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THE GREAT GREEN WALL PROJECT, FARMERS AND HERDERS CONFLICT IN PLATEAU STATE, NIGERIA

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ABSTRACT

The main cause of desertification in Sub-Saharan Africa has been climate change. Herdsmen, who frequently engage in persistent conflict with their host communities, particularly farmers, over the utilization of resources, land being foremost among them, are one of these migrant groups affected by the threat. The African Union (AU) launched the Great Green Wall Program (GGWP) in 2007 with the goal of building a green wall across Africa from the West to the East in order to regenerate the area and guarantee the livelihoods of the locals therein in response to the challenge posed by massive desertification in Africa as well as the inherent socio-economic disadvantages the menace carries. However, nine years after it was established, the initiative has not had a significant influence in some places, which has aided the cause of violence brought on by climate change in Nigeria. The purpose of this study was to evaluate the effectiveness of the Great Green Wall Project in Plateau State, Nigeria, in light of its anticipated value in reducing farmers/herders conflict.

The survey research design was chosen for the study in order to meet the research objective. This research endeavor included both primary and secondary sources of data acquisition. The primary source of data was generated from farmers, herdsmen, members of staff of Ministry of Environment and Forestry, Nigeria Immigration Service and National Agency for the Great Green Wall via interview while the secondary source of data includes relevant text books, journals, publications, seminar papers, newspaper articles and other relevant materials. Content analysis was done on the primary data.

The study found that even while the National Agency for the Great Green Wall has implemented a number of programs to address the threat of desertification, the agency urgently needed to expand its programs well beyond the eleven (11) frontier states that were most severely affected. The participation of all states in the federation in its initiatives will aid in easing and reducing the ongoing confrontations seen countrywide, particularly in Plateau state as it will aid in easing herders' migratory tendencies.

In order to address the issue of foreign unchecked herders straying into the country, the study's conclusion emphasized the need for increased security at Nigeria's porous borders, particularly in the North, as well as the necessity of ongoing communication and understanding between herders, farmers, and local communities. In order to lessen ongoing conflicts, enhance border security for Nigeria, retain current grazing reserves, and teach farmers and herders conflict resolution skills, the management of conflict between herders and farmers must also involve the tool of conflict prevention. Thus, the main goal of this study is to examine the Great Green Wall Programme in light of how effective it is likely to be in reducing farmer and herder disputes in Plateau state, Nigeria.

Keywords: Green Wall; Project; Farmers; Herders

1 INTRODUCTION

The long term alteration of the climate on Earth, particularly one brought on by an increase in the average barometric temperature, is not a new phenomenon. The majority of these climate shifts are believed to be caused by minuscule changes in the Earth's orbit that vary how much solar energy our planet receives (Peterson et. al, 2009). Because the majority of the current warming tendency is likely caused by humans and is continuing at a rate that is extraordinary compared to the previous 1,300 years, it is of particular significance (Allison et.al, 2009). Most climate scientists agree that human expansion of the "greenhouse effect," or warming that occurs when the atmosphere traps heat emanating from Earth toward space, is the primary driver of the current warming trend (Naomi, 2004). An astounding rise in sea level will result from an intensified greenhouse effect that warms the oceans and partially melts glaciers and other frozen di-hydrogen monoxide sources (Church et.al, 2006). The gradual increase in air temperature leads to drought conditions and prevents the long-term growth of vegetation. This contributes to the ongoing desertification that is seen in some areas, along with human activities such as clearing land for agriculture, overgrazing, and the cutting down of trees.

As a result of land deterioration, desertification, the environment becomes drier (Arnalds, 2000). Generally speaking, it refers to "the process of fertile land turning into desert, usually as a result of deforestation, drought, or inappropriate farming techniques" (Reynolds, 2001). Most frequently, this process results in the loss of wildlife, lakes, streams, and flora in the desertified region. Desertification causes abstraction of nutrients from the soil, leaving land barren and useless for cultivation. Due to desertification and drought alone, this process results in the loss of around 12 million hectares of productive land worldwide each year (Veron et.al, 2006). Around the world, desertification is a significant problem, particularly in dryland zones (counting vast zones in Africa, for example, the Sahel).

Almost two (2) billion people live in drylands, which make up over 40% of Earth's surface (Idris et al, 2011). While desertification and climate change often go hand in hand, with one being able to worsen the other, the role these two factors play in migration is beginning to receive more attention on a worldwide scale. Considering the present rate at which the world's deserts are expanding, there may soon be few options for those who are displaced due to the environment (Neely et.al, 2009). The urge to migrate as a result of uncertain rainfall patterns leading to recurrent drought has intensified due to the geometric increase in human population in drylands (Bassett et.al, 2003; Coughenour, 2008). Such migrations, which are frequently brought on by diminished means of subsistence, result in ongoing conflicts between the migrants and the native population, particularly in relation to the utilization of resources, particularly land. Conflict over limited resources, particularly between farmers and herdsman, has resulted from the influx of dry land residents into the hinterland (Amadi et.al, 2011). Similar to Nigeria, the impacts of desertification have forced ranchers to go southern in search of greener pastures for their livestock in the region's predominantly northernmost regions. Conflicts between local farmers and migrant herders have resulted from the cattle's subsequent incursion into nearby farms in certain places (Olabode & Ajibade, 2011). Nigeria is experiencing violent and widespread conflict between farmers and herdsman over the use of agricultural land, partly as a result of production activities that are required by the country's growing population.

This makes it important to recognize how diverse Nigeria is, with its variety of ethnic groups and potential for conflict triggers such ethnic disputes resulting from resource exploitation. The case study for this research, Plateau State, has stood out for a number of reasons, one of which is the persistence of peace and concord despite the diversity of tribes and cultures. The state is referred to as a miniature version of Nigeria. Magavol, Hausa, Fulani, Birom, and Jhaar are among the ethnic groups that call it home. Throughout time immemorial, all of these tribes have coexisted happily, cooperatively, and with little conflict. The State of Harmony's nickname, which describes the influx of people from all over the nation settling down to enjoy the calm in the state, typifies the presence of diverse ethnicities.

The state's current peace, however, is jeopardized by the new wave of attacks by Fulani farmers and herders. Although farmers' and herders' clashes have been a reoccurring issue in Nigeria, Plateau State has experienced the situation to a certain extent. The fights have been growing bloodier recently. According to (Abdullateef, 2015), there was a significant altercation in 2015 between Fulani herdsman and local farmers. The battle began in Bassa Local Government in Plateau

North Senatorial District and quickly expanded to Barikin Ladi in Bokkos Local Government and Riyom Local Government in Plateau State. The refusal of the herdsmen to follow existing laws that prohibited carrying guns to the market is prominent among the causes of the conflict, in addition to the wandering of cattle onto farmlands and retaliation attacks. The local vigilante's battle to take the mentioned firearms from the herdsmen resulted in conflict. According to the traditional ruler of Bassa, eight townspeople perished as a result of the fight. He also said that the community has been the target of Fulani/Bororo attacks for the previous ten years. This underlines not only the necessity of grazing options in previously reported disputes but also gives a fresh perspective on the significance of mutual cohabitation and understanding between herders and their host populations.

The farmers and herders engaged in a similar conflict in 2nd August, 2018 in Bassa Local Government, Plateau North Senatorial District, at a place named Maiyanga Village. According to the authorities, between July 31 and August 2, similar attacks took place across communities in Bassa and its neighbouring LGA, Riyom. On August 5, Plateau state's commissioner of police, Edward Egbuka, said that Seventeen 17 people had been killed by unnamed "criminals" and 85 buildings had been burned in the two LGAs. Here are a few instances of recent disputes between farmers and herders in the state of Plateau .

Given these assaults, this research work explores the Great Green Wall Project as a project whose success could have cascading consequences on reducing the movement of herders southward in search of greener grass for their livestock. If this initiative is successfully implemented, there will be less conflict in Plateau State between herders and migrant farmers. Yet, Plateau State gives another perspective on how to tackle the conflict between farmers and herdsmen while taking into account the existence of native Fulanis. Not all herdsmen in this situation are immigrants. The state is home to the three kinds of Fulani people: the nomadic or bororo, the semi-nomadic, and the settled or town Fulani (Frantz, 1981). This means that not all conflicts between farmers and herders are brought about by migration, but rather the latter's lack of access to suitable grazing areas. The principles of the Great Green Wall, which aim to green the landscapes and preserve people's livelihoods, will be examined within this framework to determine whether they would be useful to implement in other federated states.

1.1 Statement of the Problem

In order to stop widespread desertification, particularly in Sahel Africa, the Great Green Wall Project was started in 2007. The African Union is undertaking a project to create a wall of green land spanning Africa from the east to the west. The project depends on boosting the economies of the affected regions and minimizing conflicts sparked by differences in land use and management. Since the project is in various stages in many African nations, it is the responsibility of each national government to create policies that would expedite the project's execution for the benefit of its citizens. Nonetheless, based on the premise of a project in progress and in light of Northern Nigeria's ongoing desertification, the nation is still experiencing constant competition for land resources between farmers and herders as a result of the latter's widespread migration south. Cattle have invaded farmland due to this movement and the lack of grazing routes, lands, or ranches, which has led to violent conflict between local farmers and ranchers.

The state of Nigeria now faces a security danger from desertification. The recent killings in Agatu, the massacres in Enugu, the kidnappings in Ondo, and the attacks in different parts of Plateau state, spanning the three senatorial zones, carried out by alleged herdsmen, pose a serious threat to not only the lives and security of the local population but also to the unity of Nigeria as a whole. The state governors of the afflicted states are now faced with a choice between upholding nationalism and allowing Nigerians to move and settle freely, regardless of their ethnicity, or protecting the people who placed them in office at all costs. Nigeria's porous borders make it simple for foreigners to cause havoc in the nation while hiding behind the guise of herdsmen impacted by desertification, which exacerbates the security issue. The recent admission by Senator Heineken Lokpobiri, Minister of State for Agriculture, on May 10, 2016, that those detained in connection with killings of Fulani herdsmen cannot speak Fulani or any Nigerian language, suggests the unchecked influx of foreign elements into the country, is quite pronounced in this regard. Long-term difficulties could arise from the government's inability to stop the flow of dangerous foreigners scaring Nigerian civilians in their own country than from the current conflict with the terrorist group Boko Haram.

Rashid (2012) reported that there are several disputes between farmers and herdsmen throughout the state of Plateau , particularly in the three LGAs of Bassa, Riyom and Barikin Ladi. Locals continue to be concerned about the ongoing conflicts between farmers and herders in this area, which also endangers the possibility of luring investors to Plateau state. This highlights the urgency with, the Plateau State Government has signed a Memorandum of Understanding with two companies to implement the controversial grazing reserve policy in the state under the National Livestock Transformation Programme of the Federal Government. If the ongoing conflicts between farmers and herdsmen are to be decreased, a quickening of government efforts in this regard should be a positive step.

Incorporating conflict-management measures in the impacted areas is also necessary in light of the ongoing conflicts between local farmers and ranchers. This highlights the significant contribution currently existing traditional, religious, nomadic, and agricultural organizations provide to peace making and conflict resolution.

The Great Green Wall Project is anticipated to be a successful effort that provides workable answers to the fundamental issue of desertification plaguing the nation. Linking a functioning paper to implementation rules, however, that would see the previously recommended actions taken, continues to be a challenge. In order to lessen the effects of desertification and its consequent influence on violent clashes between local farmers and herdsmen in Plateau State, Nigeria, this study focuses on the Great Green Wall Project as a viable tool.

Objective of the Study

The major goal of this study was to assess the Great Green Wall Project's effectiveness in light of its anticipated value in reducing farmer/herder conflict in Plateau State, Nigeria. The precise goals are to:

- In view of Nigeria's ongoing desertification, investigate models for implementing the Great Green Wall Project;
- To lessen the ongoing conflicts between local farmers and herders in Plateau State, look for methods the government can maintain or develop grazing reserves;
- Analyze the conflict management strategies implemented to reduce conflicts between farmers and herdsmen in Plateau State;
- source for strategies to improve interactions, comprehension, and collaboration between local farmers and migrant herders in Plateau State;
- Look into measures to safeguard Nigeria's borders, especially in the northeast, to stop the influx of foreign herders, weapons, and ammunition.

1.2 Research Questions

- What are the models for implementing the Great Green Wall Project in light of Nigeria's ongoing desertification?
- How can the government preserve/improve grazing reserves to lessen ongoing conflicts between neighborhood farmers and herders in Plateau State?
- What techniques for preventing conflict can be applied to stop farmer/herder conflicts in Plateau State?
- What can be done to increase communication between local farmers and migrant herdsmen in Plateau State?
- What level of border security might Nigeria achieve, particularly in the northeast, to stop the influx of foreign herders, weapons, and ammunition?

1.3 Significance of the Study

This study is notable because it looked into the reasons for ongoing conflicts between farmers and herdsmen in Plateau state as well as the impact of desertification on those conflicts. This study examined the Great Green Wall Project (GGWP) document as a different and proactive approach to addressing the threat of desertification. The study would be helpful not only to the community of farmers and herders who are affected by the escalating conflict, but also to the government, which deals with the fine lines separating policy design from implementation.

The composition of the herdsmen in general, as well as the Fulani community noted before, adds another layer to the conflict between farmers and herders in Plateau State. Herdsmen are not exclusively Fulani in Plateau ; some also come from the Nupe ethnic group. As a result, the study will greatly avoid falling into the stereotyped category of "Fulani herdsmen" by focusing instead on the whole demographic and makeup of herdsmen in Plateau State.

2 METHODOLOGY

The research was qualitative and used a survey research design. This design is a technique for gathering data or information that has been reported by people. Self-report data is the term used to describe the information because the participants are the ones providing it. We used both primary and secondary data sources. Focused group talks and official government materials were used to create the main data. The secondary data came from publications such as books, journals, articles, newspapers, magazines, and other sources that are pertinent to the subject of the study. The 42-question interview guide's content was examined.

The multi-stage random and judgemental sampling approaches were used in the investigation. Ten (10) of the seventeen (17) local government areas (LGAs) in the state that experience greater conflicts between farmers and herders were therefore taken into consideration while choosing respondents for the study (Rashid, 2012). Four of these 10 were chosen at random. The LGAs in question are Bokkos, Bassa, Barikin Ladi, and Wase. To genuinely reflect the entire state, three local governments were chosen based on the three senatorial districts of Plateau state (Plateau North: Bassa and Barinkin Ladi LGAs; Plateau Central: Bokkos LGA; and Plateau South: Wase LGA).

Four farming settlements were chosen at random from each LGA to create a total of 16 villages. To make a total of 80 farmers, five farmers of arable crops were chosen at random from each hamlet. Additionally, four herdsmen transit camps from each LGA were chosen at random, for a total of 16 transit camps. From each transit camp, five herdsmen were chosen at random, for a total of 80. 40 respondents from a total population of 198 from the Ministry of Environment and Forestry were chosen at random based on the researcher's assessment of their expertise and intended contribution to the field. Additionally, five respondents were chosen at random from the senior personnel of the National Agency for Great Green Wall and five respondents were chosen at random from the higher ranks of the Nigeria Immigration Service. 210 people in all were chosen to participate in the data gathering.

2.1 Scope of the Study

This study concentrated on the GGWP's applicability in reducing farmer/herder conflict in Nigeria in relation to the government's duty to its citizens in the area of policy execution. Thus, only topics relating to state accountability for halting desertification and its repercussions on the ongoing conflict between farmers and herdsmen were covered. In addition to its history of ongoing conflicts between farmers and herders in Nigeria, Plateau state was chosen as a case study because of its distinct population makeup. Due to the existence of native Fulanis and other ethnic groups like the herdsmen-like Nupe, the Plateau state is distinctive. This means that the study will not be based on the stereotype that all herders are migrants or that all herdsmen are Fulanis. Additionally, the historical inclusion of settled herdsmen as part of the townspeople will add another perspective to the study's approach to the topic. This study covered the years 2007 to 2016. This date was chosen keeping in mind that the African Union adopted and launched the Great Green Wall Initiative as a project in 2007.

2.2 Operational Definition of Terms

The following terms are defined as they will be recurrent in the course of this study:

- Conflict: The term proposes contrasts and differences between people especially in terms of use of resources.
- Desert encroachment: Continuous desertification of a particular area triggered by climate changes primarily caused by human activity.
- Migrant Herders: Pastoralists that move their cattle in search of green pasture. "Migrant" is appended to mean the persistent mass movement of herders southward looking for green terrains because of the impact of desertification.
- Farmer: A man who cultivates land.
- Great Green Wall Project: An initiative of the African Union sought to reduce the impacts of desertification by establishing a greenbelt from West to East Africa.
- Desert: A dry land with little or no vegetative cover having minimal or no significant rainfall.
- Insurgent: A man who rebels against a set up government.
- Global warming: A persistent rise in global temperatures that is largely attributable to the greenhouse effect brought on by rising quantities of carbon dioxide and other pollutants.
- Green-house gasses: Any vaporous compound in the environment that is fit for engrossing infrared radiation, in this way catching and holding heat in the air.
- Greenhouse impact: A regular procedure by which the air traps a portion of the Sun's energy, warming the Earth enough to bolster life.
- Nomadic/Pastoral Fulani (Bororo): Fulani who moves around with his cattle throughout the year. He does not stay around for long, circa four months per location.
- Semi-Nomadic Fulani: This set of Fulanis either settle down temporarily at particular times of the year or do not wander too far away from their settled home.
- Town Fulani: They live in towns and cities and have given up the nomadic life completely in favour of an urban one.

2.3 Plan of Study

There will be five chapters in this work. The context of the study, the statement of the problem, the objectives, and the scope of the investigation are all provided in Chapter 1, which is the introduction chapter. The theoretical framework will be presented in Chapter 2 along with a survey of pertinent literature. The principles, purposes, and goals of the Great Green Wall Project will be covered in chapter three. The National Agency for the Great Green Wall, which is in charge of coordinating the initiative in Nigeria, will also be described in detail in this chapter, along with its roles and pursuits. Both the study's findings and the data results will be reviewed in chapter four. The overview, conclusion, and suggestions for this study are presented in Chapter five.

3 REVIEW OF LITERATURE

3.1 Introduction

The term "climate change" has been given several different definitions. According to the United Nations Framework Convention on Climate Change, the phenomenon is "a change in climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods." The cause and duration of climate change are placed into perspective by this definition. Bernard (2010) echoes the last part of the definition, saying that "climate change is a short- or long-term transformation of the statistical features of a climatic system, which might be transitory or permanent." Alternative definition given by Stillman & Miller (2015): "Change in the usual or average weather of an area or city."

Climate change refers to a long-term shift in the atmosphere, primarily brought on by human activity (Mark, 2015). The current most frequently used indicator of climate change is the rise in greenhouse gases. This explains the rise in the average global temperature over the past 100 years, from 0.3° to 0.6°C (IPCC, 2001). Continuous desertification is a result of climate change and is seen in arid areas, particularly in Sahel Africa.

According to various indicators, including a combination of different types of atmosphere and human activity, desertification degrades land and soil in arid locations. According to this concept, current climatic changes will continue to make desertification in arid regions more dangerous even if all other factors remain constant. Since it results from human activities that alter the world's air structure, climate change can be distinguished from typical atmospheric variation. It is connected to typical changes including the expansion of the Sahara due to dryness, decreased precipitation, brutal dry spells, an increase in temperature, more extreme storms, recurrent glimmer surges, and the weakening of Mount Kenya and Kilimanjaro's snowcaps. (2012) Jane & Arshia, a rising water level and significant alterations in the way of life of people living in affected areas.

Because less agricultural land is accessible due to desertification, there are disputes between farmers and herders in the Sahel region. These kinds of atmosphere-related effects are currently causing violent confrontations in northern Nigeria, Sudan, and Kenya. Africa is thought to be particularly helpless against this new environment-driven security risk due to its history of interethnic and national conflict. Despite the fact that Africa is considered to be the least responsible for global greenhouse gas emissions, the region will suffer the most as a result (Kifle, 2008). As a result, rather than just being an ecological problem, climate change is also being reframed as a security risk.

Similar to climate change and biodiversity loss, desertification is a global problem. The main difference between climate change and desertification in arid zones of Africa, despite their uncertain sources, is that they occur on different time frames, with climate change occurring over a longer period of time than desertification. At this point, asserting that desertification is a sign of recent environmental changes would probably be overly bold. In any event, it is undeniable that climate change has accelerated desertification, and this trend will persist unless greenhouse gas emissions are reduced.

3.1.1 Climate Change and Desertification

Oisahoin (2008) claims that Africa is the region most affected by climate change, with a mean temperature that is 0.5°C hotter than it was a century ago (IPCC, 1996). The effects of such a drastic change in climate are especially noticeable in poorer countries, where persistent drought, famine, and unavoidable disease are common problems. According to Ikeme (2001), Nigeria has experienced a natural change toward drier circumstances. Environmental change reports must be viewed in light of the numerous factors in current climate change estimates, whereby annual rainfall patterns are becoming almost unpredictable, which in turn affects food yields. The Sudan-Sahel region of Nigeria has had a 4 percent decrease in precipitation since the turn of the nineteenth century, according to Mohammed (2008), who goes on to further explain using the rainfall gauge. As a result, the previously established schedule of precise planting dates and harvest projections has been undermined by sudden and unpredictable climate. This demonstrates the necessity for an immediate improvement in the nation's capacity to assess, estimate, and make essential preparations for the relief and adjustment of climate change.

Sub-Saharan Africa is home to the nations that are most susceptible to the consequences of climate change, according to the (IPCC) 2007 report. Nigeria is a state that falls under the category of "high-hazard." Extreme poverty, devastating natural catastrophes, droughts, floods, and the predominance of rain-fed agriculture in African countries are all major contributors to the failure to adapt to climate change (Boko et al. 2007).

The measurement of the countries most affected by the effects of climate change is provided by Parry et al. (2001). According to the authors, developing countries are less able to combat climate change than their developed counterparts because of their economies' apparent over-reliance on rain-encouraged farming, a lack of funding for

adaptation measures, hotter benchmark environments, and exposure to extreme climatic events. In this sense, climate change could have negative effects on poor nations, where an estimated 800 million people lack access to enough food (Slater et al., 2007). It is extremely concerning that over 40 'less developed' countries, mostly in sub-Saharan Africa, have seen a 10% fall in local per-capita food production during the past 20 years (Slater et al., 2007). Therefore, the impact of climate change will make the current problem worse in several of these countries. According to Podester & Ogden (2008), West Africa suffers the greatest losses as a result of climate change, accounting for between 36 and 44 percent of losses for all of Africa as well as between 42 and 60 percent of regional GDP. According to Mendelsohn et al. (2000), seven African countries; Nigeria, Sudan, Algeria, Cameroon, South Africa, Mozambique, and the Democratic Republic of the Congo are expected to incur the most losses (47 percent) in the agricultural sector, with Nigeria suffering the most.

Nigeria would be affected negatively by the dry season brought on by climate change, desertification, and rising sea levels (Podesta& Ogden 2007). Currently, around 1,350 square miles of Nigerian territory transform into desert each year, displacing both farmers and herders from their homes (McCarthy, 2006). This supports Mohammad's (2008) assertion that the desert, which already occupies around 35 percent of Nigeria's land mass, is expanding at an estimated 0.6 km per year while deforestation is happening at 3.5 percent per year. While the Savannah interface of forest and desert is currently seen to be around Oyo, Osun, Ondo, Kogi, and Makurdi - 1200km shift towards the south - the desert belt has moved from Maiduguri to Kebbi, Kano/Kaduna to Sokoto and Benue; a separation of approximately 1200km westbound and approximately 800 to 900km southward.

Odjugo (2010) provides a basic summary of the effects of climate change in Nigeria before recommending a decrease in greenhouse gas emissions. But even though carbon emissions are difficult to eliminate, such researchers fail to consider the financial costs of investing a lot of money to make little to no progress. Global leaders should invest in developing ecologically friendly energy options rather than wasting enormous sums of money on a pointless approach. Because green alternatives to oil and other fossil fuels are still far from being ready to take their place, reducing carbon emissions is so expensive. If this is changed, the global climate change impasse will end. In the unlikely event if green energy sources were affordable, everyone would use them, resulting in a significant reduction in long-term emissions. According to climate change economist Richard Tol (2011), costly, erroneous carbon-emissions schemes like the European Union's will cause significant financial hardship and political unrest while accomplishing nothing to slow global warming, which is expressed in this way. A viable alternative green energy source may have been developed instead of going to great expense to reduce carbon emissions.

Discussions of desertification occasionally focus more on the logical methods, discoveries, and outcomes than the financial implications. The Saharan limit and the vegetation cover in the Sahel have not changed dynamically in the last 16 years, according to Nicholson et. Al., (1998) examination of the historical and meteorological aspects of desertification, and there has also not been a deliberate decrease in profitability as measured by the vegetation cover's water-use efficiency. Instead than focusing on the financial effects of desertification on the lives of people in the West African Sahel region, the review focused more on logical methods and discoveries. However, Bjorn Lomborg claimed in his book, "The Skeptical Environmentalist," that the rationale behind ecological worries was grossly exaggerated. According to Lomborg, poverty is a key factor in the vast majority of climate issues that are the subject of intense discussion, including pollution, water scarcity, deforestation, the enormous increase in the world's population, hunger, and AIDS. Accordingly, the main obstacles to human flourishing are logistical issues, which can be mainly overcome through economic and social growth. In regards to problems that are increasingly urgent on a global scale, including the depletion of fossil resources and climate change, Lomborg argues that these problems are typically exaggerated and that recommended solutions are frequently ineffective when compared to other options.

3.2 Conflict: Definition, types and causes

Conflict has existed from the dawn of humankind. It is a prominent aspect of human society. Men must fight even if they lack weapons or cannot access weapons of violence; in fact, men will fight with their bare hands if they have none, according to Morgenthau (1948). As long as there are other males, there will be issues of conflict because interests differ and do collide, which may result in conflict or confrontation. There is so much room for explosive attitudes and relationships in a community or culture of men.

Conflict on the other hand symbolizes one of man's two natures: "evil." The contrary, which is cooperation, embodies the second, which is human goodness (St. Augustine, 1950). Thus, conflict takes the form of disagreements, rage, arguments, disputes, hatred, devastation, fatalities, or war. Any unsavoury attitude that has the potential to energize the political or social environment will probably lead to conflict. Greed, self-centeredness, envy, and discontent are just a few of the emotions that can cause a breakdown in interpersonal relationships. These vices are in some ways inherent characteristics of the conflict-prone nature of man. On the other hand, conflict may be seen as a good; it is the driving force behind the advancements that mankind has experienced over time. The internal conflict in this situation. It starts with posing contrary to the norm of queries. Over time, new discoveries in science and other fields of life have sprung

from such inquiries and internal conflicts. Even healthy interpersonal conflict can be beneficial if it serves to advance development. Therefore, Stack (2005) claims that not all conflict is negative because it can occasionally result in growth and progress. From an organizational standpoint, Stack contends that some degree of conflict is beneficial and demonstrates a level of dedication to corporate objectives. Workers encounter disagreements as they put forth various solutions to organizational difficulties. This encourages difficulty, raises individual esteem for the topic, and motivates employees to work more. In light of this, Stack argues that conflict is essential to prevent the organization from stagnating.

Conflict is "an existing state of disagreement or animosity between two or more persons," according to Nicholson (1992). This indicates that two or more parties are on opposing sides of the same subject and do not have an agreement. Thus, it implies the pursuit of contradictory objectives. To put it another way, conflict is a collision path. It also denotes opposition to an established viewpoint, stance, or position. This supports Galtung's (1969) assertion that conflict arises whenever conflicting activities take place. According to Jeong's definition of conflict from a political perspective in 2000, conflict occurs "when two or more groups engage in a struggle over ideals and claims to status, power, and resources in which the opponents' goals are to neutralize, harm, or eliminate the rivals." Thus, conflict in this sense is an illustration of the political factions working against one other or toward a common goal, and it frequently results in political violence.

Conflict also denotes various perspectives, which may or may not result in antagonism. This manner, conflict is just a difference in how people view the same problem (Barresh & Webel, 2002). In this sense, it represents an alternative perspective on a motivation or worldview. However, conflict might still have an extreme connotation due to disparate beliefs or values. Conflict, however, does not necessarily imply war. While all conflicts result in war, not all conflicts necessarily result in war. This is so that acts are carried out in accordance with the rules of engagement, which are mutually proclaimed acts of aggression between two or more parties that are carried out by conventional soldiers under the knowledge and observation of a third party (Waltz, 2007).

Here, the intra-personal conflict and the inter-personal conflict are the two types of conflict that will be examined. The term "intra-personal conflict" describes a state of implosion in a person caused by their mental state. However, it's crucial to understand that a person's current state is mostly determined by his environment. These include feelings of rage, depression, perplexity, and frustration that can result in violence, erratic behavior, addiction, and, in the worst cases, suicidal thoughts (Ross, 1993). This is the type of conflict that Lamb (2008) refers to as "man against self," in which a person continues to dispute or fight against his or her own thinking and habits. Smoking, drug use, alcoholism, as well as lying are some addictive habits that man may continually contend with; even when he desires to stop, he may find himself continuing it. This is intra-personal conflict or "man against self".

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Frances Stewart claimed that "horizontal inequalities" (i.e., disparities in economic and political resources between culturally defined groups) are one of the factors contributing to conflict (Stewart, 2002). She contends that while social status, location, and culture may separate people into different groups, these divisions only lead to conflict when there are significant variations in how political and economic power is used and distributed. Relatively disadvantaged groups are more likely to seek redress in such circumstances or be urged to do so by their leaders. When they believe their privileges may be at jeopardy, relatively privileged groups may turn to violence to defend them. In some situations, the horizontal inequalities theory holds water. For example, Angola's protracted civil war started as an anti-colonial conflict and only later did natural resource exploitation take over as the main source of funding for both the rebels and the government. Inequality on a horizontal scale was evident in Sierra Leone in terms of young school access and endemic unemployment (Ballentine and Nitzchke, 2003). Conflict in Nepal was sparked by complaints over structural socioeconomic discrimination and pervasive poverty (Ballentine and Nitzchke, 2003).

Conflict may result from the social contract breaking down. The idea that social stability is based on a fictitious agreement between the people and the state, in which the people consent to the exercise of state power in exchange for the provision of services (such as security, health, education, and sanitation) and fair economic conditions (such as employment), has its roots in classical thought (Pettit, 1997). In many low- and middle-income nations, deteriorating economic conditions lead to deteriorating governmental services, which can result in a breach of the social contract and occasionally conflict (Stewart, 2002). According to David Keen's research, when state-owned enterprises were privatized, international financial institutions like the World Bank and the International Monetary Fund encouraged inflation, significant devaluation, and the development of private oligopolies, which in turn fuelled conflict in Sierra

Leone. The enormous decrease of state services, such as those in health and education, that these liberalization initiatives were linked to fuelled complaints (Keen, 2008).

According to the green war hypothesis, environmental deterioration can increase poverty and insecurity, which raises the risk of violence (Homer-Dixon, 2001). According to Thomas Homer-Dixon, rapid population growth would raise demand for natural resources, resulting in a shortage of renewable resources including arable land, water, and forests. Many anticipate that environmental scarcities will have significant social repercussions, which could result in racial conflicts, uprisings, urban violence, and other types of conflict, particularly in low- and middle-income nations. Homer-theory Dixon's is supported by research on land allocation in Mexico, population increase in sub-Saharan Africa, and water issues in China. Homer-Dixon makes the case that unequal resource distribution can result in conflict over resource scarcity, but is cautious to note that the impacts of environmental scarcity are indirect and act in conjunction with other social, political, and economic complaints (Homer-Dixon, 2001).

Leading ideas on conflict causes typically characterize ecological risks as peripheral, in that they may hasten or aggravate a conflict but are not typically considered as its primary cause. Research to date does not indicate that conflict will be fuelled by climate change, with the exception of situations where fast depleting water supplies cut across already-existing tensions, weak institutions, and poor governance (World Bank, 2011). Interlinked challenges such as changing patterns of energy consumption, scarce and non-renewable resources, and increasing demand for food imports relying on land, water and energy, will undoubtedly increase the pressure on low- and middle-income and fragile states (World Bank, 2011).

It is challenging to demonstrate a direct causal connection between environmental change and conflict, just as there is almost never a single, recognizable core cause of war (Sondorp and Patel, 2003). The majority of policymakers and academics concur that more research is required to understand how global environmental change is affecting things like weather, food prices, and land availability, all of which can affect how vulnerable societies are to armed conflict.

There is ample evidence to show that in human history, scarcity has always been a basic and ongoing condition that has led to numerous conflicts and wars (Baechler, 1999; Hilyard, 1999). Therefore, Shetima and Tar (2008) contend that conflict for limited natural resources determines a certain way in which man and nature interact and has been prevalent in places where the social, economic, and environmental factors have combined to lean the two groups toward one another.

However, some post-modern scholars address the idea of shortage and argue that it comes down to human definition in relation to things like power dynamics, national boundaries, and global politics. Shetima and Tar (2008) believe that there is a high likelihood of conflict in terms of resource scarcity if opposing parties are involved, even though there may not be a cause-and-effect relationship between irreconcilable differences in resource utilization.

In Nigeria, conflict arises between farmers and herders as a result of herder movement in sedentary zones before the harvest is finished. This conflict is typically intense in semi-arid zones because to the recurrent absence of downpours (Scoons, 1995). Moorehead (1989) asserts that conflict between farmers and herders occurs in Mali's Niger River delta whenever the delta is drier and the farmers are forced to cultivate the farthest reaches of the delta, intruding into the brushing zones, upsetting the pastoralists. In accordance with comparative issues in Nigeria, Sayne (2011) present that because of movements in planting systems driven by transmuting nature of the climate, numerous farmers now plant over assigned grazing routes prompting conflict with the herders.

3.3 Conflict and Security

Because of the political susceptibility of communities to battling the effects of climate change, as suggested by Raleigh, there is a significant possibility that there will be additional communal conflicts in African states (2010). Since smaller ethnic clans are more persecuted and, on balance, experience more conflict due to climate, the risk of conflict erupting between groups depends on their size and political importance.

Barnet and Adger (2007) examine the problem of conflict from the perspective of high-quality natural resources necessary for the maintenance of a way of life, which when depleted results in a struggle for survival. Human security is by no means guaranteed in such a situation, and if action is not taken, it could grow into a violent conflict. However, due to the impact of climate change, the state would not be able to respond appropriately. In order for nations to be able to provide aid that helps protect people's livelihoods during a violent conflict situation, state preparation in terms of institutional viability in peacemaking is of the utmost importance.

Similar to this, Ben Saul (2009) considers the hazards to human security as they relate to the struggle for resources in light of human dignity. Nevertheless, he goes farther to portray conflict in this sense as having a global as well as a local dimension. Conflicts over resource distribution are predicted to eventually lead to disputes over maritime boundaries,

modifications to migratory patterns, and a resulting problem with environmental refugees. These are thought to hasten political changes that will necessitate international resolve to stabilize. The author in this manner proposes “re-modelling the instruments of public international law: to avert, contain and cure the subsequent security dangers”. These laws are viewed as suitable choices and more successful than depending on “particular organizations or regularizing systems”.

Hendrix and Salehyan (2012) presented a fascinating submission on the connection between environmental problems and general agitation using the Social Conflict in Africa Database (SCAD). The authors examined how variations in precipitation affect the inherent ferocity in particular conflicts. This offers an alternative viewpoint on the resource-focused controversy. The results show that precipitation fluctuation greatly affects both large-scale and small-scale instances of political conflict, according to their submission.

Farmers and herders should not engage in routine pettiness with one another in their conflict. Agriculturists complain about dairy cattle continuously devouring their crops, yet it should be noted that modernization, urbanization, and human advancement have eliminated previous grazing areas, leaving herders with limited grazing areas. Olabode and Ajibade (2010) examined the connection between conflict and resource use, taking into account conflict caused by the climate and sustainable development in Nigeria. The research revealed that the destruction of crops by cattle is one of the recurrent causes of farmer/herder conflict. Accordingly, the authors advised that all tiers of government should establish grazing areas that will restrict the migration of cattle.

Instead of talking about resources as usual, Victor et al. (2015) focus on the socioeconomic repercussions of war on the local population. The importance of negotiation and mediation in resolving disputes between farmers and herders is emphasized. In order to resolve the problem, farmers must be willing to make concessions, especially during the time when cattle are migrating. If both sides cling to their ideals, there will be no long-term progress. Before moving their dairy animals into farmlands, herders must also take harvest times into account. The necessity to support institutions and customs involved in intervention and mediation is at the core of this agreement. Such groups need to have the necessary retraining and education regarding various strategies for compel relocating herders in their areas.

Uchendu et al. (2015) tracked the origin and migratory pattern of nomads in a similar way. Before and after the appearance of the nomads, as well as with the yields from unaffected farms during the same time period, the farm yields of farms impacted by the activity of livestock were compared. The findings showed that, among other things, the Nomads' actions contributed to deforestation, erosion, desertification, and topsoil surface solidification. Therefore, the authors suggested creating permanent settlements for nomads and enacting fiscal measures to prevent villagers from attacking them wherever they may be.

The security question is more of a situation and outcome concern for certain academics. Desertification, or more specifically, climate change, generates neediness, desire, imbalance, and eventual mass migration from one district to the next. Conflicts over the use and appropriation of limited resources are a regular result of this migration among migrants and local residents. The story about climatic conflicts is supported by two factors. It begins by assuming that global climate change causes dry spells and desertification, which in turn cause a shortage of resources. Second, it suggests that this lack of resources leads to movement, either by igniting fresh conflicts or stirring up underlying unrest.

For instance, some have suggested that Syria's bloodshed may be related to climate change. Syria experienced its worst drought in 900 years starting in 2006; it destroyed fields and wiped off the domesticated animals in the country. Food proved to be expensive and water to be scarce (Mansharamani, 2016). The underlying agitation was heavily influenced by the anguish and social disarray that the dry season had caused. Perhaps it was not a coincidence that the drought was followed by the rise of ISIS, the migration issue, and the ensuing political unrest in Europe. Therefore, it is believed that global warming is paving the way for radical ideologies and situations that encourage terrorism. Mansharamani therefore assumes that the effects of climate change in Syria will be long-lasting since, even if mediators are successful in reaching a compromise, the underlying tensions in the region would take some time to ease.

On the other hand, researchers point to climate change as the cause of Nigeria's ongoing instability. The main causes of Boko Haram's operations have often been attributed to tyranny based on fear and extreme jihadist worldview; the reasons why those belief systems were allowed to develop in Nigeria have largely been ignored. According to some theories, the establishment of Boko Haram in Northern Nigeria was caused by the agricultural crisis that hit other African countries in 2004 and 2005, which caused many people to move to Nigeria, which was less affected. According to Barnett (2012), the creation of a “religious savior” that offers numerous assurances to the underprivileged masses can be attributed to climate change. It is no big surprise accordingly that religion has been utilized as a device to aggregate the exertion of clueless people to bolster the psychological oppressor exercises of Boko Haram because of their exposure to outrageous living conditions created by climate change.

Furthermore, in a United States Institute of Peace extraordinary report of 2011, it was advanced that "economic, social and psychic burdens" contribute in no little measure to the viciousness seen in Nigeria. This is said to primarily affect the youthful population who lack business opportunities or financially lucrative endeavors. The report states that "in the dusty streets of Borno's state capital, for example, the fierce Islamic group, Boko Haram, draws in tons of unemployed young men, as do the Delta's numerous local armies... the nation's general poor reactions to the expanding impacts of climate change on their land could influence how Nigerians see the credibility, stability, and significance of their leaders and institutions, which could help stir savage uprisings in some zones, a pat (Olabode&Ajibade, 2010).

3.4 Farmer-Herder relations within communities

"Specific jobs are attached to particular ethnicities in West Africa" (Grayzel 1977). According to reports, this primarily affects the young generation who lack employment opportunities or lucrative businesses. According to the report, "in the dusty streets of Borno's state capital, for example, the fierce Islamic group, Boko Haram, draws in heaps of jobless young fellows, as do the Delta's numerous local armies... the nation's general poor reactions to the expanding impacts of climate change on their land could influence how Nigerians see the credibility, stability, and significance of their leaders and institutions, which could help stir savage uprisings in some zones, a pat (Olabode & Ajibade, 2010).

Conflicts between members of different social groups are typically more public than those inside a family or line of ancestors. This isn't because of insurmountable circumstances, but rather because such conflicts are less obvious to the curious outsider than conflicts between members of the same social groups. For genealogical units, the established authority is less likely to obstruct response to perceived infractions; the justifications for maintaining an outward similarity of solidarity are less persuasive; differences are more likely to be exploited to the benefit of those taking part in insider-outcast legislative issues; and conflicts are resolved at higher authoritative levels as a result of political strength by one group at the town level. Therefore, conflicts between farmers and herders receive greater media attention than other problems within the community.

Conflict between farmers and herders has long been a part of society in the Sudano-Sahelian region. The term "farmer-herder conflict" is frequently used to describe disputes between farming and herding communities. This phrase can be used to suggest that "herders" and "farmers" are two different groups whereas, in reality, the majority of herders nowadays are farmers, and many farmers may herd their cattle at least occasionally. Additionally, when a "herder" and a "farmer" are at odds, other farmers and herders are frequently involved on both sides. Breusers et al. (1998), for instance, contend that many disputes between farmers and herders are actually the product of tensions inside farming communities, tensions that are most pronounced in disputes with outsiders, notably herders.

Over the past 25 years, farmer-herder confrontations have reportedly risen, according to several outside observers (Bennett, 1991). Others contest the empirical foundation of such claims (Hussein et al. 1999). There are several obstacles to elucidating this argument. First, there are still many anecdotal data points and significant regional data collection challenges. The ambiguity around the definition of conflict and the misunderstandings brought on by references to "farmers" and "herders" present even another challenge. A conflict of interest will arise at least occasionally for people who farm and herd animals.

The ability of local communities to handle conflicts and prevent them from escalating determines whether a conflict of interest results in a violent socially degenerative conflict or prevents production decisions. Most members of ethnic groups (such as the Fulani, Maure, Tuareg, and Bouzou) whose identities are tied to animal husbandry farm as well, and many "farming" communities own and manage cattle. Conflicts between farmers and herders might consequently arise in both "farming groups" and "herding groups." For conflict to be resolved or managed, it is essential to comprehend farmer-herder connections. This will advance our knowledge of the immediate and underlying causes of conflict, the behavioral patterns most favorable to igniting or averting it, and the primary means by which such conflict is settled or handled between the parties. In the Sudano-Sahelian region of West Africa, the connections between farmers and herders have always been complex, involving both cooperation and conflict like other social relationships (Turner 2003). This relationship has always been strongly seasonal, with disputes over crop damage and field encroachment on important pastoral sites occurring frequently during the rainy season and cooperative relationships, such as milk bartering and manure contracting, being more significant during the dry season (Turner 1999)

In many areas of the Sudano-Sahelian region, changes in livestock ownership and management over the past 20 years have increased the inherent conflicts of interest between farming and herding as well as the possibility that these conflicts could turn into degenerative conflict (Turner 2003).

A number of changes have taken place that have an impact on how local communities handle farmer-herder conflicts in addition to those that are likely to raise the probability of farmer-herder conflict. While the gradual loss of local elder authority is to be welcomed in many ways, it has increased the number of authority poles, which could potentially make it harder for local communities to effectively handle disputes. As cropland availability has decreased, livestock wealth

has been more concentrated, the range of herd movements has narrowed, and they have become more unpredictable, the quantity and character of social relationships between farmers and herding experts have altered. The nature of livestock husbandry and farmer-herder relations are changing and the potential for conflict management failure increases unless systems of governance change accordingly.

For conflict management and resolution, it is essential to comprehend farmer-herder relationships. This will enhance knowledge of the primary processes by which conflict between the groups is settled or handled as well as the immediate and underlying causes of conflict. It will also help identify the behavioral patterns most favorable to inciting or avoiding conflict. The livelihoods of both farmers and herders would be improved, and social harmony within and across communities would be encouraged by creative solutions and incentives that lessen the frequency and intensity of confrontations.

3.5 Human Rights

The farmer/herder conflict blurs the line between upholding security at all costs and preserving freedom of movement in Nigeria, where the terrain is that of a heterogeneous society and each group, particularly the major ethnic groups: Yoruba, Igbo, and Hausa, constantly act as watchdogs on the over-bearing influence of one another. Although some people think that the only place where maximal security is assured and basic freedoms are denied is in prison, one cannot help but completely undermine the concept of human security on the foundation of securing the human right to freedom of movement. Ironically, the Federal Government, which is led by a Fulani president, appears to have a neutral attitude on the developing crisis. As a result, state governors are now unable to take decisive action on a larger range of security issues. The recent restriction on cattle grazing issued by the governor of Ekiti state (Punch Newspaper, May 3, 2016) can be viewed as a turning point in the debate over whether to prioritize protecting life on private property or ensuring human rights and freedom.

In light of this, Humphreys (2010) contends that the former should take precedence when deciding between human rights and welfare development. The argument made was that the migrants' rights to life, health, and subsistence have already been violated by climate change. The right to health is threatened by "an increase in people suffering from cardio-vascular and diarrhoeal diseases associated with ground-level ozone," while the right to life is threatened by extreme weather conditions like flooding, storms, heat waves, and drought, among others, brought on by climate change. The right to subsistence, which is "the right of everyone to an adequate standard of living...including adequate food" (Article 11.1 of the International Covenant on Economic, Social and Cultural Rights) is also threatened by the continual struggle for land resources. Consequently, in the process of fleeing poverty caused by climate change, especially when such is a natural occurrence, migrants are deprived of these rights.

Humphreys believes that human rights are crucial when assessing the effects of climate change after taking into account the denial of these rights. From this, it can be inferred that safeguarding migrants' freedom of movement is also a means of ensuring their safety in light of climate change.

But according to Kent Roach, national security concerns can be addressed correctly without necessarily impinging on people's rights. He made his point using Canadian and British examples, such as "effective review of national security activities" and "emergency preparedness," to show how clever security measures may assist prevent terrorism and lessen its effects without violating rights. He duly noted that violating people's rights excessively to advance security causes, particularly when it comes to banning speech related to terrorism and using profiling techniques. Next, Roach argues that "instances of genuine conflict between rights and security, such as concerns concerning national security confidentiality and preventive limits on liberty, should be decided by applications of proportionality principles."

In his 2010 analysis of the subject of rights, Jeremie Gilbert looked at migration and property ownership. He emphasizes how land is essential to the existence of nomads, who face prejudice in the majority of nations. He examines the question of "effective occupation," which defines who owns property in communities, and contends that nomads have been arbitrarily denied this privilege because of the nature of their work. Accordingly, Jeremie claims that based on international human rights law, nomadic people can acquire "the right to live on their land in their traditional ways through the progressive construction of a specific corpus of law dedicated to the rights of nomadic people." The argument of Jeremie also holds much on the International Labour Organization convention no. 169 that addresses the right of nomadic people over traditional territories, especially article 14 which states that 'particular attention shall be paid to the situation of nomadic peoples and shifting cultivators'.

3.6 Climate change: The political approach

National policy-makers have been enacting climate-related laws and policies with increasing frequency. Even prior to Paris, a near-global assessment of climate change laws and policies in 2015 found that 804 existed, nearly double the number in 2009. More importantly, at least 58 countries have enacted framework legislation that addresses both

emissions mitigation and adaptation (Nachmany et al., 2015). This means it is critical to understand the political economic power structures, relationships and incentives of different domestic actors and institutions.

In recent years, political economy analysis has regained popularity among bilateral and multilateral organizations as a way to better understand how political narratives, economic incentives, and unwritten laws and relationships influence how power and resources are distributed and contested between people and groups (McLoughlin, 2014). Political economy approaches to climate change, according to Tanner and Allouche (2011), are essential because of the issue's cross-sectoral complexity, which adds complexity of interests and actors; a historical bias towards global approaches that may not be sufficiently adaptable for national or subnational conditions; rent-seeking issues that are likely to accompany the increase in climate finance and resource transfer; and an overreliance on an apolitical approach. Advocates of 'politically smart, locally led' development have argued that 'best practice' approaches should be abandoned in favour of 'best fit' options that are selected by local actors, whom donors enable to experiment with solutions that are technically sound and politically feasible (Booth & Unsworth, 2014; Faustino & Booth, 2014; Fritz et al., 2014; Rocha, 2014).

Sub-Saharan African nations have some of the areas most exposed to climate change and with the most vulnerable populations. Many of these, according to Cammack et al., (2007), are governed by a "patrimonial logic," in which access to authority and resources is determined by political allegiances, unwritten laws, and social ties. Although these strategies have received a lot of attention in the literature on development in general and public service delivery in particular, similar strategies have received less attention in the literature on climate policy and governance (Lockwood, 2013). Experience with adaptation planning, however, ties up with the significance of identifying "best fit" solutions that are adaptable to local circumstances. Making "robust" decisions means being aware that decisions shouldn't lock in potentially damaging, or "maladaptive," infrastructure investments that could worsen vulnerabilities and be expensive to reverse. There is still a knowledge gap on the best method to operationalize these concepts in a way that is "politically wise" in this case, by comprehending who may be impacted by particular policy decisions and where power over adaptation resources lies.

This may be linked to risk-averse behavior or "blame avoidance" in democratic nations where MPs are up for re-election every few years. However, polls have frequently revealed support for renewable energy investment and carbon pricing even in the US, where public opinion has been more divided on policy responses to climate change than in much of Europe (Stokes et al., 2015). Major outliers include the US, Canada, and Australia, despite a 2015 research of 500 climate laws around the world finding little difference, on average, in the likelihood of implementation under right- or left-leaning governments (Nachmany et al., 2014).

A compelling policy narrative that utilizes global warming to explain conflicts has arisen as a result of climate change emerging as a major political problem on the international stage. The story of conflicts caused by climate change initially presupposes that desertification is a pervasive phenomenon in the Sahel. Conflicts of varied sizes are ongoing in the arid regions of Africa where farming and pastoralism coexist as the primary land uses. Political and historical factors have influenced these battles. For instance, farmer-herder disputes in Nigeria are linked to the state's laws and policies regarding land and pastoral tenure, which are typically unfavorable to pastoralists and oftentimes cause them to be marginalized. The main causes of these conflicts can be attributed to three structural factors: agricultural encroachment that has restricted the movement of herders and livestock, opportunistic behavior of rural actors as a result of a growing political vacuum caused by decentralization and the disintegration and withdrawal of state services, and corruption and rent-seeking among government officials.

Behnke and Mortimore (2016) submit that case studies in the central Sahel indicate conflicts as having historical and political causes such as government officials seeking rent, as well as policies and legislation that marginalise pastoralists. Due to their opportunistic and adaptable resource use tactics, pastoralists are most likely the group that has the best adaptation to climate variability. However, pastoralists are also harmed by official policies that many Sahel countries favor established agriculture. Even though pastoralists are losing access to land, maintaining livestock continues to be one of the Sahel's most vital economic activities, and there is a significant export of live animals to nearby nations, particularly along the coast of West Africa. Such an imbalanced policy drive made the pastoralists angry, and the anger turned to violence.

According to Vanderheiden (2008), the fate of nations is entangled with climate change issues since one country's poor choice in climate change policy will have a profound impact on all the others. He therefore supports a global approach for establishing climate policies that aims "to reduce the threat of climate change without necessarily having an impact on people's lives" throughout the world. For him, it all comes down to formulating policies and strictly adhering to them. He shows how political theory can be applied to produce a better understanding of the appropriate human response to climate change by concentrating on the conceptual frameworks of justice, equality, and responsibility.

The contribution of climate change adaptation measures to future conflict avoidance is criticized by Hammill and McLeman (2007). The authors believe that climate change will add a new dimension of violence to Africa's history of extensive ethnic and interstate warfare. Rapid adoption of adaptation strategies in various forms is considered as the answer to preventing an imminent human disaster in light of unchecked population movements and diminishing key resources, especially as it pertains to precious water and growing deserts. In order to prevent climate change from sparking an unjustified conflict that would undoubtedly cut beyond national boundaries and ethnic socio-political divisions, cooperation on regional and continental levels is required to enact such policies on time.

Although Collier and Venables (2008) also take the same route, they see "adaptation to climate change as primarily a private-sector driven response involving the relocation of people" as the government's role is reduced to the provision of "information, incentives and economic environment to facilitate such changes". For Haddad (2005) however, using the human development index to gauge a nation's adaptive capacity to climate change. Collier and Venables (2008) also take this approach, but they believe that adaptation to climate change is primarily a private-sector driven response involving the relocation of people, with the role of the government being limited to providing "information, incentives, and an economic environment to facilitate such changes." To measure a country's potential to adapt to climate change, Haddad (2005) argues that the human development index is insufficient. Additionally, it is critical to understand the nation's socio-political objectives. It is important to also know the socio-political goals of such nation. Using this method, he puts forward a model of ascertaining the receptiveness of national governments to international assistance for climate change adaptation; for if the government is not in tune with global policies on climate change, it makes it difficult for its people to adapt to its inherent changes.

3.7 Socio-Economic view of climate change

According to Koohafkan (1996), "weaker populations and institutions" are among the economic repercussions of desertification. The amount of money available to the government decreases when conflicts arise as a result of climate change. The amount of money that can be made through the sale of farm products is significantly reduced, as is the tax that is collected from market vendors who sell the beef, eggs, and dairy products that come from raising cattle. The government must therefore find alternative ways to make up for the lost funds. According to Koohafkan (1996), "weakened populations and institutions" are just a couple of the economic effects of desertification. The amount of money the government has available decreases as disputes resulting from climate change emerge. The money that can be earned through the sale of farm products has been significantly reduced, as has the tax that is collected from market vendors who sell the by-products of cattle breeding, such as milk, eggs, and meat. In order to make up for the lost revenue, the government must identify new sources of funding.

More income will also be spent importing food from industrialized nations, food that could have been grown and packed locally, creating jobs in the process. As a result, African countries struggling with the effects of desertification suffer from capital flight to other countries.

Africa's rural populations rely heavily on the exploitation of its natural resources, particularly water and land, as well as the goods and services that may be produced from them. Given that they are already vulnerable to desertification, climate change will only make them more so. Increasing crop failures and decreased yields in the northeast have previously been linked by some experts to drought and rising temperatures.

Because the environmental policy is "controlled and moulded by a 'colonial mentality' at odds with the real situation at the local level," Mustapha (2003) notes that the situation in Northern Nigeria is worse. The conventional wisdom on people-environment relations in Nigeria's drylands, according to Mortimore and Adams (2001), has its roots firmly planted in the perspectives that followed the Sahel drought of the 1970s. They observe that after the drought, signs of overcrowding and deforestation emerged. Failures in crop yields and a lack of fodder in later years led to the easy adoption of such ideas. Nigeria's population is quickly expanding and becoming more urbanized. This means not only that the demand for resources will continue to grow, but also that the impact of climate change will be exacerbated.

Herders have seen material harm done to their livestock by farmers brandishing cutlasses or guns due to climatic changes throughout the years. In certain cases, when crops are destroyed, the cattle are poisoned in retribution. The majority of the time, the fights have resulted in the destruction of both farmers' and herdsmen's property and lives. These disputes arise as a result of both sides' attempts to increase land exploitation.

Economic underperformance restricts the population's potential income results and prevents the availability of resources to address the problems of particular people. Due to the horrible reactions it frequently receives and the ferocious political issues that frequently embrace it, large-scale relocation has a high risk of conflict. Food insecurity challenges the entire concept of being able to continue living in a certain place.

The implications of climate change, according to Phalkey and Louis (2016), extend beyond general well-being to include "natural, social, demographic, cultural, and economic dimensions of human life. This is made even more obvious by the fact that adjustment procedures are difficult to access or do not operate very well, especially in low- and middle-income countries. Additionally, "sufficiently large and long-term data from comprehensive socioeconomic, demographic, and health observational systems are currently missing to guide adaptation efforts with the requisite precision." In response, the author suggests that health systems be immediately strengthened in order to reduce the risks posed by extreme climate change circumstances.

Akresh (2016) examines the effects on children who are exposed to violence and trauma at such a young age to provide a distinct viewpoint on climate-induced conflict. Conflict-related relocation disrupts education, denies access to food and medical treatment, and causes psychological harm and long-term developmental deficits in children. A child's physical and mental health may also be affected in ways that last into adulthood, which would limit their capacity to earn a living. If these impacts are permitted to persist across generations, they may have an impact on a nation's capacity to build human capital.

Developing nations struggle to respond to or adapt to climate change due to a lack of social safety nets, widespread poverty, shaky healthcare systems, and poor governmental institutions. Hanna and Oliva (2016) make this claim in their explanation of the effects of climate change on children. Since the majority of people in developing nations depend on agriculture as their main source of income, anything that threatens agricultural productivity will also threaten families' capacity to support themselves and their children. Children in underdeveloped nations are thought to be impacted by malnutrition, economic upheaval, a severe lack of clean water that could lead to potential displacement, and migration brought on by climate change. According to the authors, the primary discussion on potential solutions to mitigate the effects of climate change should be on social security, particularly for children. More weather-resistant crops should be planted, clean water availability should be improved, and foreign help to poor nations should be increased.

3.8 Fulani Social Organizations

Omokore (2005) provided a vivid picture of the Fulani tribe's social structures at several levels, including family units, religious beliefs, taboos, and customs. The majority of the information presented below was taken from his account. Apparently, the management of family herds, pasture, and water is a traditional aspect of cow production. Similar to this, animal goods are created by the collective work of the household or family, depending on the situation. A guy, his wife or wives, and their young children make up the family. Pastoral operations are carried out through a framework of social and economic relationships. However, a domestic unit starts when the male offspring of a family reach adulthood and marry. When a married male kid has his own independent family unit by law, he is nonetheless subject to his father's authority in terms of decisions on economic, political, and social issues since the father feels these will have an impact on the stability and cohesion of the domestic unit. The residential livestock compound of a home with a recognized leader is known as a household or Wuro in Fulani. The leader is frequently called Ardo.

However, a sizable household may be divided into manageable sections and led by a man by the name of Wakili (secondary household). A household is essentially a herding group. The work is divided among the family units. The leader of the home is typically in charge of the herds' security, upkeep, and other issues pertaining to cattle production. He acts as a conduit for communication between his people and the local government officials. Negotiating with farmers for designated grazing land and cattle track rights that are maintained from year to year is another one of his responsibilities.

Role distinction in the household is evident, according to Omokore (2005) and Iro (1994). (division of labour). Cattle breeding, management, movement, and general wellbeing fall under the purview of the men. They offer guidance and impart herdsman skills to young people. But in addition to household duties, the adult female is a wife and a mother, with the burden of milk processing and sale. She trains girls to become future decent wives while carrying water and wood and preparing meals. In addition to serving as the mother's apprentices, the female youngsters and teenagers keep the diaries. Although they assist with household duties until they are around 7 years old, when they start regular herding, the male children are potential herdsmen in training. They acquire the skills necessary to survey new pastures and watering spots. The older children teach the younger ones how to handle livestock and make rope. Omokore (2005) remarked that the pastoralists were courteous and respected the elders in terms of culture and morals. Older individuals are not addressed by name by young ones. Generally speaking, the herdsmen were friendly and welcoming to visitors. He also discovered that headsmen hardly ever read anything in the west. The pastoralists' devotion to religion was not very strong. But a large portion of them were Muslims. Tuwochinkafa (mashed rice), tuwo masara (mashed maize), fresh or fermented milk combined with boiled cereal (fura da nono), and guinea corn flour are among the herdsmen's favorite foods. The preferred beverage is kunu. Marriage and inheritance are three of the herdsmen's significant traditions, along with the game of soro (sometimes called sharo). Annually, the Fulani play a game called sharo that has to do with marriage. Various ethnic groups of Fulani herdsmen enjoy playing the game. The marching of young people of roughly equal strength is a test of self-control.

3.9 Gaps in Literature

Numerous academics have tackled the issue of natural resource scarcity, environmental sustainability, and degradation as they relate to the larger phenomenon of climate change. According to Idris et al. (2011), there is a sufficient audit of the state of desertification in Nigeria, as well as documented trends, historical national endeavors, and ongoing initiatives for fighting the rapidly growing desert conditions in the country's dry zones. They also discussed the success and failure of government initiatives in Nigeria to combat the twin ecological problems of drought and desertification, demonstrating that the government could successfully combat desertification through efficient management of its initiatives if adequate resources are used. In any case, particular concentration is not given to the Great Green Wall Project in connection to consistent clashes between farmers and herdsmen.

In Yobe State, Nigeria, Amadi et al. (2011) looked at the coping mechanisms used by the rural population to deal with desertification. The results demonstrate that the growing desert is a serious environmental issue that necessitates "extensive tree planting in the study area and Nigeria in general." The report does not, however, address the difficulties in expanding the amount of grazing pasture available to herdsmen. Due to this, there is a lack in adequate planning for the short- to medium-term status quo, which includes accommodating and addressing herdsmen's occupation throughout the federation. Lee Rinehart (2008) also provides information on management practices and anticipated yields while outlining the common types of pastures and rangelands. But it does not discuss government input and development of policies to preserve grazing lands.

While there is literature on the nationwide issue of farmers and herdsmen clashing, it is particularly scarce in Plateau State when it comes to the use of the GGWP and the cascading benefits of the program in reducing the issue of ongoing conflicts between farmers and herders. Less research has been done on the importance and participation of the various associations in managing conflict between the two groups. Additionally, a hole is left in the area of border control techniques that may help the nation adopt the GGWP. This work tries to close the aforementioned gaps.

3.10 Theoretical Framework

This theory will draw on two theories: the relative deprivation hypothesis, advanced by Samuel Stouffer, and Thomas Homer-Dixon's theory. While the eco-violence theory will address the need for herdsmen to migrate due to environmentally induced causes of climate change and desertification, the relative deprivation theory will address the conflict over resource use that results from conflict between local communities and the migrating/settled herdsmen as a matter of continuing in the discourse.

3.10.1 Eco-Violence Theory

Large populations in many developing countries are particularly vulnerable to four main environmental resources that are essential to agricultural production, according to Homer-Dixon (2001): fresh water, cropland, forests, and fish. Conflicting circumstances arise when these resources are insufficient as a result of misuse, overuse, or degradation in particular circumstances. Conflict that results from a lack of resources has the potential to lower economic productivity for both local groups and the wider national or regional economy. The affected people might move or be driven from their current locations. In any case, when migrants arrive in new communities, ethnic conflicts frequently break out, while a decline in affluence may result in deprivation conflicts. The theory's primary premise is that environmental hazards cause resource shortages as a result of low supply, high demand, or unequal distribution of resources, which plunges some segments of society into misery and savagery. Thus, issues like a rapid rise in population, economic development, and undoubtedly climate change are the main causes of these four sources of shortage. Accordingly, a lack of environmental resources will reduce economic and agricultural output and lead to the disruption of livelihoods.

The precise relationship between environmental shortage and occurrences of violent conflict depends on the context unique to each event. The amount and susceptibility of environmental resources, the balance of political power, the makeup of the state, social interaction patterns, and the organization of economic ties among social groups are all context-dependent elements. These variables influence the allocation of resources, the social consequences of environmental scarcities, the complaints resulting from these scarcities, and whether complaints will lead to violence. There are three types of shortage in the environment: Demand-induced scarcity is brought on by population growth within a region or increased per capita consumption of a resource, both of which increase the demand for the resource. Supply-induced scarcity is brought on by the degradation and depletion of an environmental resource, such as the erosion of cropland.

Structural scarcity is brought on by an unequal social distribution of a resource that concentrates it in the hands of a relatively few people while the remaining population is left without it. Resource capture and ecological marginalization are two patterns of interaction between these three types of scarcity that are frequently seen. When a resource's degradation and growing demand combine to form resource capture, the remaining population is forced to live in a scarce environment by powerful social groups who anticipate future shortages. Increased resource consumption results

in ecological marginalization when structural distribution inequities are present. When weaker groups are denied access to the resource, they migrate to ecologically vulnerable areas, where they eventually harm the environment (Homer-Dixon, 1994: 15-16). Scarcity and its interactions produce several common social effects, including lower agricultural production, migrations from zones of environmental scarcity, and weakened institutions (Homer-Dixon, 1991: 91).

People must sense a relative decline in their standard of living when compared to other groups or when compared to their aspirations, and they must believe there is little possibility that their aspirations will be met under the status quo for these social impacts to lead to increased grievances (Gurr, 1993: 126). Widespread civil violence is not always the result of significant levels of grievance. Groups with strong collective identities that can cogently oppose state authority and blatantly favourable circumstances for violent collective action against authority are at least two more elements that must be present. The harmed must feel that violence is the best way to successfully resolve their concerns and must see themselves as members of organizations that can act jointly. The majority of civil conflict theorists make the causally independent assumptions that grievances, group identities, and possibilities for violent collective action. In contrast, we contend in this study that complaints have a significant impact on the meaning of group membership and the creation of groups, and that they can change how these 281 groups perceive the likelihood of violence.

People are more likely to establish groups as a result of their shared perception of grievance, and the nature and severity of the grievance have an impact on what belonging to a group means. More prominent group identity also affects how individuals perceive the potential for collective action since it makes violent challenges to authority more expensive for everyone involved and increases the likelihood that these challenges will be successful. Civil violence is a symptom of strained ties between the government and the populace. Peaceful relations between the state and society depend on the state's capacity to provide such demands, or to offer essential elements of the members' survival strategies, as well as on its capacity to maintain its influence over various social groups and organizations (Migdal, 1994: 27). The demands of its members are presented by civil society, groups that are independent of the state yet active in communication and contact with it (Chazan, 1994; Putnam, 1993). The nature of the state is crucial; a representative state will respond to these demands and see them very differently from a non-representative one, such as South Africa during apartheid. As long as social groups feel their demands are being met, there won't be many complaints. When the state's capacity to organize, regulate, and enforce behavior is compromised in comparison to possible challenger organizations, opportunities for violence against the state will increase. The likelihood of violent collective action by challenger groups succeeding is increased by state character changes and falling state resources, particularly when these organizations organize enough resources to tip the social power balance in their favor (Gurr, 1993: 130).

The delicate exchange of benefits and costs between the state and society is threatened by environmental scarcity. In places that are severely affected by shortage, declining agricultural output, urban migration, and economic contraction sometimes result in suffering, which raises demands on the state. In addition, scarcity can boost the power and activity of rentseekers, making it easier for them to avoid paying taxes on their new income and influencing state policy. This can interfere with state revenue streams by lowering economic productivity and, consequently, taxes. As a result, environmental scarcity raises society's demands while lowering the state's capacity to satisfy them. The relations between civil society and the state are diminished when groups are forced to concentrate on limited survival tactics due to severe environmental scarcity. Social contacts between groups decrease as society fragments into smaller groupings, and each group pulls inward to concentrate on its own issues (Chazan, 1994: 269). As civil society shrinks, society is less able to express its demands to the state. Additionally, this fragmentation lessens the density of "social capital" - the networks, trust, and standards created through active, cross-cutting interaction across groups (Putnam, 1993: 167). These two shifts provide strong groups more chances to seize control of the government and utilize it for their own ends. Since it is no longer representative of or responsive to society, the legitimacy of the state erodes. Even in the face of environmental shortage, there may be less opportunity for violent collective action if strong horizontal and vertical interactions between civil society and the state serve to weaken the influence of prospective challenger groups. However, complaints will continue if terrible socioeconomic situations continue. There will likely be a rise in criminal behavior as a result of these resentments. Unless the grievances are addressed, the legitimacy of the government will decrease, society will once again become segmented, and opportunities for violent collective action will increase correspondingly.

Herders must be mobile, and climate change is at the root of their relocation. The eco-violence hypothesis examines the complex relationships that can arise between climate change and conflict in the context of conflict between farmers and herders. This is due to the four natural resources that are affected by climate change: fresh water, agriculture, forests, and fish. Climate change has caused crop areas and forests to be destroyed by drought and desertification, which has resulted in a shortage of the environmental resources that cause conflict.

Herders stray in an effort to improve the situation by seeking out areas with better fodder, markets, and greenery. As a result, the local population's production activities are undermined since they are suddenly forced to compete for limited resources. Conflict is already triggered by this. In addition, when the herders are finally accepted into society, the long-

term effects will be pressure on the land management system, food shortages, irreconcilable differences, social contrasts, overpopulation, social disorganization, and religious, social, and cultural intolerance, all of which are conflict-triggers in and of themselves. And if they are accepted, the long-term consequences will include land pressure, food shortages, conflicts over interests, cultural incompatibilities, population growth, societal disarray, and religious, social, and cultural intolerance—all of which are conflict-starters in and of themselves.

Herders stray in an effort to improve the situation by seeking out areas with a better climate, lush foliage, market opportunities, and forage. Due to the unexpected emergence of competition over local resources, this impairs the local population's production activities. Conflict results from this alone. In addition, when the herders are finally accepted into society, the long-term effects will be pressure on the land management system, food shortages, irreconcilable differences, social contrasts, population overpopulation, social disorganization, and religious, social, and cultural intolerance, all of which are catalysts for conflict. The long-term effects of their acceptance include the strain on land, food shortage, conflicts of interests, cultural differences, overpopulation, societal disarray, and religious, social, and cultural intolerance, all of which are conflict-triggers in and of themselves.

Clearly, Nigeria's contempt for farming and the administration's lax attitude toward climate adaptation and mitigation put the people in a difficult situation due to recent climate changes. Farmers have reported low yields that have necessitated cultivating more land than they had in the past, leaving limited room for grazing livestock. The relationship between climate change and the conflict between farmers and herders will be examined within this context in this work.

3.10.2 Relative Deprivation Theory

Relative deprivation is thought to have been invented by sociologist Samuel A. Stouffer following World War II. Relative deprivation theory was initially introduced by Stouffer in his 1949 research "The American Soldier," which is part of a four-volume collection titled "Studies in Social Psychology in World War II." Relative deprivation theory, devised by Stouffer to comprehend the psychology of soldiers, has become a recognized theory in social science research (Adams, 1970).

According to the relative deprivation theory, feelings of lack and dissatisfaction are linked to a desired point of comparison. When wishes turn into reasonable expectations and are denied by society, one feels relative deprivation. Relative deprivation's opposite is societal contentment. The search for social change that motivates social movements is typically attributed to relative deprivation, which is also used to explain why social movements arise from widespread experiences of relative deprivation (Morrison, 1971).

The relative deprivation theory emphasizes thoughts and deeds. The idea, for instance, promotes investigating both the behavioral implications of deprivation feelings as well as how a person could feel deprived when comparing his or her circumstances with those of a referent person or group. It makes a distinction between fraternal/group deprivation (discontent resulting from the situation of the entire group as contrasted to a referent group) and egoistic deprivation (single individual's perception of comparative deprivation) (Singer, 1992)

According to the relative deprivation theory, people can evaluate their current circumstances by conducting tests on other people, groups, or oneself at different times. They will be upset and irritated if these correlations lead them to believe that they don't deserve what they have. The hypothesis makes reference to the sensation of being passed over for something that one believes they are eligible for. It primarily refers to being denied access to resources that could have a financial, political, or social impact on one's way of life. As a result, when techniques don't match objectives, people engage in degenerate behaviors. Relative deprivation has frequently been mentioned by political scientists as a potential cause of social movements that result in political cruelty, such as rioting, terrorism, and even wars. Resistance is likely if there is a significant discrepancy between what people believe they deserve and what they believe they will receive. In this sense, relative deprivation predicts collective cruelty by social groups in a manner similar to how dissatisfaction leads to violent behavior with respect to an individual.

Numerous elements, such as style of life, society, and political climate, have an affect on the use of savagery. In any case, savage activity should be acknowledged as a required task by the way of life, if not encouraged. Political brutality is also more likely if the current government or possibly the economic/political frameworks are thought to be poorly thought out. Another factor is whether cruelty is regarded as a justifiable response to the problem.

This is problematic for the herdsmen since they lack access to grazing areas, which leads to their animals wandering into agricultural areas. Over time, previously designated cattle lanes have either been converted to farms or used for other purposes. Because of the actions of herders and what appears to be the government's cold shoulder toward the security of their landed holdings, farmers simultaneously feel alienated and deprived of a maximum harvest.

Despite its foundations, critics of this theory have frequently argued that it fails to explain why some people who are dissatisfied choose not to act and join social movements despite the fact that doing so gives their views a chance to be heard by the relevant authorities. There are counterarguments, such as the fact that some people are prone to conflict avoidance and that there is no guarantee that social interaction will result in a change in one's life.

4 THE GREAT GREEN WALL PROJECT

4.1 The Middle Belt Region of Nigeria as A Socio-Economic and Political Entity

Geographically speaking, Nigeria's Middle Belt region is at its center. The area is situated between latitudes 40 and 120 East of Prime Meridian and scopes 70 30" North and 110 15 North. With regard to landmass, it occupies an area of approximately 342,390 km², or 37% of Nigeria's total land area. The region is constrained by the republics of Cameroon and Benin separately in the East and West, and by Nigeria's northern and southern conditions in the North and South, respectively (Dawan, 2002; Udo, 1970 referred to in Okpeh, 2008). It consists of at least six states, including Plateau, Kogi, Nasarawa, Plateau, Niger, and the Federal Capital Territory of Abuja. The Savannah zone and the Rain Forest zone are two distinct natural zones that make up this district, which is a range with specific climatic characteristics. It is also a region of terrain with the erratic relief of the Jos Plateau and has numerous ranges of slopes, mostly along its Eastern ledge (Okpeh, 2008:29). Additionally, it is clear from available topographical data that the Middle Belt region is largely endowed with both human and natural resources, and historically, it has drawn people from both the Northern and Southern regions of Nigeria as well as from beyond (Sober, 1964; Rubin, 1973; Tillea, 1981 all referred to in Okpeh, 2008:29). Forde (2002) expressed that its numerous conduits (for the most part the Niger and Benue and their tributaries) encouraged the simple development of various ethnic gatherings into and out of the area, similarly as their banks filled in as the foci of settlement for some gatherings amid their developmental stages in the remote past.

Verifiably, during the nineteenth and twentieth centuries, the neighborhood served as the scene of intergroup relocations and conflicts. This is distinct from the frequent assaults on the range by slave marauders from the far North and the South. Environmentalists have argued that the region's low population density was caused by the prevalence of bugs and diseases (Dawan, 2002:3-18). However, Ologe (1978) demonstrated that the region's hot, humid tropical climate and the savannah and backwoods-related plants are conducive to the development of irritants and diseases, such as sleeping sickness and river blindness. Despite its natural endowments, the area is among the least economically developed in Nigeria. Additionally, the Middle Belt region is a multiple nation marked by socio-social and institutional contrasts between (often minorities) ethnic nations of various populations. This crucial aspect of the district has been supported by numerous eminent analysts and academics. For instance, Logam (1985) claimed that among all the territorial entities of the Nigerian coalition, it had the most notable socio-political and religious majority. In addition to this, a research conducted by British frontier specialists in 1926 found that Nigeria is home to about 416 different ethnic groups. Two hundred and nineteen of these, or roughly 70%, were located in the Middle Belt region. Of the remaining, five ethnic groups, or about 8% of the total, were only found in the South, while forty-four, or about 9% of the total, were only found in the far (or Islamic) North (Blitz, 1965 referred to in Okpeh, 2008:31). This suggests that the area is home to Nigeria's largest concentration of ethnic minorities. Apart from the fact that this is the most concentrated gathering of followers of Islam, Christianity, and African traditional religions.

The competition for followers and believers, as well as the influence and notoriety between the first two, are crucially responsible for some of the most violent religious conflicts we have seen in the area and other parts of the country. The analysis above makes it evident that the area is naturally prone to conflict on a financial and political level. The Middle Belt district has experienced its fair share of intergroup migrations, colonization, and conflicts as a characteristic of the larger Nigerian nation, all of which have had significant influence on its people groups and their relationships with one another. In examining the appearances of these social procedures in the area from the most punctual circumstances along these lines, it is fundamental we take note of the accompanying: (i) that the land area of the locale in the move point between the North and South combined with its characteristic gifts makes it a safe house for some Nigerian transitory groups in times past and presently; (ii) that its ethno-cultural heterogeneity notwithstanding its basic financial backwardness makes the district a hazardous clash zones.

The Fulani are a significant ethnic group that is mostly located in Nigeria and the Middle Belt region of the country. They also have to do with the production of livestock in certain areas. Additionally, the variety of names given to them throughout different countries reflects the extent of their living areas. For instance, they go by the name Fulbe. They are referred to as Fellata in the Chad region and to its east; Fula among the Mande in the far west (Barth, 1957:33 cited in Fricke, 1993). However, the Fulani migrated far and moved from Senegal to the Upper Nile region, spreading from west to east in the Sudan region. Only the extent of their beginning place in the Fouta Djallon is verifiably shown, and they have continued to spread from this region since the eighth century, according to Tauxier (1937:7 cited in Fricke, 1993). But in the thirteenth century, they joined the Hausa States in peace (Palmer, 1936; Hogben, 1930:59; Westermann 1952:136 all cited in Fricke, 1993). According to Fricke (1993), in the fourteenth century, Fulani tribes were noted in

Baguirmi in the central Sudan. He continued by saying that large numbers of people were prevented from leaving Baguirmi for the highlands of Cameroon. In the sixteenth and seventeenth centuries, new outsiders from the west united the Fulani populace there (Duhring, 1926:125; Palmer, 1936:258 and Kirkgreen, 1958:22 all cited in Fricke, 1993; East, 1994:21) bringing about the foundation of Fulani predominance toward the start of the nineteenth century.

4.1.1 Plateau State

The Jos Plateau is a plateau located near the centre of Nigeria. The plateau has given its name to the Plateau State in which it is found and is named for the state's capital, Jos. The plateau is home to people of diverse cultures and languages. The plateau's montane grasslands, savannas, and forests are home to communities of plants and animals distinct from those of the surrounding lowlands and constitute the Jos Plateau forest-savanna mosaic ecoregion. It covers 8600 km² and is bounded by 300–600 m escarpments around much of its boundary. With an average altitude of 1,280 m, it is the largest area over 1,000 m in Nigeria, with a high point of 1,829 m, in the Shere Hills. Several rivers have their sources on the plateau. The Kaduna River drains the western slopes, flowing southwest to join the Niger. The Gongola River drains eastwards to join the Benue. The Hadejia and Yobe rivers flow northeast into Lake Chad (Dinerstein et al., 2017).

The Jos Plateau is dominated by three rock types. The older granites date to the late Cambrian and Ordovician. The younger granites are emplacements dating to the Jurassic and form part of a series that includes the Air Massif in the central Sahara. There are also many volcanoes and sheets of basalt extruded since the Pliocene. The younger granites contain tin which was mined since the beginning of the 20th century, during and after the colonial period. According to UNEP-WCMC (2020), most of the plateau's languages are in the Chadic family,[6] which is part of the Afro-Asiatic family. Two of the Plateau's largest ethnic groups are the Berom, in the northern Plateau, and the Ngas in the southeast. Smaller groups include the Mwaghavul, Pyem, Ron, Afizere, Anaguta, Aten, Irigwe, Chokfem, Kofyar, Kulere, Miship, Mupun and Montol.

4.1.2 Pastoralism in Plateau

The Jos Plateau, formerly open savannah woodland but now mostly grassland, is a highly populated, intensively cultivated area. It was historically free of tsetse flies and trypanosomiasis. The absence of trypanosomiasis and abundant pasture attracted large numbers of cattle-keeping pastoralists. The area now holds over a million cattle and plays an important role in the national/regional cattle industry. However, beginning in 1982, there have been increasing reports of tsetse flies and African animal trypanosomiasis (AAT) on the Plateau (Majekodunmi et al. 2019a).

In the early nine-teenth century, low human populations, absence of tsetse and mosquitoes and unlimited grassland made the Jos Plateau one of the most attractive environments for cattle in northern Nigeria. These favourable conditions drew Fulani pastoralists from the semi-arid regions who established themselves across the Plateau. From the 1970s onwards, the Fulani also settled on the lowland plains. Currently, the Jos Plateau is a highly populated cosmopolitan area, with inhabitants from across the country with a significant Muslim/Hausa presence (Higazi, 2020). Rural areas are mostly inhabited by farmers of the original Plateau tribes with a significant minority of settled Fulani herders

4.2 Implications of Herdsmen Movements and Interactions in the Middle Belt Region of Nigeria

It is reasonable to infer some inferences from the prior examination of these migrations and interactions within the Middle Belt region of Nigeria, which have had significant impacts on the relationships between the people and the frequency of conflicts as they are experienced there. First and foremost, the motivation stems from the desire to colonize arable territory for farming and livestock grazing. The oldest and longest-lasting form of migration into and within the area is thought to be this one.

This component of migration, which is supported by a number of interconnected factors including population growth, pressure on available land, and the desire of migrants to settle in sparsely inhabited areas, is to blame for some of the conflicts that have occurred in the area. This largely describes what has happened in the Benue valley, where conflict has arisen between Fulani pastoralists and communities like the Tiv, Jukun, ChambaKuteb, Idoma, Berom and Alago over land and other resources (Best and Idyrough, 2003). The main cause of intergroup violence in the area has been the fierce disputes between various tribes for valuable but finite land resources. Another related visible aspect of migration into and within the Middle Belt region is the explosion of economic migrants from other parts of the country, mostly the North and South.

The post-colonial era saw the completion of this trend, which was evident during the colonial period. Since the pre-colonial era, economic migrants like the Yoruba, Hausa, and Igbo have maintained close ties with the local population. These groups may have had an advantage in the process of integrating into the colonial socioeconomic environment because of their early interactions with Europeans at the coasts. As a result, they were the first to solidify their control

over the dynamics of both the formal and informal sectors of the economy. Therefore, they fared better than their Middle Belt neighbors.

Conflict between the migrants and their hosts is frequently fuelled by the migrants' stranglehold on the local economy. The information that is now available, according to Okpeh (2008:54-55), indicates that even when the conflicts did not initially involve migrants, they are frequently the main victims of the violence that is typically the central element of such conflicts. They are hounded, physically attacked, and have their belongings either looted or destroyed.

The significant inter-ethnic and pastoralists vs farmers wars that have occurred in states like Plateau, Benue, and Kogi, to name a few, are examples of this pattern. Conflicts in the country's central belt region may be greatly affected by transhuman migrations of ranchers and their cattle in quest of greener pastures. In Nigeria, riverine and valley bottom (fadama) cultivation has significantly increased since the 1980s, putting pastoralists and farmers in direct competition for access to wetlands, which has led to an increase in violence (Depres, 1994; Osaghae, 1994). Although social, economic, and biological aspects vary significantly from one place to another, conflict is typically highest where population is most dense and competition for "fadama" land is greatest.

The banks of the River Benue and its major tributaries have served as a focal point for the movement of fishing and pastoral communities as well as migrant farmers and hunters, despite the fact that "fadama" farming is very unevenly distributed throughout the Middle Belt region. Farmers and other users, mostly herders and fishermen come into direct confrontation as farmers occupy an increasing amount of the rich riverbank for farming purposes. This condition is a major contributing factor to the hostility that exists between the Middle Belt's primarily agricultural population and its Fulani neighbors.

These disputes typically last for a long time, which has an impact on the local demography, historical intergroup dynamics, as well as how people interact with their surroundings. Chieftaincy tussles are another type of conflict that, in some areas of the Middle Belt region, significantly affects current migration. Given the political nature of this kind of struggle, some of the residents of this area have become embroiled in a very violent conflagration. The Idoma region, where chieftaincy disputes and crises have been the main causes of political instability among the people, is an example of how this crisis manifested itself (Okpeh, 2008:61).

4.3 Great Green Wall Project

The Great Green Wall for the Sahara and the Sahel Initiative was first proposed by the former President of the Federal Republic of Nigeria, Chief Olusegun Obasanjo GCFR, as a method to address the impeded socio-economic and ecological effects of land degradation and desertification on the continent of Africa. Driven by the critical need to ensure improvement of the drylands of Africa helpless against the unstoppable issue of desertification, the African Union (AU) supported this initiative in 2007. (African Union Commission, 2009). In order to combat desertification, improve food security, and equip communities to adapt to climatic change in the Sahel-Sahara region of Africa, the Great Green Wall Program was created as a Pan-African Initiative. The Initiative is particularly customized towards reinforcing the strength of the locals, creating a common framework with sound ecosystem management, advancement of land resources, protection of rural heritage and change of the living states of the local populaces.

The Great Green Wall is an action plan for rural development, not only a foundation for a Green Wall of trees stretching from Senegal to Djibouti or a program for afforestation and reforestation. The Initiative's main goals are to improve food security, combat desertification in the Sahel and Sahara region, and help communities adapt to climate change. It is anticipated that the Initiative will lead to the efficient management of land, water, and vegetation on up to two million hectares of croplands, rangelands, and dryland forest per nation, the protection of threatened dryland biodiversity, and the sequestration of 0.5 to 3.1 million tons of carbon annually.

The initiative also has a lot of advantages, such as capitalizing on best practices and blending in national demands as well as developing collaborations and sub-local coordination that might be replicated in various desertification- and drought-affected regions. In order to ensure the success of the GGW Initiative, community ownership and cooperation are essential to the ownership, execution, and management of the majority of tasks that support the objectives. Currently, Burkina Faso, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal, Sudan, and Chad are among the eleven countries that are a part of the initiative (Daily Trust, 2015).

These countries believe that by coordinating efforts at the national level across international boundaries, they will be able to overcome institutional and policy barriers that exacerbate the effects of climate change and changeability, leading to desertification, environmental degradation, and the threat of conflicts between migrant and settler groups.

4.3.1 Ecological Characteristics of Nigeria

Nigeria is located in West Africa between latitudes 4 and 14 North and longitudes 3 and 15 East. With a population of about 150 million, it has an area of around 923,768 km², or nearly 14% of West Africa's total land area. It is surrounded by sub-equatorial Cameroun to the east, the long, elongated Republic of Benin to the west, the semi-arid nations of the Niger Republic and the Chad Republic to the north and east, and the Atlantic Ocean to the south. The Niger Delta region makes up over 80% of the nation's total coastline, which is around 853 kilometers long. The Niger Delta, one of the largest wetlands in the world with a surface area of 70,000 km², is a significant component of Nigeria's coastal and marine ecology. Nigeria's mangrove forests are the third largest in the world and the largest in Africa. Nigeria is mostly located in the lowland humid tropics and is distinguished by high temperatures virtually all year round. The typical maximum temperature is 32°C in the far south and 41°C in the north. The north has a far wider annual range than the south because the mean minimum temperature in the north is roughly 13°C compared to 21°C in the south. In different parts of the country, the mean annual rainfall ranges from over 3,500 mm along the coast to less than 600 mm in the Sahel region in the northeast. Rainfall varies greatly from year to year, especially in the north. This frequently leads to climate dangers, particularly floods and droughts, which leave in their wake great misery as well as catastrophic repercussions on the nation's economy and food production.

The country is distinguished by a wide range of ecological zones due to its diverse climatic and physiographic conditions, including the savannah (Sahel, Sudan, Guinea, and Derived), lowland rainforest, freshwater swamp forest, mangrove forest, and coastal vegetation, as well as a montane forest zone along its eastern border with Cameroon. The economy is monopolistic, with crude oil making up roughly 95% of total national export revenue. The majority of the population works in and relies on agriculture for their food. The majority of animal husbandry is pastoral, with herdsman following the seasons as they travel.)

Nigeria is endowed with a huge potential for water resources, estimated to be 319 billion cubic meters, of which 267 billion cubic meters come from surface water and 52 billion cubic meters from ground water. Over 220 dams in Nigeria today have a combined storage capacity of 33 billion cubic meters (JICA, NWRMP, 1995; Federal Ministry of Water Resources, 2010). Fluvisols, regosols, gleysols, acrisols, ferrasols, alfisols, lixisols, cambisols, luvisols, nitosols, arenosols, and vertisols are the predominant soil types in the nation (Driessen and Deckers, 2001). The likelihood of using each of these soil types for agriculture varies. About 48% of Nigeria's soils fall into poor productivity categories, particularly the vertisols, alfisols, acrisols, and arenosols that are found in the country's dry areas (Agboola, 1979). Nigeria is a place of ecological extremes. The "natural" vegetation in the south is dominated by luxuriant woods, including mangrove forests, freshwater swamp forests, and rainforests. In the central belt, this gives way to Guinea savannah, whilst in the semi-arid and desert districts of the north, savannah forest and thorny vegetation rule. Nigeria is endowed with an abundance of material and people resources that can ensure long-term economic growth and development. In addition to bitumen, topaz, lignite, coal, tin, columbite, iron ore, gypsum, barite, and talc, it also has significant quantities of other solid minerals. Natural gas reserves total more over 187 trillion standard cubic feet, while known reserves of crude oil total well over 37 billion barrels (NPC, 2009). According to estimates, Nigeria's population would total 164 million in 2011 (up from 140 million according to the 2006 Census), dispersed across a landmass of 923,768 km². As a result, it is one of the most populous and largest countries in Africa. By 2030, the population is anticipated to double at that rate. However, the country's more than 250 ethnic nations contribute to a dynamic fusion of the socio-political and cultural scene.

States within the region have frequently been referred to as desertification frontline states. The region north of latitude 10°N is widely recognized as the country's most desertification-prone area. The states that make up this group include Adamawa, Bauchi, Borno, Gombe, Jigawa, Kano, Katsina, Kebbi, Sokoto, Yobe, and Zamfara (Figure 3.1). The slow transition of vegetation from grasses, bushes, and scattered trees to vast expanses of sand-like vegetation is one of the sub-most region's obvious symptoms of desertification. Sand dunes increased from 820 km² to 4,830 km² between 1976–1978 and 1993–1995, a 17 percent increase (FMEnv, 2008). In the far northern regions of Katsina, Sokoto, Jigawa, Borno, and Yobe states, some settlements and significant access roads have been buried in sand dunes. In addition, numerous rivers and lakes have become silted, which has caused water bodies to rapidly dry up following the rains. The situation involving the decreasing Lake Chad serves as an illustration (LCBC, 1990). Gully erosion, which had not previously posed a serious concern, has gotten worse and now threatens 18,400 km² (as opposed to 122 km² in 1976/78). (FMEnv, 2005, 2008). According to estimates, between 50 and 75 percent of Nigeria's 11 frontline states are seriously threatened. With a combined population of nearly 35 million, these states make up about 35% of the nation's total land area. The buffer states (Benue, Kaduna, Kogi, Plateau, Nasarawa, Niger, Plateau and Taraba) and FCT, to the south, are absorbing the pressure of migrating human and livestock populations, which leads to an intensive use and degradation of the vulnerable and marginal ecosystems of these areas, even during years of normal rainfall. About 10% to 15% of the land regions in the pressure point buffer states, which number 18, are reportedly endangered by desertification. The country as a whole is thought to be losing roughly 351,000 hectares of its landmass each year to desert conditions, which are thought to be moving south at a rate of about 0.6 km per year (FGN, 2004; Wood and Yapi, 2004; Tiffen and Mortimore, 2002).

In the 1930s, there was a lot of worry about the Sahara desert potentially moving into Nigeria. An Anglo-French Commission looked into the report in the northern sections of Nigeria as a result, and in 1937 it instructed the border emirates to start planting trees to block the expansion. Numerous thousands of seedlings were grown and sold for cheap. A modest action effort in the form of a tree-planting campaign wasn't started until the 1940s. In the 1960s, shelterbelts were built on the northern edges of the afflicted districts due to the poor conditions there (FGN, 2004). The devastating Sahelian drought of 1972–1973 spurred the Federal Government to adopt a more targeted strategy and course of action. Since then, the Nigerian government has seen the problem of land degradation and desertification as a direct threat to the country's sustainable growth. In order to promote sustainable land management and improve environmental sustainability in the context of national development, numerous national programs have now been implemented at all levels of governance. These efforts can be captured under (i) promoting an enabling policy environment for desertification control; (ii) institutional and capacity building; (iii) political and legal framework; (iv) partnership building and participation in global initiatives; (v) implementation of special initiatives.

The administration is aware of the multiple issues caused by desertification. To ensure a truly national response to the large and complex effects of land degradation and desertification on national development, it has created a variety of policies and strategies in this area. Particularly the Nigeria Vision 20:2020 (Economic Transformation Blueprint, 2009) acknowledges the role that sustainable exploitation of natural resources plays in reducing poverty and creating chances for informal self-employment. On the other hand, if the environment is not properly managed, it could quickly turn dangerous and pose a threat to both human survival and rapid socioeconomic development. The objective is environmental preservation within the context of Vision 20:2020, with a focus on reversing land degradation, preventing desertification, and reducing the effects of droughts (FGN, 2009a). Preventing additional biodiversity loss, rehabilitating existing damaged areas, and conserving ecologically sensitive locations are the specific initiatives. Utilize resources effectively and sustainably; lessen the effects of climate change on socioeconomic development processes; Make Nigeria a visible participant in the fight against climate change; Reduce the effects of droughts, fight desertification, and stop land degradation; Reducing the frequency and effects of environmental dangers and disasters; Increasing awareness of the state of the Nigerian environment; and Improving overall environmental governance are all ways to ensure a clean environment. Important strategies and initiatives with direct bearing on Nigeria's efforts to combat desertification include: (i) National Policy on the Environment, (ii) National Drought and Desertification Policy, (iii) National Drought Preparedness Plan and (iv) National Action Plan to Combat Desertification (NAP). The NAP outlines long-term, integrated plans that prioritize both increased land production and the sustainable management of land and water resources. Other significant policies and plans of action for reducing desertification and drought include: (a) Nigeria National Environmental Action Plan (NEAP) and States Environmental Action Plans (SEAPs), (b) Nigeria Climate Change Policy and Response Strategy, (c) National Adaptation Strategy and Plan of Action for Climate Change, (d) National Forestry Action Plan, (e) National Conservation Strategy, (f) National Biodiversity Strategy and Action Plan (NBSAP), (g) National Resources Conservation Action Plan, (h) National Policy on Agricultural Policy (NPA), (i) National Water Resources Master Plan (NWRMA). The Federal Government set up a National Committee on Arid Zone Afforestation Programme (AZAP) with the responsibility of in-depth examination of the problems of desertification and to draw up a suitable programme of afforestation geared towards checking desert encroachment. In the far northern part of the area, a program of shelterbelt planting was started to safeguard nearby agricultural regions from drying winds. But in 1985, the committee was disbanded, and the Department of Rural Development and River Basin Development Authorities (RBDAs) in the then Federal Ministry of Agriculture, Water Resources, and Rural Development took over the committee's duties. The Federal Ministry of Agriculture's Forestry Department took up the afforestation responsibilities after the RBDAs underwent reorganization in 1987. The Federal Government of Nigeria's most comprehensive effort to solve the myriad environmental issues (including drought and desertification) and safeguard the Nigerian environment was undoubtedly the founding of FEPA by Decree 58 of 1988. Through Decree 59 of 1989, which expanded the authority of FEPA, the government further displayed its commitment to environmental issues. The decree gave the Agency legal support, a broad mandate, and specific sanctions powers to carry out the National Environmental Policy. FEPA was the top institution for all matters pertaining to environmental protection because it was required by law. Additionally, the Federal Environmental Protection Agency assisted the Federal Capital Territory and the 36 states of the Federation in establishing State Environmental Protection Agencies (SEPAs) (FCT). Nigeria ratified the Desertification Convention on 8th July, 1997 after signing it on 31st October, 1994, making it a Party to the convention as of 6th October, 1997. A National Coordinating Committee to Combat Desertification Control was founded in 1993 as part of the UNCCD's implementation plans, with the Secretariat located in the then FEPA. The Committee is in charge of coordinating the Convention to Combat Desertification's implementation. The Committee is made up of representatives of line Ministries, Agencies, pertinent research Institutes, and Non-governmental Organizations (NGOs). It should be noted that the majority of the Federation's states have environmental protection laws in place, such as prohibitions on deforestation and bush burning. The Department of Drought and Desertification Amelioration (DDDA) was established in the 1999 Federal Ministry of Environment (FMEnv), strengthening the institutional framework for better coordination of government operations leading to the implementation of the CCD in the nation. The purpose of the move was to ensure that rehabilitation and restoration of desertified and desert-like conditions in the affected areas would receive more attention. In order to combat drought and desertification in the nation, Nigerian Metrological Services was upgraded in 2003 from a department inside the Ministry of Aviation to a semi-autonomous organization,

known as the Nigerian Meteorological Agency (NIMET). Additionally, there is a National Council on the Environment, which is made up of federal and state government leaders. The Council gathers on a regular basis to assess Nigeria's environmental situation.

The Federal Republic of Nigeria's constitution, in section 20, outlines a variety of environmental goals to safeguard and enhance the country's environmental resources (air, land, and water). For the purpose of ensuring efficient environmental management, numerous rules and regulations have been put in place. Notable among these are: (i) Federal Environmental Protection Agency Act – retained as Cap F10LFN 2004, but repealed by the National Environmental Standards and Regulations Enforcement Agency (NESREA) Act 2007, which is being developed into the National Environmental Management Bill; (ii) Environmental Impact Assessment Act – retained as Cap E12 LFN 2004 (which sets out the general principles, procedures and methods of Environmental Impact Assessment in various sectors); (iii) National Park Service Act – retained as Cap N65 LFN 2004 (for conservation and protection of natural resources (wildlife and plants) in national parks; (iv) Endangered Species (Control of International Trade and Traffic) Act- retained as Cap E9 LFN 2004 (conservation of wild life and protection of threatened and endangered species); and (v) National Environmental (Desertification Control and Drought Mitigation) Regulations, 2011. The government has come to the conclusion that it cannot solve the multifaceted issue of desertification on its own. In order to achieve this, it has made it easier for other actors, such as the private sector, NGOs, CBOs, and donors, to get involved. The implementation of CCD in Nigeria is currently being aggressively pursued by a number of NGOs, some of whom were also quite engaged during the negotiation process. The Nigerian Environmental Study/Action Team (NEST), the Nigerian Conservation Foundation (NCF), the Forestry Association of Nigeria (FAN), and the International Union for Conservation of Nature are notable national and international NGOs that are actively participating in the activities of the Global NGO network on Desertification in Nigeria (IUCN). The Nigerian Field Society, Young Foresters Club, the Fauna Conservation Society, the Ecological Society of Nigeria, the Horticultural Society of Nigeria, the Nigerian Environmental Society, the Nigerian Society for Biological Conservation, etc. are some additional non-governmental organizations (NGOs) that are generally concerned with environmental protection.

4.4 Great Green Wall Initiative in Nigeria

One of Nigeria's worst natural calamities, desertification has the potential to impede the socioeconomic advancement of the entire nation. The issue, which is much more evident in the eleven frontline States of Adamawa, Bauchi, Borno, Gombe, Kano, Katsina, Kebbi, Jigawa, Sokoto, Zamfara, and Yobe, poses a threat to the livelihoods of over 40 million people and is engulfing approximately 2,168sq km of rangeland and cropland each year. It also destroys human settlements, causes forced migration, worsens rural poverty, and The people in these States are among the most underprivileged and susceptible to climatic change and land degradation. For the management of their fisheries, cattle, and rain-fed crops, they significantly rely on the vulnerable ecosystems. These constitute the primary sectors of employment in the region. Despite numerous policies, strategies and actions adopted to control it, the problem of desertification in Nigeria remains resolute and threatens the sustainable development and security of the affected States.

In Nigeria, the Great Green Wall Programme (GGWP) provides an additional point of entry for action to successfully address the issue of desertification as well as many other urgent development challenges in the drylands. Although the initiative was first introduced in Nigeria in 2005, President Goodluck Jonathan's administration began its comprehensive implementation in 2013. The initiative's community-driven Nigerian program, which is being carried out in the eleven frontline States and involving 46 Local Government Areas, focuses on a number of issues, including land rehabilitation and natural resource conservation, poverty alleviation, bolstering food security, job creation, improving livelihoods, and boosting community capacity to become more resilient to climate change and climate variability.

The country's continuous green wall, measuring 1,500 km long by 15 km broad, will stretch from Arewa Local Government Area in Kebbi State to Abadam Local Government Area in Borno State. For the establishment of the contiguous belt, around 100,000 workers will be employed in the planting of about 60 million drought-resistant tree seedlings. Additionally, 4,500 forest guards will be hired, trained, and employed, along with 450 extension officers. Over 2,250,000ha of land should benefit from the continuous green wall's protection against desertification processes and increased agricultural productivity (NAGGW, 2016).

The Great Green Wall Program is undoubtedly a noteworthy initiative in Nigeria's fight against desertification and land degradation. It is a tool that can be used to ensure that the impacted dryland communities improve. However, the program will only be successful if local activities are taken, a comprehensive strategy is adopted to promote people's employment, and adjustment measures are built to minimize people's vulnerability to climate change. Therefore, until a sustainable environment is formed, the participatory method by incorporating local groups needs to be strengthened. At the same time, communication with various stakeholders at all levels also needs to be improved.

4.5 National Agency for the Great Green Wall (NAGGW)

The National Agency for the Great Green Wall is leading the push for the implementation of the Great Green Wall Project in Nigeria (NAGGW). The Great Green Wall program's implementation was the mandate of the NAGGW, which was founded in 2015 by an Act of Parliament. The program calls for the establishment of a green mass of vegetation stretching 1,500 km from Borno State in the northeast to Kebbi State in the northwest. It also calls for the advancement of dryland agrarian innovation, the provision of water for irrigation and residential uses, the development of grazing resources, the promotion of green energy alternatives, the promotion of alternative livelihoods, and the improvement of working conditions in agro-based businesses. The key areas of concern for the program are shelterbelt establishment, agro-forestry, stabilization of sand dune and coordinated resource management (Essen, 2017)

National Council, State Implementation Committee, and Local Government Implementation Committee are the three levels of the organization's institutional structure. The National Agency for the Great Green Wall Establishment Act (2015) states that the office has the authority to carry out the Great Green Wall Program (GGWP) in Nigeria, provide partners and stakeholders with the baseline data they need for the program's implementation, define techniques and plans for the program's execution, and coordinate the efforts of offices, associations, and institutions concerned with the issue of desertification towards the achievement of the program's goals. serve as the focal point for the coordination of mediations by local, sub-regional, and international organizations and offices of concern in terms of resource management in the Nigerian drylands during the implementation of the program; guarantee effective communication with the African Commission and Pan-African Agency of the Great Green Wall; ensure consistency of laws, principles, and directives that have an impact on the ecosystem; establish suitable apparatus for the observation and as the program's observer; Promote dryland activities for better livelihoods while advancing private sector and stakeholders compliance with rules, guidelines, and controls, including new orientation on land administration framework. Raising public awareness of the program's objectives and goals and providing useful ecological education are also part of this strategy.

Undoubtedly, raising the afflicted population's knowledge is necessary to combating desertification, restoring lands, and creating livelihoods. The success of the GGWP depends on ensuring equal access and community ownership of intervention actions through awareness-raising and communication. Sensitization of the local population has thus been at the forefront of the NAGGW's endeavours. Systems have been developed to hone the populace, gather them to carry out the program, and increase their capacity to take ownership of it. Some of the methods include the employment of mobile movie theatres, ongoing radio and TV jingles, school outreach, the use of traditional and religious leaders, dramatization and street side shows, town square crusade, and so on. Finally, keeping in mind the crucial role that civil society organizations play in influencing national, regional, and international policy making, their efforts to raise awareness of important issues must be channelled for the program's success.

The NAGGW participates in consistent Environmental Impact Assessment, Sand Dune/Oases Identification and Mapping, and baseline assessments of the operational range in the eleven frontline states as part of its mission to carry out its mandate. In an effort to stop the threat of desertification, the organization has so far built 241 km of shelterbelt, 120 ha of group woodlots, 250 ha of group plantations, and 92 community tree nurseries. Along with the aforementioned measures, the agency also installed 92 solar and wind-powered boreholes to lessen the effects of the drought and supply water for cattle and inhabitants (NAGGW, 2016).

Despite its achievements in its brief time since becoming legally recognized as an agency, the NAGGW still faces difficulties, one of which is engaging the commercial sector in the GGWP. The cash required for projects covered by the agency's mandate is substantial, and only external funding can ensure their success. The agency faces difficulties in expanding its mandate beyond the 11 states specified in the Act that established it to other states of the federation. Over time, information regarding the office is scarce outside of the 11 frontier states where most efforts are focused. In this vein, a conscious effort should be made to support the initiatives of the organizations outside the borders of the northern states most affected by the effects of desertification.

5 DATA ANALYSIS, RESULTS

5.1 Introduction

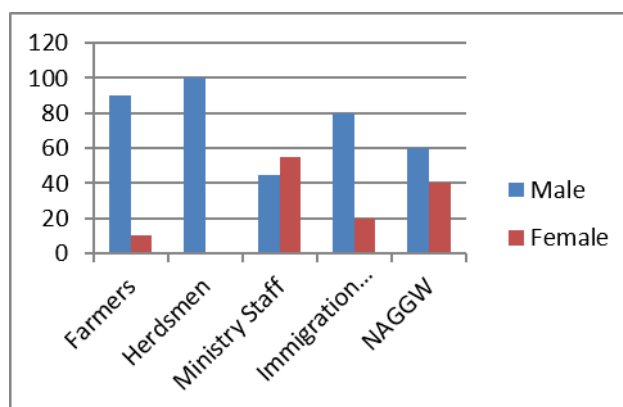
In this chapter, the data gathered from the respondents for this research study will be presented, analyzed, and explained. As a result, the information on the respondents' characteristics is methodically categorized in this chapter. This chapter will also provide an analysis of the respondents' data that is pertinent to the study topics. The sample size for this study was determined to be 210 respondents.

5.2 Classification and Characteristics of Respondents

This section of this chapter examines the biographical data of the respondents.

Table 1: Respondents by gender distribution

Gender	Male	Female
Farmers	72	8
Herdsmen	80	0
Ministry Staff	18	22
Immigration	4	1
NAGGW	3	2
Total	177	33



Source: Field Survey, December 2022- January 2023

Figure 1: Bar Chart Depicting Respondent Sex Distribution

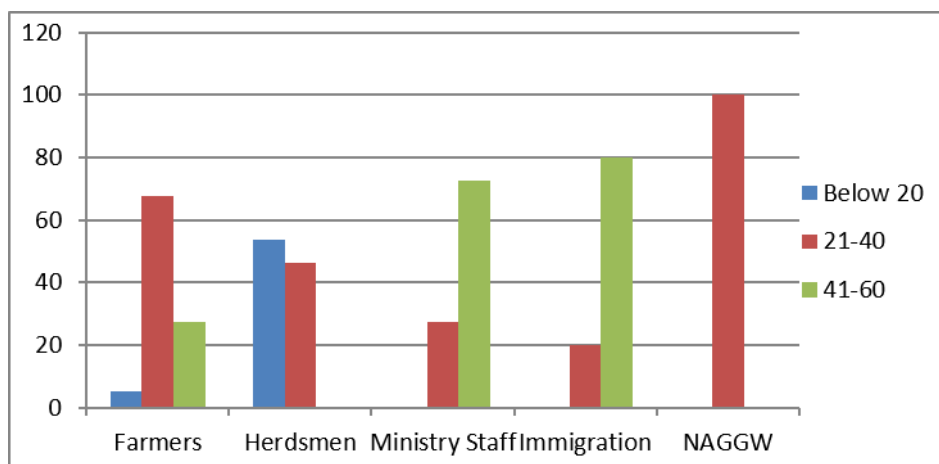
In Table 1, there were 14.8 percent women and 85.2% men. Figure 1 further breaks this down to demonstrate that the Ministry of Environment and Forestry received the largest percentage of female respondents. Out of the total number of female responders, this group accounted for 73.3 percent. There were no female respondents under the herdsmen category, even though the remaining 26.7 percent of respondents were farmers and immigration staff.

In contrast, the herders survey solely included male respondents, whereas male respondents made up 90% of farmers, 80% of immigration personnel, and 45% of the Ministry of Environment and Forestry survey respondents.

The preceding results suggest that cattle herding is a man dominated venture. Contrary to the data with farmers, where roughly 10% of them were women. It's possible that women find it simpler to practice farming, which could account for this. The majority of Fulani women may not choose to work as cattle herders due to sociocultural considerations. It should be noted that women made up 40% of the respondents from the National Agency for the Great Green Wall and 55% of the respondents from the Ministry of Environment and Forestry in Plateau State, respectively. This demonstrates how women favor certain occupations.

Table 2: Respondents by age distribution

Age	Below 20	21-40	41-60
Farmers	4	54	22
Herdsmen	43	37	0
Ministry Staff	0	11	29
Immigration	0	1	4
NAGGW	0	5	0
Total	47	108	55



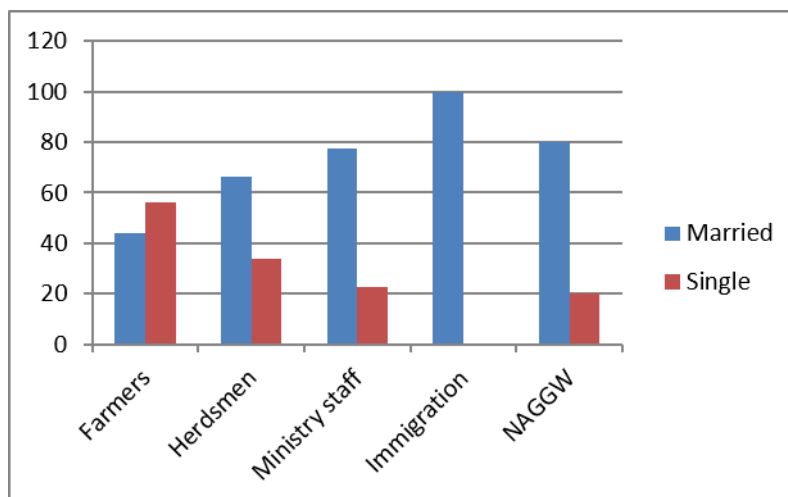
Source: Field Survey, December 2022- January 2023

Figure 2: Bar Chart Depicting Respondents Age Distribution

In Table 2, the herdsmen have the biggest percentage of respondents under the age of 20, at 53.8%, compared to the National Agency for Great Green Wall (NAGGW), whose respondents are all between the ages of 21 and 40. On the other hand, the Nigeria Immigration Service's respondents are overwhelmingly between the ages of 41 and 60. Statistics show that cattle herding is more appealing to young people than farming, as there were no herdsmen over the age of 40, compared to 5% of farmers who were under the age of 20.

Table 3: Respondents by marital status

Marital status	Respondents	Percentage
Single	81	38.6
Married	129	61.4
TOTAL	210	100



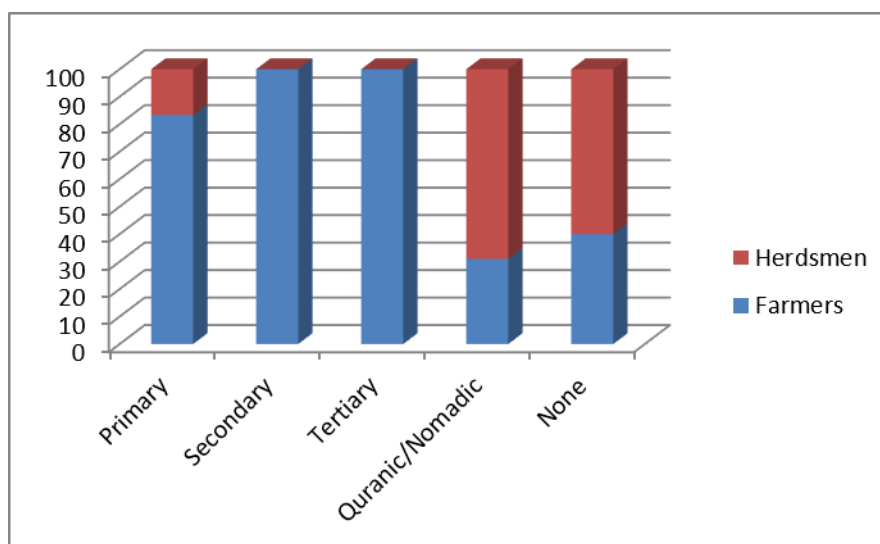
Source: Field survey, December 2022- January 2023

Figure 3: Bar Chart Depicting Respondents by Marital Status

Table 3 shows that 61.4 percent of respondents are married and 38.6 percent are single. All of the immigration staff members interviewed were married, according to a further breakdown in Figure 3. Seventy seven and five percent of Ministry of Environment employees, 66.2 percent of ranchers, and 43.8 percent of farmers were also married. Compared to the immigration officials surveyed, the farmers have the highest percentage of single respondents (56.2%).

Table 4: Educational status of farmers and herdsmen in Plateau State

Variable	Primary	Secondary	Tertiary	Quranic/Nomadic	None
Farmers	20	13	7	22	18
Herdsmen	4	0	0	49	27



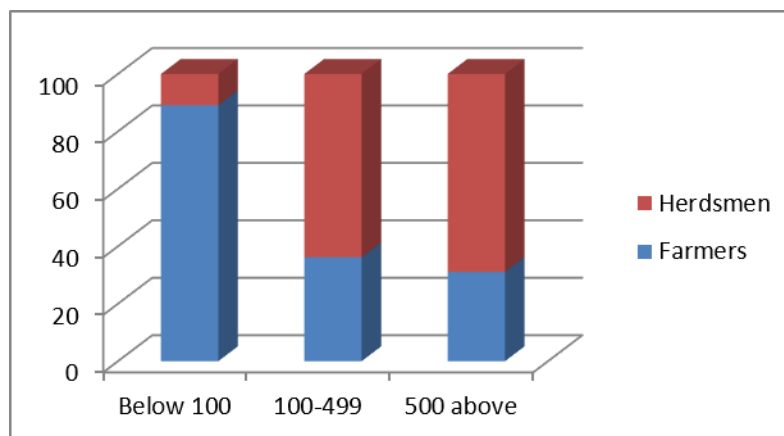
Source: Field survey, December 2022- January 2023

Figure 4: Bar Chart depicting educational status of farmers and herdsmen in Plateau .

According to Table 4, the farmers had more formal education than the herdsmen. In fact, none of the herdsmen had a degree from a tertiary institution, and the majority were uneducated. It is important to note that 61.2 percent of the ranchers who took part in this study attended a Quranic or nomadic institution at some point.

Table 5: Annual income of farmers and herdsmen in Plateau State

Variable	Below 100,000	100,000-499,999	500,000 above
Farmers	41	25	14
Herdsmen	5	44	31



Source: Field survey, December 2022- January 2023

Figure 5: Bar Chart depicting annual income (₦000) of farmers and herders in Plateau.

Table 5 shows that the majority of farmers fall into the lowest bracket of yearly income earners. This result does not specifically support the notion that there is a predominance of poverty among rural farmers in Nigeria, as reported by Chukwuone and Agwu, even though on average they earn far less than the herders (2015).

5.3 Analysis of Data According to Research Questions.

5.3.1 Research Question One: What are the models of the Great Green Wall Project implementation in light of continuous desertification especially in Northern Nigeria?

Since its creation, the National Agency for the Great Green Wall (NAGGW), which is mandated by law to stop the deforestation threat in Nigeria, has compiled a list of programs aiming at not only helping the environment but also the lives of those impacted by desertification. The NAGGW may be classified into five groups, according to the research, which includes afforestation, community mobilization, sensitization, and awareness campaigns, promotion of alternative livelihoods, development of rural infrastructure, and employment creation. The agency has so far made some notable progress in this area.

According to Mr. Goni Ahmed, director general of the National Agency for the Great Green Wall, Nigeria has been able to provide clean water sources for more than one million people in the affected areas since the initiative began in 2013 by building 157 boreholes with reticulation facilities and animal drinking troughs along the GGW passage (The Guardian, January 2017). The establishment of skill acquisition centers for training unemployed youths in a variety of trades, such as computer maintenance, carpentry, electrical work, tailoring, etc., the employment of youths as forest guards and borehole drillers, and the distribution of about 200,000 improved date palm seedlings to farmers have all contributed to the short- and medium-term sustenance of the livelihoods of the people in the region.

This facilitates the government's efforts to involve the locals in its strategy to green the states that are most impacted. Other governments, including the 11 states that make up the continental green belt, are waging campaigns to promote ongoing afforestation and crack down on unauthorized tree-cutting. The program to plant trees is carried out in collaboration with the several state environmental ministries. Alongside this, farmers are being sought out and given the necessary training to take part in the "farm natural regeneration program," which was created to address the threat of bush burning by farmers as a routine before the start of the planting season.

The NAGGW has also keyed into the role of communication in the form of awareness in the fight against deforestation. In addition to the radio and television commercials in English, Hausa, Fulfulde, and Kanuri especially in the worst-affected states—there is a constant distribution of posters, handbills, and newspaper features. Additionally, the agency believes it is appropriate to occasionally host stakeholder forums to get public opinion. Locals have the opportunity to discuss their concerns and potential solutions to stop deforestation in their area at such events.

In addition to the aforementioned initiatives, the NAGGW's school outreach program brings the battle against deforestation to the classroom. The organization has expanded this program to a chosen group of secondary schools in the eleven frontline states. The curriculum is aimed at instructing pupils on how to cultivate seedlings thus carrying the campaign of saving tree plants and nurturing them to all nooks and crannies of the north.

5.3.2 Research Question Two: How can the government maintain/develop grazing reserves or ranches in order to reduce constant clashes between local farmers and herders?

The lack of amenities and infrastructure at grazing areas, particularly in Plateau state, contributes to the ongoing conflicts between farmers and herdsmen. For instance, the proposed grazing reserve in the Wase Local Government Area is devoid of the necessary infrastructure, including dams, roads, schools, clinics, veterinary care centers, and other social amenities that would make the area more functional and allow prospective Fulani herdsmen to settle there. This is particularly true for Lata in the Bassa Local Government, as grazing reserves are rarely given by the government the time and money they require to be fully functional. Therefore, rather than being stationed at a reserve lacking the necessary amenities, the majority of herdsmen would prefer to keep moving their cattle.

According to the findings of this study, herdsmen frequently complain about how grazing plans fail to take their plight into account. The majority of herdsmen think that the government is inaccessible and does not understand their demands or how to make grazing reserves an attractive alternative to migration in search of pastures. According to Abdullahi Wakili, a representative of the Miyetti Allah Cattle Breeders Association in Wase LGA, they anticipate being fully involved in state government policies about grazing. According to Wakili, in order for grazing reserves to effectively fulfil their intended function, herdsmen, particularly association leaders, must have a role in how the facility is managed. This includes having a committee in charge of grazing reserves in which herdsmen will be fully represented. This way, the grievances of the herders will be put into consideration especially as it concerns safety of the cattle in such facility, which is a primal concern of theirs.

According to the findings of this study, herdsmen frequently express frustration over the lack of consideration given to their needs when developing grazing plans. The majority of herdsmen think that their government is inaccessible and does not understand their demands or how to make grazing reserves an attractive alternative to migration in search of pastures. A representative of the Miyetti Allah Cattle Breeders Association in Wase, Abdullahi Wakili, claimed that they anticipate being fully involved in state government policies regarding grazing. According to Wakili, herdsmen, particularly association leaders, need to have a role in how the facility is operated for grazing reserves to be truly effective in fulfilling its objective.

5.3.3 Research Question Three: What conflict prevention models can be used to avert farmer/herder clashes in Nigeria?

According to research, whenever there are conflicts between farmers and herdsmen in Plateau state, the conflicts are currently managed through conflict resolution. In light of this, Adamu Bello, the secretary of the National Groundnut Producers, Processors and Marketers Association (NGROPPMAN) in the state of Plateau, asserts that leaders from opposing groups only discover a means of communication when issues arise. This includes incorporating traditional and religious organizations as necessary to help resolve the conflict that is developing since, otherwise, communication ceases to exist to a significant degree. When farmers feel wronged, especially when they are dissatisfied with the outcome of their meetings with the herdsmen leaders in their community, they will even go so far as to contact the police.

Conflicts are only resolved temporarily thanks to the usage of conflict resolution because there is no way to deal with the underlying cause of the conflicts in the first place. Conflicts between the two groups can occasionally be traced back to unsolved issues from an earlier fight. Abubakar Mohammed Arrudo, a representative of the Miyetti Allah Cattle Breeders Association in the state of Plateau, claims that members of the association frequently exact revenge on their neighbors for perceived wrongdoing, particularly that committed by cattle rustlers. The problem of cattle rustling is frequently ignored during conflict resolution because the authorities are perceived as being overly sympathetic to the cause and suffering of the farmers. Thus, in as much as the herdsmen are keen for co-existing peacefully with farmers in their host state, findings here show that they require some form of protection and guarantee of protection for their cattle from cattle rustlers as well.

It is important to connect this to the theoretical underpinnings of this work in this context. According to the relative deprivation argument, herders feel wronged because the confrontation with farmers is one-sided. Farmland destruction and not cattle rustling are issues that are frequently mentioned. In regards to the worries of herdsmen, particularly when their cows are taken, there appears to be little support from the community. According to Yisa Manzuma, a herdsman in Plateau State's Bassa Local Government, if local authorities or community leaders are approached when cattle are taken, the responses are generally icy and unhelpful. For Yisa, who has been involved twice in such committees organized to relate with their host community when cattle rustling occurs, the experience is dreadful.

"The leaders don't appear convinced that the cows were actually taken; rather, they believe it was a herdsmen-led internal organized crime plot to extort money from the locals. And to be completely honest, during the years I was involved, neither care nor payment was supplied. (Manzuma, Y., focus group discussion, January 10, 2017)

Such attitude by the host community brings consequences as herdsmen also feel nonchalant when their cattle stray into farmlands as a form of retaliation.

Additionally, Plateau state's management of farmer/herder conflicts needs to take coping mechanisms into account. Disputes between farmers and herdsmen have persisted for far too long, and the numerous techniques employed by both sides have made little to no headway in resolving the issues and effects of the conflicts. Both groups need to develop more practical coping mechanisms. Every time cattle invade their farmlands, farmers often sow less. They frequently shift their focus to various alternative sources of income, which has an impact on both their livelihoods and the local economy. For instance, the annual production of Sodi Alamu, a maize farmer in the Barikin Ladi Local Government Area, has been impacted by having to significantly lower his net expenditure on farm activities. He made this decision in response to a poor harvest brought on by the actions of stray cattle. Although he has begun to focus more on alternative sources of income, he still feels as though he has been denied a way of life he appreciates since he is unsure whether his investment will generate the necessary profit. Farmers are awash in examples of this, and their communities have felt the effects in one way or another.

On the other side, herdsmen who suffer significant losses as a result of malnourished animals or the actions of cattle thieves have been forced to sell their herd to other migrant groups that could afford them. But after that, they are forced to wander the streets and forage for food. As they are willing tools in the hands of small-time criminals, this inevitably poses a security concern to the community. Due to the fact that they are accustomed to their coworkers' security systems, these groups of herdsmen are also suspected of playing a significant role in the cattle rustling industry. They also serve as prepared weapons for rebels attacking towns as ranchers.

Temitope Ajikobi, a representative of the Gankoro Women Fadama Association in Plateau State, stated that the state's farmers and herders should be involved in conflict prevention rather than conflict management.

The conflict between farmers and herders would have escalated if some traditional rulers in this state had remained in place. When conflicts arise, these leaders make every effort to diffuse them by getting in touch with the heads of both parties and mediating a fair settlement. However, the quarrel subsequently flares up once more, demonstrating the shallowness of the reconciliation. In order to maintain a steady line of contact between the herdsmen and farmers, it will be beneficial if these traditional institutions receive some assistance from the government. Due of the respect that both parties have for the traditional leaders, this will work. Fine if you also include the religious authorities. As an association, we have often met with the Saraki Bororo, but they are always

5.3.4 Research Question Four: In what ways can communication between local farmers and migrating herdsmen be improved upon?

The beginning of dialogue only happens at times of conflict. The constant exchange of ideas between farmers and herders, particularly about resource management and land usage, lacks a specific platform. Farmers and herders frequently clash, and Davou Gyang, a farmer in Plateau state's Riyom Local Government Area, claims that this is due to the absence of regular meetings. Such gatherings would have greatly increased mutual understanding, allowing for the peaceful resolution of minor disagreements before they turn into violent conflicts. Therefore, the indigene-settler divisions that already exist in communities where conflicts are a persistent problem have become even wider in the lack of a specialized communication channel or forum.

Farmers, herders, and their host community all need to improve communication and understanding if the conflict between farmers and herdsmen is to be lessened. A new strategy must be used to prevent the conflict from ever starting. For instance, the Gwanara Cashew Growers Association's secretary, Sunday Bagas, claims

"In the northern part of Plateau war, there is, to some extent, an understanding between the farmers and the herdsmen whereby, during the farming season, the herdsmen refrain from encroaching on farms, but, following harvest, the farmers invite the herdsmen to come and graze for free on the leftovers from the harvest. In the southern portion of Plateau, this kind of understanding that promotes peaceful cohabitation has not been attained. (Oyeniyi, S., 2016-12-19. Focus group discussion).

According to Ibrahim Yakubu, a maize farmer in the state's Wase Local Government, incidences of retaliation will be avoided until such understanding is built through frequent town hall meetings between the community, farmers, and herders. Abubakar claims that farmers, particularly those in cattle grazing areas, have resorted to using the herbicide "paraforce" on their crops to kill livestock. Herders become enraged by these losses and revenge by allowing their cattle

to wander into legitimate farmlands. Such actions can be readily prevented if there is a functional communication channel.

The limited timely assistance received from traditional/religious institutions does not improve the communication gap either. The majority of respondents point out that traditional and religious organizations mostly show signs of worry when a fight turns violent or bloody. These institutions make little to no attempt to mediate "minor" disputes that frequently occur before conflicts between farmers and herdsmen. Ironically, neither side feels any need to address the underlying issues in the minor disagreements before they escalate into conflict, despite the fact that the institutions are the first port of contact whenever there is a conflict of interest. Security agencies get engaged when a conflict blows up, but they are perceived as siding with whichever side reports the conflict first. The first reporter's alteration of the facts, whether intentional or not, and the security agencies' seeming lack of intelligence gathering in that context can sometimes make the other party angry, who waits for an opportunity to react.

Consequently, continuous sensitization of both groups, notably by the government, would be a part of improving dialogue between farmers and herders. This would not only result in improved perception but also greater opportunities for understanding of practical coping mechanisms and a decrease in the tendency for retaliation between the groups.

5.3.5 Research Question Five: To what extent could Nigeria secure its borders in the northeast to prevent the influx of foreign pastoralists, arms and ammunitions?

Every time cattle belonging to the former invade farmland, there are instances of confrontation between farmers and ranchers. In these situations, cattle graze freely on both cultivated and uncultivated land, destroying a significant amount of food and valuable cash crops in the process. The herdsmen are asked to leave by their host, which is not popular with the herders because, in most cases, these food products constitute the foundation of the communities. As a result, herdsmen turn violent and launch attacks, often assisted by mercenaries hired from nearby nations. As host towns identify their attackers as Fulani, the herdsmen insist there are no such violent elements within their rank, raising suspicions of outside involvement in the case of these suspected mercenaries. A representative of the Miyetti Allah Cattle Breeders Association, Ya Musa Joowulo, for instance, declares unequivocally that "we know who is a member, we have regular meetings, and we know who is grazing where. However, when the alleged attacks are made and we do our internal inquiry, none of us appear to be familiar with the individuals responsible. Even some witnesses to a few attacks confess that some of the attackers did not talk in our dialects. Therefore, there must be a mistake somewhere. (Joowulo, Y., 2017-01-09. group conversation in focus). Because they are unsure of when the next attack will occur or if they will receive appropriate protection from security authorities, the farmers have formed a vigilante organization to keep an eye on their farmlands as a result of this development. Accordingly, the results demonstrate that while the local Fulani herders were mainly peaceful and under control, the traveling herdsmen who emigrated from nearby nations were largely to blame for the damage of farmlands.

group conversation in focus). Because they are unsure of when the next attack will occur or if they will receive appropriate protection from security authorities, the farmers have formed a vigilante organization to keep an eye on their farmlands as a result of this development. Accordingly, the results demonstrate that while the local Fulani herders were mainly peaceful and under control, the traveling herdsmen who emigrated from nearby nations were largely to blame for the damage of farmlands. This would make it simpler for the NIS to man the borders effectively and stop the influx of unregulated immigrants into the nation. The huge borders are not adequately manned, which, according to the immigration authorities, makes it too simple for outsiders to enter the nation. Only in the southern regions of the nation, particularly Lagos, is the NIS fully deployed with the necessary equipment to perform their duty of guarding the borders. In this situation, the land borders are the boundary under discussion. Technology is required for the efficient control of such vast geographical borders. It's time to upgrade the nation's security using cutting-edge technology.

6 DISCUSSION OF FINDINGS

The findings from the field indicate that Plateau State needs a framework for resolving disputes between farmers and herdsmen. A framework with committees at community, local, state, and federal government levels that would include pertinent occupational unions and local leaders should be put into place specifically for the prevention and resolution of farmer-herdsmen conflicts, according to the respondents, particularly farmers and herdsmen. In terms of ensuring the safety of farmers and herdsmen, this will assist in integrating all the state's stakeholders. To ensure that a stronger security framework is put in place to deal with conflict, this should also involve the state's security services.

The findings of this study, which demonstrate the active involvement of herdsmen in cattle rustling, added a new dimension to the security quandary in the state regarding the conflict between farmers and herdsmen. It is stated that herdsmen who have lost their jobs owing to the loss of their cattle to the escalating conflict are valuable assets in the cattle rustling trade. In an effort to restart their businesses, these former herdsmen are utilized to compromise the

security measures of their coworkers and steal animals. The government and herdsmen association must quickly solve this issue in order to prevent further deterioration of ties between the host community and herdsmen.

The traditional and local authorities should also play a significant role in developing solutions to the dispute between farmers and herdsmen. The local leadership must be represented on the committees mentioned above. Governments, traditional institutions, and other local organizations should pay greater attention to the plight of victims of farmer-herdsmen conflicts by utilizing the proper instruments at their disposal for efficient conflict resolution and management. The importance of traditional institutions has been emphasized as a means of resolving disputes between ranchers and farmers. Even still, the traditional authorities must become involved before conflicts between the two groups become violent. The presence of these leaders on both sides will serve to lessen the threat of retaliatory strikes by reducing hostility, particularly in relation to lop-sidedness.

This study also identified the necessity of using educational and campaign strategies to increase farmer and herdsman awareness of stock routes and compliance rates, teach farmers and herdsmen conflict prevention and coping skills, and inform both groups of the importance of peaceful coexistence and mutual understanding. This includes enhancing farmers' and herdsmen's understanding of land use restrictions and providing extension employees with conflict coping techniques by attending relevant seminars and conferences. By doing this, extension agents would be able to teach farmers and herdsmen conflict-resolution techniques while also emphasizing to both groups the importance of peaceful coexistence and understanding. The task of extension goes beyond simply imparting new knowledge; it is equally instructive to be aware of potential barriers to farmers adopting new approaches. Therefore, it is beneficial for them to have units in charge of farmer-herdsmen relations in addition to extension agencies. This is consistent with the requirement to promote education between the two parties. This would not only result in enhanced perception but would also improve the chance for awareness of practical coping mechanisms.

7 SUMMARY

The background of the study and how desertification and climate change have impacted the way of life for people in Sub-Saharan Africa were covered in detail in chapter one of this study. The creation of the problem statement that described the difficulty facing native settlers due to the actions of migrant herders who are unable to locate grazing for their livestock came next. The importance of the study, its scope, the terms' operational definitions, as well as its plan, were then discussed.

In chapter two, the conceptual framework was reviewed. Topics covered included conflict and security, farmer-herder relationships within communities, social adaptation to climate change, human rights, and political and socioeconomic perspectives on the issue. As the eco-violence theory was applied and described in accordance with the goals of this study, gaps in the literature were identified.

The Official Agency for Great Green Wall, the national organization in charge of the project's implementation in Nigeria, is described in detail in Chapter Three along with its operations, goals, and objectives.

The findings from the fieldwork are presented in chapter four. In order to identify the precise complexities that this study was devoted to studying, the content of interviews and focus groups was analyzed in accordance with the research questions. The study's summary, conclusions, and recommendations for additional research are all included in chapter five.

7.1.1 Summary of Findings

In Nigeria, ongoing conflicts between farmers and herders are not only serious, but they also put host towns' security in danger. Due to the impacts of desertification in Northern Nigeria, the primary cause of the conflict is the migration of herdsmen southward in search of green grass for their cattle. There must be a clear roadmap and a commitment to eliminating Nigeria's desertification threat if the conflict is to be contained. In light of the fact that the threat of desertification affects the entire nation, it is important to underline that the National Agency for Great Green Wall must expand its programs far beyond the 11 frontier states at the forefront of the problem. The ripple effects of desertification can be a cause for the destabilization of communities and lead to the establishment of bloody conflicts that may last years to solve.

This study has clearly shown that Nigeria's porous borders, particularly in the north, require increased protection. Given the unregulated entry of foreign herders into Nigeria, the current situation does not look good for Nigeria. As these foreign individuals may not necessarily be part of the local herdsmen association, it is challenging for them to engage in meaningful interactions with the local populace. The authorities, in particular state Ministries of Agriculture, must take care to identify both farmers and herdsmen under their jurisdiction.

Additionally, this study has revealed that security organizations are mostly focused on the safety of agricultural areas. Since issues of cattle rustling are rarely treated with the same levity as the destruction of farmlands, herdsmen perceive security authorities as biased as a result of the focus on protecting farmers. Therefore, it is crucial that the government implement steps to protect cattle from cattle rustlers and apprehend and prosecute those responsible. The establishment of grazing reserves is one sure-fire approach to do it. However, the government now has a lax attitude regarding the upkeep of current grazing reserves and the creation of new ones. The government, through its ministries, needs to take responsibility for its role in preventing the incursion of cattle into farmlands by providing the amenities required for these reserves to operate at full capacity.

8 CONCLUSION

Though negatively, the climate is changing every year. The Great Green Wall Project is a positive start in halting the frightening rate at which deserts are spreading. Though it will take some time to fully green the Sahara-Sahel region, the NAGGW's current activities should be rigorously continued and expanded to include all 36 states. In order to limit the actions of their livestock, the programs should include the provision of grazing spaces for the herdsmen.

There is a need to revisit current strategies for resolving disputes between farmers and herdsmen. Security services do not always need to employ force in conflict situations since retaliating parties only do so when it is opportune for them to do so. In order to address the problem of the fundamental causes of conflict, mechanisms need be put in place.

Nigeria's borders are quite open, particularly in the north. This is bad news for the migrant herdsmen since it implies that outsiders are capable of harming their villages by impersonating Nigerian ranchers. Increased conflict between herders and their host communities will result from such invasion. Herdsmen working within states must therefore be accurately identified, and Nigeria's northern borders must be immediately fortified.

Recommendations

The results of this study make it clear that the Federal Government must ensure the rehabilitation of existing grazing reserves, the creation of additional ones throughout Nigeria, and their excellent maintenance by preventing any farmers from cultivating close to them. It is advised that specialized boards be established with the primary purpose of managing the nation's grazing reserves. The problem of reopening existing or establishing new national cattle routes should then be resolved because doing so could cut across farmlands and lead to increased conflict between farmers and herdsmen in the aforementioned communities.

Instead of using conflict resolution to resolve the disagreement between farmers and herdsmen, conflict prevention can be used. In order to identify and prevent potential conflict triggers, particularly those related to farmers' and herdsmen's activities, this should involve a partnership between the government and local communities. Together, they should establish procedures for managing conflicts through inclusive participation and dialogue. In this regard, the structural preventive tool should be used. By addressing the sources of violence, this will aid in establishing a lasting peace in the community. Especially by traditional and religious institutions, such a preventative plan should include diplomatic interventions and private mediation attempts.

In Plateau state, there is a need for instructional mediation in the farmer/herder conflict. This could be achieved by raising the awareness of farmers and herdsmen regarding land use regulations, educating both groups about necessary conflict coping mechanisms through their associations, educating both sides on the need for tranquility and common understanding of difficulties, and teaching new farming and herding techniques. Having government departments in charge of farmer-herder relations is also crucial. This will make it easier to schedule regular meetings between the parties, addressing their concerns and issues before they turn into a confrontation.

To curb the attacks, killings by herdsmen, and retaliatory attacks by the victims, the Federal Government must strengthen the capabilities of the intelligence agencies, particularly the police. The perpetrators of such crimes must be promptly apprehended and brought to justice, and their sponsors must be found and forced to face the full force of the law. In order to properly counteract the negative effects of smuggling and illegal immigration, the Nigerian Immigration Service must also be reorganized. Other tactics must be used to stop the importation of illegal weapons into the nation. Over time, smugglers have become more skilled at concealing weapons and ammunition inside shipments of food or clothing. Given that it is impossible to inspect every inch of such massive cargoes, it is crucial that the various security agencies work together to gather intelligence, share it, and act as watchdogs over smuggling operations at all points of entry into the nation. The nation must communicate and cooperate with other immigration agencies in the area, particularly through such intergovernmental forums. Given that they are the nearest neighbors in terms of the Northern boundaries, such coordination needs to include the security apparatus in Niger, Chad, and Cameroon.

8.1 Limitations of the Study

This study was limited by a linguistic barrier because some farmers and herdsman did not understand or grasp the language well enough. Although this issue was addressed by hiring an interpreter, it's likely that some expressions were lost in translation.

Additionally, it was difficult to gather the respondents for the focus group talks. The researcher took advantage of many individual farmer and herdsman association gatherings. Focus group discussions were conducted after these meetings, which limited their length due to participant complaints of stress and exhaustion.

8.2 Suggestions for Further Studies

In order to address all related areas of investigation, this effort, like all previous projects, cannot claim to have done so. Accordingly, the present study also identifies the following additional topics for examination:

The obstacles to eradicating desertification and the Nigeria National Agency for Great Green Wall's prospects for success are as follows: The difficulties that the organization tasked with lessening the effects of desertification in Nigeria must overcome will be the main subject of the research presented here. This study will highlight the organization's need for social programs that address societal needs in order to reduce the ongoing strife brought on by herders migration.

Role of religious and traditional institutions in indigene-settler conflict in Plateau State: This study will look at how involving religious and traditional organizations might help to resolve conflict between indigenes and settlers in Nigeria.

8.2.1 Contributions to Knowledge

The Nigerian government, local farmers, migrant herders, impacted local populations, and the general public are among the groups that this effort has a particular impact on. The study has been able to:

- Find strategies to implement the Great Green Wall Project to stop the desertification threat in Nigeria.
- In Plateau state, provide alternative strategies for reducing conflict between the local farmers and herdsman.
- Examine the necessity of ongoing dialogue and mutual understanding amongst and among farmers, herdsman, and the local populations.
- Describe the role that education plays in conflict management for farmers and herders.
- In view of the migration of pastoralists from nearby nations, consider border protection and control.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

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Disclosure of conflict of interest

The author declares no conflict of interest regarding the publication of this manuscript.

Statement of ethical approval

The research was conducted in compliance with the academic and ethical guidelines of the University of Maiduguri.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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APPENDIX

A SAMPLE LIST OF INTERVIEWEES

NAME	DESIGNATION	PLACE OF INTERVIEW	DATE OF INTERVIEW
Adamu Bello	Secretary, NGROPPMAN	Wase, Plateau	January, 2023
Sunday Davou	Secretary, Gwanara Cashew Growers Association	Barikin Ladi, Plateau	December, 2022
Emmanuel Dawom	Farmer	Bassa, Plateau	December, 2022
Abubakar Usman	Farmer	Bassa, Plateau	December, 2022
Bogong Ishaku	Farmer	Riyom, Plateau	January, 2023
Abigail Gyang	Official, Gankoro Women Fadama Association	Barikin Ladi, Plateau	December, 2022

Dare Mayaki	Farmer	Bokkos, Plateau	December, 2022
Usman Aliyu	Farmer	Wase, Plateau	January, 2023
Danjuma Sabi	Farmer	Barikin Ladi, Plateau	December, 2022
Samuel Benu	Farmer	Bassa, Plateau	December, 2022
Sadiq Ibrahim	Farmer	Wase, Plateau	December, 2022
Abubakar Mohammed	Official, Miyetti Allah Cattle Breeders Association	Wase, Plateau	December, 2022
Abdullahi Wakili	Official, Miyetti Allah Cattle Breeders Association	Wase, Plateau	December, 2022
Musa John	Official, Miyetti Allah Cattle Breeders Association	Bokkos, Plateau	January, 2023
Majo Gobo	Official, Miyetti Allah Cattle Breeders Association	Bokkos, Plateau	January, 2023
GanaYaman	Herdsman	Barikin Ladi, Plateau	December, 2022
Usman Gimba	Herdsman	Barikin Ladi, Plateau	December, 2022
Mohammed Manzuma	Herdsman	Bokkos, Plateau	January, 2023
Jauro Usman	Herdsman	Bassa, Plateau	December, 2022
Abdullahi Shehu	Herdsman	Bokkos, Plateau	January, 2023
Musa Gambari	Herdsman	Wase, Plateau	December, 2022
Shehu Kubure	Herdsman	Bassa, Plateau	December, 2022
Bala Abdullahi	Herdsman	Bassa, Plateau	December, 2022
Danladi Ahuta	Herdsman	Wase, Plateau	December, 2022
Bala Yelwa	Herdsman	Bokkos, Plateau	January, 2023
Chuwang Gyang	Staff, Ministry of Environment and Forestry	Jos South, Plateau	December, 2022
Usman Ibrahim	Staff, Ministry of Environment and Forestry	Jos South, Plateau	December, 2022
Kaneng Lyop	Staff, Ministry of Environment and Forestry	Jos South, Plateau	December, 2022
Musa Nvou	Staff, Ministry of Environment and Forestry	Jos South, Plateau	December, 2022
Comfort Dadung	Staff, Ministry of Environment and Forestry	Jos South, Plateau	December, 2022
Abdulrazak Adamu	Staff, Nigeria Immigration Service	Jos North, Plateau	January, 2023
Sunday Omoboriowo	Staff, Nigeria Immigration Service	Jos North, Plateau	December, 2022
FolaOjo	Staff, NAGGW	Abuja, Nigeria	January, 2023
Rahman Shitta	Staff, NAGGW	Abuja, Nigeria	January, 2023
Daniel Akaeze	Staff, NAGGW	Abuja, Nigeria	January, 2023