else:
            prob = prob * 0.1
            activityToday = "N/Internationalization"
            activityList.append("N/Internationalization")
    elif activityToday == "Lobby":
        change = np.random.choice(transitionName[2], replace=True, p=transitionMatrix[2])
        if change == "31":
            prob = prob * 0.0
            activityList.append("Anxiety")
        elif change == "32":
            prob = prob * 0.0
            activityToday = "Debate"
            activityList.append("Debate")
        elif change == "33":
            prob = prob * 0.1
            activityToday = "Lobby"
            activityList.append("Lobby")
            pass
        elif change == "34":
            prob = prob * 0.37
            activityToday = "Protest"
            activityList.append("Protest")
        elif change == "35":
            prob = prob * 0.31
            activityToday = "Access"
            activityList.append("Access")
        elif change == "36":
            prob = prob * 0.22
            activityToday = "Court"
            activityList.append("Court")
        elif change == "37":
            prob = prob * 0.0
            activityToday = "Intimidation"
            activityList.append("Intimidation")
        else:
            prob = prob * 0.0
            activityToday = "N/Internationalization"
            activityList.append("N/Internationalization")
    elif activityToday == "Protest":
        change = np.random.choice(transitionName[3], replace=True, p=transitionMatrix[3])
        if change == "41":
            prob = prob * 0.0
            activityList.append("Anxiety")
        elif change == "42":
            prob = prob * 0.0
            activityToday = "Debate"
            activityList.append("Debate")
        elif change == "43":
            prob = prob * 0.0
            activityToday = "Lobby"
            activityList.append("Lobby")
        elif change == "44":
            prob = prob * 0.2
            activityToday = "Protest"
            activityList.append("Protest")
```

```python
            pass
        elif change == "45":
            prob = prob * 0.2
            activityToday = "Access"
            activityList.append("Access")
        elif change == "46":
            prob = prob * 0.24
            activityToday = "Court"
            activityList.append("Court")
        elif change == "47":
            prob = prob * 0.26
            activityToday = "Intimidation"
            activityList.append("Intimidation")
        else:
            prob = prob * 0.1
            activityToday = "N/Internationalization"
            activityList.append("N/Internationalization")
    elif activityToday == "Access":
        change = np.random.choice(transitionName[4], replace=True, p=transitionMatrix[4])
        if change == "51":
            prob = prob * 0.0
            activityList.append("Anxiety")
        elif change == "52":
            prob = prob * 0.0
            activityToday = "Debate"
            activityList.append("Debate")
        elif change == "53":
            prob = prob * 0.0
            activityToday = "Lobby"
            activityList.append("Lobby")
        elif change == "54":
            prob = prob * 0.14
            activityToday = "Protest"
            activityList.append("Protest")
        elif change == "55":
            prob = prob * 0.16
            activityToday = "Access"
            activityList.append("Access")
            pass
        elif change == "56":
            prob = prob * 0.24
            activityToday = "Court"
            activityList.append("Court")
        elif change == "57":
            prob = prob * 0.33
            activityToday = "Intimidation"
            activityList.append("Intimidation")
        else:
            prob = prob * 0.13
            activityToday = "N/Internationalization"
            activityList.append("N/Internationalization")
    elif activityToday == "Court":
        change = np.random.choice(transitionName[5], replace=True, p=transitionMatrix[5])
        if change == "61":
            prob = prob * 0.0
            activityList.append("Anxiety")
        elif change == "62":
            prob = prob * 0.0
            activityToday = "Debate"
            activityList.append("Debate")
```

```python
        elif change == "63":
            prob = prob * 0.0
            activityToday = "Lobby"
            activityList.append("Lobby")
        elif change == "64":
            prob = prob * 0.25
            activityToday = "Protest"
            activityList.append("Protest")
        elif change == "65":
            prob = prob * 0.16
            activityToday = "Access"
            activityList.append("Access")
        elif change == "66":
            prob = prob * 0.0
            activityToday = "Court"
            activityList.append("Court")
            pass
        elif change == "67":
            prob = prob * 0.25
            activityToday = "Intimidation"
            activityList.append("Intimidation")
        else:
            prob = prob * 0.34
            activityToday = "N/Internationalization"
            activityList.append("N/Internationalization")
    elif activityToday == "Intimidation":
        change = np.random.choice(transitionName[6], replace=True, p=transitionMatrix[6])
        if change == "71":
            prob = prob * 0.0
            activityList.append("Anxiety")
        elif change == "72":
            prob = prob * 0.0
            activityToday = "Debate"
            activityList.append("Debate")
        elif change == "73":
            prob = prob * 0.0
            activityToday = "Lobby"
            activityList.append("Lobby")
        elif change == "74":
            prob = prob * 0.22
            activityToday = "Protest"
            activityList.append("Protest")
        elif change == "75":
            prob = prob * 0.0
            activityToday = "Access"
            activityList.append("Access")
        elif change == "76":
            prob = prob * 0.37
            activityToday = "Court"
            activityList.append("Court")
        elif change == "77":
            prob = prob * 0.05
            activityToday = "Intimidation"
            activityList.append("Intimidation")
            pass
        else:
            prob = prob * 0.36
            activityToday = "N/Internationalization"
            activityList.append("N/Internationalization")
    elif activityToday == "N/Internationalization":
```

```python
            change = np.random.choice(transitionName[7], replace=True, p=transitionMatrix[7])
            if change == "81":
                prob = prob * 0.0
                activityList.append("Anxiety")
            elif change == "82":
                prob = prob * 0.0
                activityToday = "Debate"
                activityList.append("Debate")
            elif change == "83":
                prob = prob * 0.0
                activityToday = "Lobby"
                activityList.append("Lobby")
                pass
            elif change == "84":
                prob = prob * 0.0
                activityToday = "Protest"
                activityList.append("Protest")
            elif change == "85":
                prob = prob * 0.0
                activityToday = "Access"
                activityList.append("Access")
            elif change == "86":
                prob = prob * 0.0
                activityToday = "Court"
                activityList.append("Court")
            elif change == "87":
                prob = prob * 0.0
                activityToday = "Intimidation"
                activityList.append("Intimidation")
            else:
                prob = prob * 1.0
                activityToday = "N/Internationalization"
                activityList.append("N/Internationalization")
        i += 1
    print("Possible states: " + str(activityList))
    print("End state after " + str(stage) + " stage: " + activityToday)
    print("Probability of the possible sequence of states: " + str(prob))
    activityList.append(prob)
    return activityList

# Function that forecasts the possible state for the next stage
activity_forecast(2)



# To save every activityList
list_activity = []
count = 0

# `Range` starts from the first count up until but excluding the last count
for iterations in range(1, 1000):
    list_activity.append(activity_forecast(3))

list_activity.sort(key= lambda k: k[3])
# Check out all the `activityList` we collected
print(list_activity)
```