



**REPORT**  
OF  
**NATIONAL  
CONFERENCE**  
ON  
**LIVESTOCK  
REFORMS AND  
MITIGATION OF  
ASSOCIATED  
CONFLICTS**

HELD ON 13<sup>TH</sup> AND 14<sup>TH</sup> FEBRUARY, 2023  
AT NAF CONFERENCE CENTRE AND SUITES, ABUJA

**INITIATED AND SUPPORTED BY KANO STATE GOVERNMENT**

Compiled & Edited by:

**M. KUTA YAHAYA**  
Chairman, Conference Technical Committee

&

**ATTAHIRU M. JEGA**  
Chairman, Conference Organizing Committee



His Excellency  
**Dr. Abdullahi Umar Ganduje, OFR**  
(Khadimul Islam)  
Executive Governor, Kano State



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# Executive Summary

The National Conference on Livestock Reforms and Mitigation of Associated Conflicts in Nigeria, initiated and sponsored by the Kano State Government, was held on the 13<sup>th</sup> to 14<sup>th</sup> February, 2023 at NAF Conference Centre and Suites, Abuja. The idea for the Conference arose from the traction and buzz generated by the incessant farmer-herder clashes in the recent years and the need to find lasting solutions to the crisis that has claimed many human lives, and resulted in loss of resources and livelihood of farmers and herders alike.

The Conference, with the theme 'Sustainable Livestock Reforms and Mitigation of Associated Conflicts' had, in addition to the opening ceremony, six sub-themes addressed in Panel discussions, namely: (i) Productivity and Business of Value Chain Development for Livelihood Restoration in Farmers/Herders Conflicts Mitigation in Nigeria, (ii) Funding, Infrastructure and Institutional Capacity Development for Effective Delivery of Functional Extension and Veterinary Services, (iii) Governance, Policy Reforms and Enforcement of National and Regional Provisions (Laws and/or Legislations) with Strategic Frameworks for Coordination of Cross-border and Internal Migration of Pastoralists, (iv) Engendering Prosperity, Wellbeing and Peaceful Inter-Communal Coexistence among Farmers, Pastoralists, Youth and Women, (v) Citizens Engagement, Media Support and Inter-Cultural Communication as Panacea for Farmers/Herders Conflicts Mitigation in Nigeria and (vi) Strengthening Adoption of Climate Smart Farming and Livestock Production Practices to Mitigate Impact of Climate Change.

During the two-day conference, A Keynote Speaker, six lead paper presenters and 29 designated discussants, made significant contributions, which were complimented by contributions of about 500 invited participants. In addition, parallel sessions were held after the main session at the end of each day's main presentations by Lead Paper Presenters, discussants and participants. This was deemed necessary to enable other participants who had no opportunity of contributing to the discussions during the Panel sessions to be able to do so. Generally, many views were expressed regarding the concerns around herder-farmer conflict that have impacted on the livestock as means of livelihood with great potentials for economic diversification that Nigeria craves for. In the light of the general and common positions shared by participants from diverse fields in livestock sector in Nigeria, the following pertinent recommendations, among others, were made:

- I) Government at all levels need to invest in creating the needed infrastructure and delivery of essential services in education, health care, veterinary services, extension service delivery, access to information and training to provide the needed skills and capacity for transforming traditional livestock production systems.

- ii) Government should review the National Livestock Transformation Plan (NLTP) and other similar programmes and broaden the development options with clear funding framework and mechanisms to ensure effective implementation, supported by strong political will. Such programmes should be environmentally adaptable, socially acceptable and economically viable over the short, medium and long term periods.
- iii) There is the need to deploy innovative and adaptable technologies grounded in scientific and indigenous people's knowledge, jointly designed and implemented with strong producers' participation. Such livestock production practices should lead to increased crops-livestock integration, development of grazing reserves, establishment of smallholder and commercial dairy and beef farms, establishment of ranches, breeds improvement, establishment of pastures and feedlots and management of livestock migration, among other development strategies.
- iv) Government should strengthen the role of traditional rulers and community leaders in managing the affairs of farmers and herders including the sustenance of inter-communal relations for effective management of disputes and conflicts.
- v) There is the need to strengthen peace-building interventions at all levels among farmers and herders by adopting proactive early warning and early response mechanisms. This should also include adoption of alternative dispute resolution and training of community leaders and other community gatekeepers on techniques of mediation.
- vi) Government, together with other stakeholders should work out practical mechanisms for increased and viable private sector investments in the agricultural and livestock production industries with a framework for strengthening backwards integration in the livestock value chains.
- vii) There is the need for Federal and State Governments to establish the Ministry of Livestock Resources in line with the practice in many other West African countries. In the alternative, Federal and State Governments should expand the scope of existing Departments of Livestock Production to address the broader needs of the industry. Similarly, there is the need for the creation of additional research institutions for beef, dairy and pasture production as a strategy for expanding funding and enacting policies and programmes for the development of the sector at all levels of government.
- viii) Media organizations need to create awareness at all levels that will promote inclusive communities, strengthen harmonious relations to encourage government and private sector investments for cohesive societies and improved productivity. Similarly, profiling and reportage that malign socio-economic and ethnic groups need to be avoided.
- ix) UN Agencies, Bilateral Institutions, Regional Organizations (AU and ECOWAS), national and international CSOs and other support organisations should increase the level of funding and support to the government of Nigeria in mitigating the impact of climate change, addressing technology gaps, addressing poverty and skills gap and improving people's livelihoods.
- x) Agricultural and pastoralist organizations, cooperative societies and relevant producer associations and professional bodies need to be supported for improved productivity.
- xi) There is the need to revisit and review sub-national, national and regional laws, legislations and policies so as to make applicable reforms for improving livestock production and addressing conflicts.

- xii) There is the need to adopt Climate Smart Agricultural (CSA) practices, including the adoption of integrated approach to managing landscapes of croplands, rangelands, forests and fisheries that address the interlinks between the quest for food security and mitigation of the challenges of climate change.
- xiii) There is the need to strengthen and improve the security architecture for the prevention of violent crimes including cattle rustling, raiding of villages, kidnapping of persons for ransom and trade in illicit arms and drugs.
- xiv) There is the need to strengthen the process of litigation for more effective dispensation of justice and handling of the various litigations relating to violent crimes and other perpetrators of violent conflicts.
- xv) There is the need to reform the security and judicial architectures to ensure the curtailing of farmer-herder conflicts, cattle rustling, illegal arms trade as well as importation and proliferation of small arms in the country.
- xvi) Political leaders at all levels need to refrain from politicizing the issue of farmers-herders conflicts and other associated issues while pursuing inclusive processes that will strengthen unity and co-operation in the country.



## Introduction

### 1.1 Background Information

Conflict over space, resources and the good things of life are as old as the history of human settlement. Its consequences vary from being mild to life threatening, to fatal. According to NSW Volunteering (2021), conflict can occur due to a number of reasons. Conflict occurs over resources when people have unequal access to resources or have disagreement about how the resources should be used. The resources could be land, water or other common assets. Also, it could be over values and beliefs when people have different understanding of the concept of wrong or right and in some cases, what is considered extremely bad in some culture could be deemed desirable by others. When people of a particular belief or value system perceive that they are being forced to accept a belief or value they do not agree with. When conflict occurs due to breakdown of trust, then people who have been co-existing harmoniously for a long time could develop strong negative emotions towards one another and this could lead to loss of trust and confidence which may lead to conflict. Furthermore, power issues also precipitate conflict arising largely from unclear power relations, unjust or unfair use of power by a section of the people leading to frustration, anger and eventually, conflict. Different perception on what happened is another cause of conflict. When this happens, view of an issue varies. Therefore, recounting what happened in the past may vary from one person to the other. This difference in perception could lead to a conflict. In the view of NSW Volunteering (2021), bullying, harassment and discrimination is another cause of conflict when people seem unfairly or unequally treated on the basis of their race, religion, colour, sex, age or disability, conflict may occur. Whatever the cause(s), conflict is a phenomenon that is ubiquitous and civilization demands that processes are set in motion to manage its occurrences and consequences, hence the prognosis that birthed this conference with particular reference to herder-farmer crisis.

A major conflict unsettling the Nigerian space is the farmer-herder conflict. It is one type of conflict that has resulted in the loss of many lives and property and has so far projected Nigeria in a very bad light. It is an unfortunate conflict which has taken different dimensions in the last few decades, ranging from economic to the ethno-religious. Attempts by the Federal Government to address the problem have elicited a lot of criticism and mistrust, thus efforts to address the crisis are rendered ineffective or dead on arrival. It is, therefore, heart-warming that among the state governments that have taken serious interest in resolving the crisis, Kano State Government is number one. It has gone beyond rhetorics to putting infrastructure in place and committing huge capital to tackle the menace. In the heat of reactions and widespread banning of open grazing in the North Central and Southern parts of the country, the government of Dr Abdullah Umar Ganduje was the first to set up Rural Grazing Areas in the state to curb open grazing and associated conflicts between pastoralists and farmers.

## **1.2 The Mandate of the Kano State Committee on Livestock Reforms**

One of the terms of reference of the Committee was to organize a conference of experts, practitioners, relevant institutions of governments and other stakeholders to review perennial challenges and recommend a way forward for the transformation of the livestock production sector that will lead to increased productivity and reduction of conflicts among farming and pastoralists communities in the country. To actualise this, the Committee organized a broadly representative National Conference on Livestock Reforms and Mitigation of Associated Farmers-Herders conflicts in Nigeria. The Conference held on the 13<sup>th</sup> and 14<sup>th</sup> February, 2023 at the NAF Conference Center and Suite, Abuja.

The theme of the Conference was *Sustainable Livestock Reforms and Mitigation of Associated Conflicts in Nigeria*. The Sub-themes revolve around issues of Productivity and Business of Value Chain Development for Livelihood Restoration in Farmers/Herders Conflicts Mitigation in Nigeria, Funding, Infrastructure and Institutional Capacity Development for Effective Delivery of Functional Extension and Veterinary Services, Governance, Policy Reforms and Enforcement of National and Regional Provisions (Laws and/or Legislations) with Strategic Frameworks for Co-ordination of Cross-border and Internal Migration of Pastoralists, Engendering Prosperity, Wellbeing and Peaceful Inter-Communal Co-existence among Farmers, Pastoralists, Youth and Women, Citizens Engagement, Media Support and Inter-Cultural Communication as Panacea for Farmers/Herders Conflicts Mitigation in Nigeria and Strengthening Adoption of Climate Smart Farming and Livestock Production Practices to Mitigate Impact of Climate Change

## **1.3 The Rationale and Objectives of the Conference**

The productivity of the livestock sector has been very low, despite the existing potentials in the country. With about 20million cattle and millions of sheep and goats managed under pastoral system of production, the Livestock Industry is providing livelihoods and employment to millions of Nigerians while also providing revenue to government from the local taxes and export earnings. Due to the low productivity, the country is importing milk and other livestock products worth millions of US dollars, thereby draining the nation's scarce foreign reserve.

In addition to low productivity, there are ongoing conflicts associated with the practice of traditional livestock management systems. Conflicts with farmers, which is often intertwined with other ethno-religious and political contestations, has resulted to loss of lives and property in different parts of the country. Again, the increased level of crimes in recent years has exacerbated the challenges which needed to be addressed through holistic implementation of projects and programmes.

The policy environment in the country that ought to support increased livestock production is also inadequate with weak co-ordination between the federal and state governments. There has also been repeated policy summersault due to inadequate planning and public engagements which calls for well-articulated intervention strategies that will spur increased productivity while meeting the aspirations of the diverse stakeholders in the country.

The Conference is therefore conceived to bring together all the relevant stakeholders in the industry to x-ray the issues in a dispassionate manner devoid of politically-driven and narrow sentiments and focused on the technical, scientific and socio-economic analysis of the challenges to offer realistic, practical, pragmatic and implementable strategies over the short-, medium- and long-term periods. The outcome of the conference is to contribute in designing a roadmap for the sector.

**Other objectives of the Conference include:**

- i) Identifying model or models of livestock reforms that are desirable and sustainable,
- ii) Exploring how the traditional livestock production system can be suitably reformed with remarkable and sustainable value-addition to Nigeria's economic growth

- iii) Proposing measures to enhance and sustain peaceful co-existence amongst diverse Nigerian communities; and
- iv) Situating the proposed reforms within the policy and governance frameworks of the Nigerian federation.

#### 1.4 The Conference Activities

The Conference was held in two days; Monday, 13<sup>th</sup> and Tuesday, 14<sup>th</sup> February, 2023. On Day One, activities include the opening ceremony and three plenary sessions. The activities of Day Two include presentations from the break-up groups, three plenary sessions and the reading of the conference communiqué. The details of the events are as presented

Goodwill messages were delivered by the representative of the Senate President, Senator Barau Jibrin and representative of Nigeria Governors Forum, Prof Abba Gambo. Also, the goodwill messages from development partners were presented by the President of the Commonwealth Association; Tunde Nasir and Country Coordinator, Sasakawa Project; Dr Godwin Atser. Other goodwill messages were from the Minister of State for Agriculture and Rural Development, Mustapha Baba Shehuri, HRH; the Emir of Kano, Alhaji Aminu Ado Bayero and the Sultan of Sokoto, His Eminence, Alhaji Sa'ad Abubakar III and high-point of the occasion was the inspiring and pragmatic address by His Excellency, Dr. Abdullahi Umar Ganduje, the Executive Governor of Kano State.

The activities of the Conference included an opening session, deliberations at plenary sessions where scholarly papers and experts discussions were held and interactive group discussions that permitted in-depth discussions among stakeholders. The programme of events at the Conference is attached.

#### 1.5 Addresses and Speeches

During the opening session, a number of personalities addressed the Conference. The Secretary to the Kano State Government, Alhaji Usman Alhaji welcomed participants who honoured the invitation to attend the Conference from all parts of the country. He was elated that the Executive Governor of Kano State was personally attending the Conference. He, therefore, welcomed His Excellency, the Governor of Kano State, Dr. Abdullahi Umar Ganduje, who is the Chief Host of the Conference. He lauded the Governor's stride in education and health sectors especially with the Comprehensive Cancer Treatment Centre in Nigeria located in Kano. He also commended the infrastructural development strides and ensuring adequate security in spite of the huge population of the state.

He equally welcomed the Deputy Governor of Kano State and expressed optimism that he will continue with the good work of Governor Ganduje on assumption of office in May, 2023 (Insha Allah). He equally welcomed His Eminence, the Sultan of Sokoto, Alhaji Saad Abubakar, the Emir of Kano, Alhaji Aminu Ado Bayero, who is also the Chairman, Kano State Council of Emirs and other traditional rulers attending the Conference. We appreciated the Chairman of the Occasion, the Lead paper presenters and discussants as well as other dignitaries that were present at the meeting. Finally, he acknowledged the efforts of the Conference Committee Chairman, Prof. Attahiru Jega and other members of the Committee for the tireless efforts in making the Conference a reality. Finally, Secretary to the State Government welcomed each and every one that has honoured the invitation to the Conference from far and near.

#### **OPENING REMARK BY PROFESSOR ATTAHIRU JEGA, OFR CHAIRMAN, CONFERENCE COMMITTEE**

The Chairman of the Conference Committee, Prof Attahiru Jega, welcomed all distinguished invited guests and participants to the National Conference observing that the tireless effort to organize the



■ **Professor Attahiru Jega, OFR** Chairman, Conference Committee

Conference has been crowned by stakeholders' acceptance and presence at the Conference. He submitted that the Conference is designed as an all-inclusive process to address the under development of the Nigerian Livestock sector and the perpetual crises and conflicts associated with it. He averred that a national strategic focus on the Livestock sector and its perennial challenges is an imperative that has assumed significance given its strategic importance as our nation searches for sustainable ways and means of diversifying its economy, becoming self-sufficient in food production as well as a major competitive exporter of Agro-allied products in the global economy among other indices of development of a nation including but not limited to a stable, more cohesive developing democracy.

Given the forgoing, the Chairman submitted that it becomes imperative that questions like what model(s) of reforms are desirable and sustainable and how can the traditional livestock production and development sector be suitably reformed, with remarkable and sustainable value-addition to Nigeria's economic growth and enhanced peaceful co-existence amongst diverse Nigerian communities? He advised that the answers to these questions should be properly situated within the policy and governance frameworks of the Nigerian federation and this requires all hands-on-deck to achieve this. He urged the array of intellectuals that have been carefully selected to chart a way forward relying on our abundant resources, theorists' positions and practitioners' experience. He opined that a non-partisan, or a multi-partisan inclusive approach is critical to ensure that the outcome of this Conference become viable recommendations which can be taken further to develop a Blueprint for implementable programs and projects for sustainable Livestock Reforms and Mitigating Associated Conflicts in Nigeria. Conclusively, on behalf of the Conference Committee, the Chairman thanked His Excellency, the Governor and the Government of Kano State for the opportunity to organize the conference and for providing the necessary support towards the success of the planned programme of activities. He wished the Conference fruitful deliberations in the course of the two-day conference.

## **ADDRESS BY CHAIRMAN OF THE OCCASION, DR MANSUR MUKTAR, VICE PRESIDENT, ISLAMIC DEVELOPMENT BANK (ISDB)**

According to Dr Mansur Muhktar, conflicts between farmers and herders/pastoralists have been one of the issues of national concern and significance with growing number of casualties associated with it. The conflict has exacerbated between 2016 and now with at least 4000 people dead and several thousand others sustaining injuries, both physical and emotional. Northern parts of Nigeria have been the epicenter of this conflict, although this is spreading to other regions. He commended the decision by HE; Governor, Abdullahi Ganduje to lead the national conversation on this issue and the 30-man Committee that organized this Conference, especially Prof Attahiru Jega for working with his team that have worked tirelessly to set forth a robust agenda and bring this conference to life. He observed that the Conference is very crucial in reshaping dialogue on the issue at hand and expressed concern about the divisive ethno-religious narrative which has done very little to resolve the crisis.

In proffering way forward on the issue at hand, he contended that there is well-documented evidence of peaceful co-existence between herders and farmers and that the two had in fact lived together harmoniously, interacted, married, traded and built meaningful relationships that span generations. He quickly added that there might have been occasional skirmishes back then but nothing compared with the scale that we have today.

He then listed the impact of climate change on critical resources that has exacerbated by Nigeria's rapidly growing population, the ECOWAS Transhuman protocol to which Nigeria is a signatory that though has positive aspects, but has also contributed to the increased pressure on land, water and pasture. Also implicated is the legal and legislative inconsistencies including the tensions between the 1964 Grazing Reserves Act and the 1978 Land Use Act that have made the governance of land in the region and across the country more difficult.

He then proffered that ranching is potential solution to these problems that is envisaged to operate as an integrated business and will involve many aspects including, the development of commercial crop production to support livestock through the supply of fodder; the formation of producers into clusters



**Dr Mansur Muktar, Vice President, Islamic Development Bank (ISDB)**

to create viable ranch herd sizes and; the creation of cooperatives to facilitate increased access to inputs, infrastructure, finance, markets and support services. He lamented that more than 3 years into its launch, a single ranch is yet to be built. Limited public engagement and buy-in have undermined the legitimacy of the plan while funding constraints and lack of ranch development expertise have hampered its progress. Dr Mansur finally asserted that though ranching is very important, it is insufficient to effectively address the fundamental drivers of the farmer-herder crises, and listed among other things that are critical in having a sustainable livestock reforms. These are;

- a. Need for far greater political will than has been demonstrated thus far especially with the potentials of National Livestock Transformation Plan (NLTP), but requires community buy-in and the full cooperation of all levels of government.
- b. Modernization of the livestock sector should not be left to the government alone given the need for financing and capacity building. We require support from private investors, the international donor community and Development Finance Institutions (DFIs).
- c. Support from other development partners and banks to learn from the Islamic Development Bank that provided financing for the Kano State Agro-Pastoral Development Project (KSADP) which includes the establishment of a 3,000Ha Grazing Reserve. There is certainly space for other Development Finance Institutions to render support.
- d. Reforming security and justice architecture.
- e. Multilateral agencies like the ECOWAS need to play a more active role in addressing the security situation as there is increasing evidence of the role of migrant herders in the proliferation of arms.
- f. States and Federal governments need to take the issue of climate change more seriously. We need strategies to mitigate the impact of climate change and to manage environmentally induced migration. Even though, we have a national policy on climate change, adopted in 2012, very little progress appears to have been made on its implementation and this must change.

### **KEYNOTE ADDRESS BY PROFESSOR E. A. IYAYI, REGISTRAR/CEO NIGERIAN INSTITUTE OF ANIMAL SCIENCE**

The Keynote Address was delivered by Prof. E. A. Iyayi; Registrar/CEO, Nigerian Institute of Animal Science (NIAS) and dwelled on Promoting Sustainable Livestock Production and Mitigating Associated Conflicts. According to Prof Iyayi, the role of livestock production to national development cannot be overemphasized. Citing FAO (2013), he submitted that livestock contributes nearly 40% of total agricultural output in developed countries and 20% in developing ones supporting the livelihood of at least 1.3billion people worldwide. With specific reference to Nigeria, the keynote speaker averred that the Nigerian livestock sub-sector is very vital to the socio-economic development of the country and it represents an important source of high-quality animal protein contributing 36.5 percent of the total protein intake of Nigerians, generates employment, income, and earns foreign exchange for the country. The livestock sub-sector in 2022 was estimated to contribute about 17 percent of the Agricultural Gross Domestic Product (GDP) and 5.0 per cent of the National GDP (This day Newspaper, 25<sup>th</sup> September, 2022). He went further to define sustainable livestock production as a production process that is aimed at making livestock systems economically more efficient and striking a balance between meeting the growing demand of animal-origin products and at the same time reducing to the minimum, the negative side effects and externalities from the livestock sector (Agrilink 2019). To achieve this, there is the need for

- extensive pre-planning,
- knowledge of one's goals,
- understanding of marketing options and the ability to review and adapt plans as needed.

He further reasoned that henceforth livestock should be seen as a profitable venture in Nigeria with many advantages enumerated amongst others to include; production of protein rich, high quality food products with huge potential both for local and international earning contributing more than 40% of the contribution of agriculture to the global economy. Having profile all of these, he proceeded to list causes of conflict amongst herders and farmers profiling several incidences of these conflicts across Nigeria and the attendant negative consequences. With these established, the keynote speaker noted that the challenges posed by herder-farmer conflicts are surmountable and identified steps to bring about peace between herder and farmers communities to include the following.

- i) *Creation of awareness of climate change*
- ii) *Tree planting campaign*
- iii) *Use of improved technology*
- iv) *Creation of awareness on control of population*
- v) *Symbiotic farm project*
- vi) *Establishment of peace-building Committee*
- vii) *Establishment of open communication channels*
- viii) *Inter-religious dialogue*
- ix) *Payment of compensation*
- x) *Establishment of grazing land policy/Adoption of Ranching Policy*
- xi) *Early warning mechanism*
- xii) *Animal Identification and Traceability System*



## **GOODWILL MESSAGES BY DISTINGUISHED PARTICIPANTS**

**G**oodwill messages were received from dignitaries. The Senate President was represented by Senator Barau Jibrin conveyed the commitment of the Senate to give legislative backing to the outcome of the Conference should the need arise. In his words, “the Senate President assures you that Senate would not hesitate to begin the process of enacting laws if such is needed, or amending existing laws through amendments to meet the objective of positively transforming the livestock sector”. The Senate President wished the Conference participants fruitful deliberations.

Speaking on behalf of the Nigeria's Governor's Forum, Professor Gambo described the Forum as an Association of the 36 State Governors, all standing on equal footing. The Forum is a policy and resource center that provides reliable and current information on policy formulation and implementation by state governments. He thanked His Excellency, Dr Abdullahi Umar Ganduje for taking the bull by the horn with the support and backing of Kano State Government for the Conference. He also thanked His Eminence, the Sultan of Sokoto, for bringing royal backing to this Conference. He further commended the Sultan who, as a first-class military officer, brought charm to the traditional system. He urged the Conference to go back to the basis of climatic change and farmers/herder's crisis while engaging in this discourse. He averred that the traditional authorities used to have a way of resolving herder-farmers' conflict and such approach should not be jettisoned even in the current diverse opinion about the subject of concern.

In his message, Dr. Tunde Nasir, the President of the Commonwealth Veterinary Association expressed appreciation for the laudable Conference that the Kano State Government is championing in terms of transformation of livestock in sustainable way. He reiterated that Commonwealth Association (as an Association of Commonwealth Countries) the English-speaking countries, believes in this Conference and if recommendations are well implemented, it will resolve the conflict that we have in the country for decades now. Talking from the veterinary perspective, he opined that there is nothing we can do without actually making sure that the health value chain of livestock is given a prominent role; and many things that are very key to this include production health, the governing process that does not take cognizance of tariffs and taxes as well as issues that are militating against effective implementation of livestock production.

Dr. Godwin Atser, Country Coordinator of Sasakawa Global conveyed his appreciation and that of his colleague, Dr Tunde Amole, Country Representative, International Livestock Research Institute(ILRI), Ibadan to the Kano State Government for putting this Conference together and recognised the value of the establishment of Kano State Agro-pastoral Development Project. He noted that the issues around conflict are well known; especially the impact of climate change. There is need for political will to actually address the issues as well as science and technology to tackle these problems. He urged other states to borrow a leaf from the Kano experience reiterating that Kano is one of the most peaceful states in northern Nigeria. He invited participants to Kano State to see how agricultural revolution is evolving and best example to be proud and associate with in our quest for sustainable development. And that ILRI is a willing partner in this endeavour.

The Honourable Minister of State, Ministry of Agriculture and Rural Development, Mustapha Baba Shehuri, in his goodwill message noted that the Conference is coming at a critical period in our nation's history when national security is threatened by heightened and frequent farmer/herder conflict, banditry and cattle rustling. He mentioned National Pastoral Development Programme, National Animal Identification and Tracking System, National Animal Breeds Improvement Programme and National Strategic Animal Feeds Development Programme as programmes at the national level

targeted at improving livestock production in Nigeria with the objective to produce safe feeds that can meet the international standard and export of quality of animal products such as milk, meat, herb and skin. He further noted that this is a time for collective decision to bring about a change that we need to work together to build on and sustain change by mitigating conflict to open the opportunity for healthy living and wealth creation through improved animal production, processing and marketing, transportation, livestock identification. Thank you for listening.

His Eminence, the Sultan, congratulated Governor Ganduje for the Conference initiative. He picked on the proliferation of arms in West Africa and observed that as a military officer in the ECOWAS, moratorium was fashioned out on these small arms and light weapons in Gambia and wondered where the moratorium is. He observed that the moratorium will help the outcome of the Conference to check the illegal acquisition of small arms and light weapons in West Africa. He further reiterated that the Emir of Kano captured his mind regarding the theme of the Conference and expressed the sadness that the herders and farmers conflict have been politicized. He admonished the political class to take cognizance of the fact that the position they hold is transient and they shall be held to account by the Almighty Allah. He further noted that people are angry and hungry; and urged that the tension be doused. He then thanked the Governor and all those that have attended this conference and we are always ready and very open to share things we have known.



His Royal Highness, the Emir of Kano, in his goodwill message, observed that the main cause of conflict is the competition for resources, land and opportunities among stakeholders and in some cases, different ethnic groups. He emphasized that there is urgent need to find ways to ensure that all stakeholders involved have equal access to resources and means to sustain their livelihoods, hence the timeliness of this Conference targeted at Livestock Reforms and Mitigation of Associated Conflicts. To achieve this, His Highness gave the following antidote:

- Having a reform agenda which centers around conflict mitigation and resource management to include the establishment and resuscitation of grazing reserves as suggested by many experts and well-meaning Nigerians and other methods of land utilization;

- Creating awareness about the importance of livestock reform and its associated benefits;
- Prioritization of enforcement of existing laws and regulations related to pastoralism and grazing rights and boundaries; and
- Extend supports to those affected by the conflicts by providing necessary relief and rehabilitation as well as compensation.
- Strengthening local and regional conflict resolution mechanisms and creating alternative modern livelihoods for herders and extending agricultural credit facilities to real farmers, not impostors

He then called on all stakeholders and experts at the Conference to evolve a comprehensive reform agenda that will take a holistic and long-term approach to ensure a peaceful, sustainable and equitable agricultural environment in Nigeria. On a final note, he admonished that government policy should be fair and inclusive and does not favor one group over the other. He then commended Governor Ganduje for his steadfastness and commitment while in office some eight years ago.

To sum up, we believe Governor Ganduje has done a commendable job in engaging all stakeholders and finding solutions to the conflict between farmers and Fulani herders. We, therefore, urge all of you to further support his efforts and work together to achieve lasting peace and harmony in Nigeria.



### **ADDRESS BY HIS EXCELLENCY, DR. ABDULLAHI UMAR GANDUJE, EXECUTIVE GOVERNOR OF KANO STATE**

His Excellency asserted that the Conference grew out of the need to provide solution to the age-long conflict between herders and farmers and also proposed the way forward to economic development of the sector. According to His Excellency, the disputes have reached crisis levels in recent years-killing thousands of people and displacing many thousands more from their homes and left in relics by attacks. He then went further to profile drivers of the crisis to include:



His Excellency, Dr. Abdullahi Umar Gandule, CON, The Executive Governor of Kano State welcoming Participants

- Climate change that has left in its wake desertification and soil erosion and have enraged competition over natural resources, pushing herders to venture into new areas to seek pasture for their herds.
- Weakness of state institutions and lack of infrastructure which has resulted in the inability of governments to effectively control their territory, enforce the law and provide formal avenues for the peaceful resolution of disputes.
- The 'politics of transhumance' also highlights the interplay among political elites which can manipulate political tensions between herders and farmers to advance their agendas, expand land ownership and take control of large herds for their economic and political gains, consequently threatening livelihoods of both communities.

To mitigate this, His Excellency submitted that the Rural Grazing Areas (RUGA) or ranching, which has been deliberately politicized, remains the only option that would go a long way in mitigating existential problems as pastoralists would have lands to graze without cattle encroaching on people's farmlands. There is, therefore, the need for information, education and strategic communication on the development of grazing reserves to mitigate the consequences of these conflicts. Proffering further solutions, His Excellence submitted further as follows:

1. The importance of avoiding the dangers of allowing these conflicts to harden the religious or ethnic conflicts with the responsibility of resting squarely on the political, religious and all other parts our leadership elite in Nigeria
2. The need to intensify existing collaboration with our neighbours especially border communities, to prevent the movement of small arms and disarming armed pastoralists and bandits who go through our borders day after day.
3. Predominantly nomadic pastoralists should be persuaded to move their cattle into established ranches and public grazing reserves where breeding farms and other mechanized livestock management practices would bolster the sector's productivity.



■ Governor Ganduje welcoming the Sultan of Sokoto



■ Governor Ganduje exchanging pleasantries with the Emir of Kano

4. Government should rebuild social capital at the community level to promote mutual trust, confidence building and consolidate the peace process while the law and order pillar would support the strengthening of legal frameworks for improving livestock production, peace and harmony.

He finally expressed optimism that this conference will produce a working document that would go a long way in mitigating conflicts between herders and farmers in this country.



■ Governor Ganduje with dignitaries



■ Prof. M. Kuta Yahaya, Chairman, Conference Technical Committee, anchoring technical sessions



■ Hon. Muhammad Garba, welcoming the Emir of Kano to the conference





## The Presentations and Deliberations of The Conference

### 2.1: PLENARY SESSION 1

#### SUB-THEME:

PRODUCTIVITY AND BUSINESS OF VALUE CHAIN DEVELOPMENT FOR LIVELIHOOD RESTORATION IN FARMERS/HERDERS CONFLICTS MITIGATION IN NIGERIA

#### Introduction

The Chairman, HRH Alhaji (Dr). Muhammadu Sambo Haruna, Emir of Wase observed that the theme and timing of the national dialogue are very important for Nigeria at this time considering the loss of lives associated with the crisis. He reviewed past reforms, programmes and policies which were set to improve livestock productivity and their benefits. He noted that the reform promoted through the National Livestock Transformation Programme was adopted in his domain in Wase. He harped on the need for the review of the roles of the different tiers of government in addressing the farmer-herder crisis and proposed the adoption of ranching due to its numerous benefits.

#### The Lead Speaker: Prof. Suliaman Elias Bogoro

The Lead Speaker called the attention of the participants at the conference to the reality that non-professionals have been talking more about the herder-farmer issues more than the professionals. He thus appreciated the Governor of Kano State for bringing professionals together from different parts of the country to discuss the issue. He analyzed the sub-theme by looking at its key words.

On productivity, he noted that low productivity is the bane of the livestock sub-sector and the larger agricultural sector. He, however, called for a reversal of the trend through improved breeds, modern production techniques/technologies and disease control which should be a focus of the reforms.

He also noted the poor development of the livestock value chain sub-sector when compared with other countries. He specifically cited the case of Moroccan leather which was made out of the Sokoto goat-breed and called for the enhancement of the livestock value chain through research, technology and appropriate production inputs as well as extension services.

On livelihood, he noted that farming is at the centre of rural livelihood in Nigeria. As such, there is a need for livelihood-focused national livestock reform programme.

In order to address the avoidable herder/farmer conflict, he proposed:

1. Enhanced sub-sectoral funding, input subsidy and single digit livestock business loans, through appropriation, Agricultural Development Fund and Global funding windows.
2. Immediate adoption of conflict resolution mechanisms between herders and crop farmers towards ending the recurrent violent conflicts that have worsened insecurity in the country.
3. Government-supported sedenterisation of itinerant livestock herds, noting that data from recent studies show that the livestock sub-sector has been marginalised in comparison to the crop sector. He broke the process into three:
  - i. Immediate: Provision of immediate special funding to promote sedentarization of livestock herds with provision of ₦250 billion annually by the federal government (and to be complimented by State governments) for five years from 2023.
  - ii. Medium Term: Set a target of five years to migrate from itinerant to full sedentarisation of the national herd.
  - iii. Long Term: Adoption of modern ranching and related husbandry practices aimed at stoppage of herd migration to avoid conflicts as in other parts of Africa and the rest of the world.
4. Unbundling the national livestock research and development value chain. For instance, NAPRI and NVRI are the two research institutes dedicated to livestock research compared to over 20 of their kind for crop research. He opined that there is need to come up with specialised research institutes for poultry, dairy, swine, fisheries etc.
5. Notable Innovative Reforms and Transformation Paradigms such as germplasm and genetic material development, collection, preservation and distribution, climate smart housing/husbandry, product development, value addition and storage, domestication of new species; and documentation and data banking.
6. Attraction of International Funding basket to reclaim and resuscitate the Lake Chad and its huge resources.
7. Adoption of livelihood-focused livestock development reforms to include the revitalisation of moribund grazing reserves with provision of basic education facilities, Primary Health Centres and clinics/Maternity Centres and access/feeder roads

## **Discussant 1: Dr. Andrew Kwasari**

The first discussant started by attempting to define the meaning of some critical terms around the Livestock Industry such as productivity, value chain and the National Livestock Development Plan.

He identified some good models for livestock development, which have been well tested especially the in the United States and Singapore where the market leads while the policy makers complement the market.

On the question of how the policy environments should feed into the development of value chain, he focused on the primacy of the upstream sector and primary production and downstream. He noted that productivity enhancement requires adoption of new ways, which entails identifying and addressing the critical areas/issues along the value chain of the Nigerian livestock industry.

First, he highlighted the importance of knowledge citing the case of ranching as an old practice which predicated independence. He also noted that Nigeria has had beautiful ranching programmes in the past that can be leveraged upon.

However, the prospects of ranching in Nigeria today are not bright because of the problems of knowledge gap among pastoralists concerning what they need to do to access credit facilities.

He stressed the need for government to fund the policies, remain faithful to their execution and stay within the ramifications it defines within the policy framework.

In order to activate and develop the livestock industry, the governments need to channel investment where it is needed and focus on the upstream/primary production.

Policy design is easier than policy execution because more effort is needed to execute than to design.

He spoke on the value-chain of transhumance, arguing that the ECOWAS Transhumance Treaty is not the problem. Nigeria needs to exploit the value chain of livestock sector under the ECOWAS to ensure that the requisite productive infrastructure is available so that the pastoralists coming into the country would pay for them.

He also spoke on the need to have updated data on different cattle breeds.

## **Discussant 2: SSG, Kano State**

The second discussant started by stating that since the inception of the administration of the Government of Dr. Abdullahi Umar Ganduje, it was duly recognized that in order for the State to retain its position as the commerce nerve center of the north, the issue of checkmating any conflict between farmers and pastoralists must be given priority attention. Peace and security must reign in order for the economy to prosper.

The Kano State Government, as a strategy, embarked upon setting up a committee structure at all levels ranging from the village, ward, district, emirate up to the state

This structure consists mainly of locals, headed by village, ward and district heads and the Emir. The role of this structure is to create synergy at all levels and provide a platform for engagement with all stakeholders to address issues of conflicts and provide an effective local security network to support the authorities in maintaining law and order and fostering communal harmony.

It is recommended that the structure put in place by the present administration should be entrenched in the policies of the next government for necessary implementation and sustainability.

## **Discussant 3: SSG, Niger State**

The third discussant expressed profound gratitude for the opportunity to discuss the lead paper. According to him, whenever he saw pastoralists moving towards Southern part of Nigeria, he believed that it is a big risk, given the insecurity situation in Nigeria in recent times. The pastoralists can enjoy abundant land and water for their animal grazing in the North. The pastoralists can live better; enjoy high productivity and an increase in the production of cattle milk in the Northern part, far better than in the Southern part of Nigeria.

He maintained that Niger State has a grazing reserve similar to that of Kano State. In Niger State, the pastoralists have access to large grazing land with abundant water for their animals. They have settled down thereby reducing the kind of tension many experienced in the Southern part of Nigeria. He however, lamented on the harsh conditions the pastoralists are experiencing given the banditry attacks they have suffered in recent times.

He informed the participants about BOBI Grazing Reserve established by the Niger State Government which is backed by legal legislation enshrined in the government bye-laws. Emphasising the vulnerable situation of the herders, he cited a situation where the pastoralists lost over 1000 cattle to bandits.

In view of the challenges experienced by the pastoralists, the economic value chain has suffered greatly. No productivity is secured.

In a nutshell, the discussant recommended that for the pastoralists to live and settle down, the following plausible suggestions should be considered:

- Opportunity to assess to market.
- Reinforcing government intervention.
- Provision of additional facilities to improve health and education for the children of the pastoralists.
- Curtailing the encroachment of land designated to the pastoralists.

## **Discussant 4: Prof. Chukwuemeka Jaja Nwanegbo**

The discussant began by raising important questions around the need to leverage on value chain development to prevent farmer-herder crisis.

He noted that in drawing livestock policies, efforts were not made to factor in the line of production within the agricultural sector in such a way that it can put value back to the livestock.

If we can develop crops from the plant position through the processing stage down to the creation of value for the livestock, this can help to encourage the pastoralists to know that there is value that can flow from agriculture to the livestock industry.

He said the conflict part of the farmer-herder predicament is of crucial interest and stressed the importance of early information in the mitigation of the conflict within the ambit of the early warning system and the need for communities to track impending danger.

The mitigation of the farmer-herder crisis is a long term process. In the interim, how do we reduce the intensity of the farmer-herder conflicts?

He identified the use of early information as a viable strategy for conflict management.

The absence of information infrastructure in the local communities is a strong impediment to the development of the livestock industry.

He shared the experience of how communities in Anambra State managed these types of conflict through information tracking, compensation which bolstered the confidence of farmers and herders in the State.

### **2.2: PLENARY SESSION 2**

#### **SUB-THEME:**

**FUNDING, INFRASTRUCTURE AND INSTITUTIONAL CAPACITY DEVELOPMENT FOR EFFECTIVE DELIVERY OF FUNCTIONAL EXTENSION AND VETERINARY SERVICES**

### **Chairman's Remark**

The Chairman observed that the theme and timing of the national dialogue are very important for Nigeria at this time considering the loss of lives associated with the crisis. He reviewed past reforms, programmes and policies which were set to improve livestock productivity and their benefits. He noted that the reform promoted through the National Livestock Transformation Programme was adopted in his domain in Wase. He harped on the need for the review of the roles of the different tiers of government in addressing the farmer-herder crisis and proposed the adoption of ranching due to its numerous benefits.

## **Lead paper: Dr. Junaidu Maina DVM, FCVSN**

The Lead paper presenter, by way of introduction, identified legislations and national structures as key bases for the operations of veterinary services in the past that enables veterinary authorities to carry out their key functions including surveillance, early detection and control of animal diseases and zoonosis, animal production food safety, extension services and certification of animals and animal products. However, these collapsed alongside extension services due to shrinking of opportunities for Veterinarians in Government, Veterinary para-professionals and auxiliary staff, unsustainable provision of free Veterinary and Extension Services, intermittent and uncoordinated provision of free veterinary drugs, feeds and other services including Artificial Insemination (AI) by some Non-Governmental Organizations, availability of private Veterinary and extension services for poultry in urban and peri-urban locations to the detriment and negligence of rural small-scale farmers who are the main producers, government failure to provide enabling environment for private veterinary and extension services to strive and penetrate rural areas, abolition 'of jangali' and other associated challenges, and collapse of overall absorptive capacity of livestock sector. He then listed some innovations that could revive and create a sustainable, effective and functional Veterinary and Extension Services to include:

- a. Sanitary mandate between State Veterinary Services with accredited Private Vets to provide treatments, surveillance, outbreaks investigations, vaccinations, meat inspections in agreed LGAs/Zone in accordance with the Animal Diseases (Control) Act
- b. Community-based Animal Health Services: Community Animal Health Workers in collaboration with private/public Vets to provide basic veterinary and extension services.
- c. Other Digital Innovations to cope and adapt to challenges posed by climate change, market barriers, price fluctuation, health risks and record keeping for breeding purpose.

He concluded by stating that application of these innovations will restore and improve capacity for better services delivery, more revenue generation and mitigate against herder farmer conflicts for better national food security.

## **Discussant 1: Prof. Lukman Akinbile**

The discussant identified the collapse in the 1970s of the *Burti System* (where specific migration routes were set up for herders, with mutual agreement from the farmers, herders, and local authorities), the tsetse control programs that have reduced the threat of diseases such as trypanosomiasis and cross-bred trypanosome-intolerant zebu cattle with trypanosome-tolerant hump-less breeds, that have hitherto helped southward movement of herders led to conflicts over land. These conflicts were aggravated by deteriorating environmental conditions, desertification and soil degradation that have led pastoralist from Northern Nigeria to change their transhumance routes. To salvage the current situation, the discussant identified issues of foreign transhumant migrant herders and climate change as critical issues to pay attention to for the goal of livestock reform programs to be achieved.

Among other things, the discussant proffered effective political leadership, improving public communication, ensuring funding and accountability, building the technical capacity of institutions, ensuring improved security, enhanced dialogue, establishment of structures for sustainability, address transhumant pastoralism and climate change, need for effective extension service and veterinary services, as solutions germane in steps towards ensuring effective take-off and success of the livestock policy. He concludes by stating that the national livestock development policy has the potential of reducing the incidence of herders-farmers' crises to the barest minimum and improve the productivity of livestock towards achieving food self-sufficiency. To achieve these, the discussant suggests that it is expedient that

the implementation of the policy considers the issues so raised and ensure that implementation is executed with highest level of diligence and professionalism. The incidence of conflict that leads to wanton destruction of life and property will be checked towards achieving a peaceful and egalitarian society.

## **Discussant 2: Prof. Eze Chinedu Athanasius**

The second discussant emphasized the importance of capacity building in livestock reform and opined that adequate Veterinarian and extension workers are required for the livestock sector's sustainability and productivity improvement. According to him, such officers should be well trained and equipped with all the tools they need to perform their duties in rural areas where their services are most needed. He further submitted that the reform must be holistic, incorporating both farmers and pastoralists; improving their capacity and providing them with necessary facilities to aid in the enhancement of their productivity.

More succinctly, the discussant provided the following recommendations as germane to achieving sustainable livestock reforms in Nigeria:

- Capacity building for the team players including provision of adequate number and the expertise of veterinarians for efficient service delivery in clinical and preventive services, provision of drugs and vaccines and other farm inputs as well as human health;
- Strengthening the capacity of farmers' organisations by bringing the small scale farmers into clusters or groups on a sustainable manner;
- Reward and leadership development among community based organisations
- Strengthening other institutions and associations like Livestock Producers' Association, Milk producers and Veterinary Association and Animal Science Association.
- Provision of the state of the art equipment.

## **Discussant 3: Alhaji M. D. Abubakar**

The discussant highlighted the importance of the downstream sector in livestock production. According to him, the downstream has been neglected and has received almost no funding. According to him, the situation was exacerbated by the dominance of multinational corporations, which have a competitive advantage over local dairy companies in terms of market and productivity. With the help of the private sector, the federal and state governments should beam a search light to how to improve local dairy production. For example, the Kano state government, in collaboration with the Islamic Development Bank, has established four grazing reserves in various locations where pastoralists are stationed to collect milk for processing by dairy companies. It has promised to open 200 more milk collection centers across the state. This will help to improve the supply chain for dairy processing companies while also increasing the multiplier effect. Other states, including Jigawa, Adamawa, and Niger, are also participating in such interventions.

In response to funding shortages for such interventions, he stated that the Federal Ministry of Agriculture and the Ministry of Trade and Investment have recently endorsed the National Diary Policy after two years of follow-ups. According to him, if signed, a development levy would be introduced and imposed on multinational companies that import milk into Nigeria. Another source of funding is the imposition of backward integration, and import substitution, in which 10-13 percent of milk imported must have local content.

## **Discussant 4: Prof. Shola Olorunnisomo**

The discussant highlighted the importance of livestock in human nutrition and livelihoods and how they contribute significantly to nutrition and national food security; employment and livelihoods; assets acquisition; soil fertility; socio-cultural prestige; expand scope of agricultural production by utilizing crop residues and raw materials for certain industries

To achieve a more robust landmark in this sector, the discussant gave two options; i.e. to increase cattle numbers in the country through importation of more cattle breeders, and more cattle per breeder or to maintain/reduce numbers but improve output from individual cattle for increased output, improved genetics, improved feeding and improved husbandry practices.

He however, posited that, it is not going to be easy as the rangeland and mixed farming systems generally fall under traditional systems, while landless (or intensive) systems fall under modern systems with majority (about 95%) of cattle farmers in Nigeria practice the traditional system.

The paper also addressed the issue of Farmer-Herder Conflicts; deadly conflicts such as farmer-herdsmen, ethnic clashes, cattle rustling, political clashes and political conflicts (RUGA, Cattle Colonies, Grazing Reserves, Grazing Routes, Open grazing, etc.) arising from the Pastoralists which come to be associated with movement of farmer and livestock in search of grazing and water was extensively discussed.

*In conclusion, the presenter made the following recommendations:*

- Farmers and herdsman must embrace husbandry practices that will produce more from less land;
- As Arbitrators in the conflict, government must find equitable ways of partitioning land for agricultural use, bearing in mind priorities for primary and secondary agricultural production;
- The pastoralists must be encouraged to embrace sedentary lifestyle and take more responsibility for productivity of his land;
- The farmer must also be encouraged to drop shifting cultivation and embrace modern soil management techniques to maintain productivity of his land;
- In the interim, farmers and pastoralists must be helped to survive and to engage their land to maximum advantage revisiting and redesign grazing routes;
- More feed and fodder companies should be encouraged to operate in proximity to grazing routes and cattle markets;
- Education of pastoralists on the significance of extension services;
- More of teaching pastoralists basic modern production techniques;
- Extension services must move from mere passing of information to true education;
- A curriculum for basic cattle production techniques should be developed in the language of the pastoralists; and
- Grazing routes should be treated as a transitional rather than a fixed policy until more pastoralists embrace a sedentary form of cattle production.

## **Discussant 5: Prof. Dauda Bitrus Bawa**

Discussing this, the discussant gave the general overview of the roles of extension workers in disseminating new agricultural technologies to farmers. He described extension services as an essential tool in the creation of sufficient awareness, improve attitude and behaviour change towards acquiring modern knowledge base and technology driven farming techniques as well as generating feedback. He however, lamented the near absence of functional extension services in the country, where he said the current ratio of 1700 Farmers to one Extension Officer (1/1700) is grossly unacceptable and will not augur well for the growth and development of livestock sector in Nigeria.

He concluded by recommending that, the effective extension system with qualified extension personnel are put in place. Therefore, he implored Government to provide enough extension workers in the country and Government at all levels should take measures to ensure extension workers are recruited. He also recommended the generation of timely, adequate and reliable data, as well as the need to update the current cattle in the country.

## 2.3: PLENARY SESSION 3

### SUB-THEME:

GOVERNANCE, POLICY REFORMS AND ENFORCEMENT OF NATIONAL AND REGIONAL PROVISIONS (LAWS AND/OR LEGISLATIONS) WITH STRATEGIC FRAMEWORKS FOR CO-ORDINATION OF CROSS-BORDER AND INTERNAL MIGRATION OF PASTORALISTS

### Introduction

The Chairman, Barr. Dr. Mohammed Ndarani Mohammed, SAN noted that the national dialogue initiated and supported by the Kano State Government is coming at a right time in the life of the nation. He observed that migration of pastoralists from Central and West African countries has been on the increase due to pastoralist right to free movement as supported by the ECOWAS Transhumance Protocol and the Nigerian constitution. He equally opined that the movements have implications on the farmer-herder crisis. A primary driver of the conflict identified by him is the competition for land and water, although there are also political and social triggers.

He also touched on the different regional policies and frameworks for pastoralism which include ECOWAS Transhumance Protocol and African Union Livestock Development Strategy for Africa etc. He thereafter, highlighted various legislation and policies on transhumance in Nigeria at the federal and state levels.

He however, asserted that Nigeria has not put the provisions of the stated frameworks on pastoralism into practice, noting that the ECOWAS Transhumance Protocol for instance recognizes the precedence of local and national laws. He therefore, recommended that whatever reform is to be adopted should have a legal backing while the ECOWAS Transhumance Protocol should be properly domesticated along with the building of necessary institutions.

### Lead Presenter: Prof. Issac Albert

#### Introduction

The Professor of African History, Peace and Conflict Studies, in his presentation titled **Strategic Frameworks for Reforms and Coordination of Cross-Border and Internal Migration of Pastoralists**, traced the history of interventions in sedentarising and transforming the production system of transhumant pastoralists to the 1942 Fulani Settlement Scheme in Jos Plateau which was found to be too costly. Other interventions include:

1. The 1954 World Bank study on Fulani pastoralism which proposed the concept of grazing reserves as a solution to the challenge,
2. The Grazing Reserve Act of 1965 which empowered the Ministry of Animal and Forest Resources to acquire, preserve, control and manage grazing resources. The Act also allowed for the demarcation of stock routes to link the Grazing Reserves with each other.

3. National Grazing Reserve (Establishment) Bill of 2016 which was meant to establish a National Grazing Reserve Commission with the power to identify and acquire land for the establishment of Grazing Reserves.

He noted that the Grazing Reserve Concept, despite being reflected in various National Development Plans between 1970 and 1985, was hampered by challenges ranging from high cost of compensation on land which dissuaded the States from establishing reserves and overcrowding, failing infrastructures and mismanagement of the functioning ones. He also asserted that Nigerians have been playing politics with an activity that is economic, noting that the reactions of the State governments to the issue have largely been reactionary and conflictogenic, citing the draft 2016 Bill which was fiercely criticized and rejected by the parliament as an example.

He, therefore, argued that the legal framework for managing the situation has not been properly established. He cited the problematic perception of the ECOWAS protocols on transhumance as an example, whereas Nigeria has done little to domesticate the protocols and public discussion has consistently projected ranching as the only solution.

He shared the resolutions of a regional summit on human and climate security challenges and farmer-herder conflict resolution held on 12<sup>th</sup> – 13<sup>th</sup> December, 2022 at the same venue which he felt are still relevant. The summit asked the government to:

- i. Mainstream climate smart strategies into all livestock and crop farming sectoral policies and interventions across the region, with specific budget lines to ensure its sustainability.
- ii. Establish Federal and State Ministries of Livestock and Fisheries Development in Nigeria to better coordinate with other West African countries to attract greater attention that facilitate reaching of the full potentials in the livestock sector.
- iii. Carry out a comprehensive review of traditional systems and models for farmer-herder conflict resolutions in the region, strengthen and up-scale mechanisms that have proven effective.
- iv. Establish, strengthen and fund National, State and Local Government multi-disciplinary, multi-ethnic and multi-religious Conflict Resolution and Peace Building Committees to pay particular attention to the livestock and crop farming sub-sectors and engender unity and peaceful co-existence.
- v. Review, harmonise and enact, if necessary, existing legislation suitable to the context of countries and localities affected by farmer-herder clashes.
- vi. Promote utilisation of early warning systems by National and State Governments in the region to mitigate the occurrence of conflict.
- vii. Make the regional summit a bi-annual event to be hosted among the neighbouring countries (Chad, Niger, Cameroon, Benin and Nigeria) for strong networking and continuous collaboration in promoting regional peace and climate security in the livestock and crop farming sectors.

He further posited that the politicization of the herder-farmer crisis and allowing it to fester for too long has caused four main problems:

- I. Issue proliferation: Farmer-herder conflict now has degenerated into (i) “killer herdsmen crisis” (ii) banditry (iii) Fulani domination etc.
- ii. Actor proliferation: Farmers, herders, politicians, criminals etc.
- iii. Distortion of realities
- iv. Management complication: No solution now commands popular support. There is suspicion everywhere.

He therefore, called for Nigerians to stop playing politics with the problem and its management.

## **Discussant 1: Prof. Saka Nuru**

In his contribution, the discussant took the audience down the memory lane. He noted that pastoralism has existed for centuries, drawing attention to the importance of history and learning from its lessons to augment the development of the livestock sector. In the past, the practice was entirely different from what we see today lamenting the deterioration of the symbiotic relationship between farmers and pastoralists.

He reviewed the history of ranching systems in northern Nigeria and the viability of the livestock market in states like Kano, Sokoto and Maiduguri.

The discussant also stressed the economic significance of livestock production in the provision of employment opportunity for the transporters, dealers and majority of the industry players.

On grazing reserves, he pointed that eighty per cent of the grazing reserves were not developed.

He noted that there were national and international conferences on the livestock industry that were convened in the past. The conferences had all the critical stakeholders in attendance.

He also noted that he hoped that the conference would be different from the previous conferences in terms results. He recommended the setting up of a committee of experts, including agriculturalists, economists, anthropologists to come up with ideas and blueprint for the federal and state governments.

He lamented that we have not achieved much in the last four decades and called for the need to start thinking about fresh approaches in terms of immediate and long-term solutions. He called for the adoption of endogenous livestock development and a shift of research focus from animal-centred to human-centred.

## **Discussant 2: Prof. Oka Martin Obono**

The discussant posited that in order to fully comprehend the context of farmer-herdsmen conflict it should be analysed from three perspectives, namely: climate change, migration and pastoral policy.

He noted that climate change puts major pressure on the pastoralist and the farmer and advised that the country must think big and outside the box and come up with ways and means to re-green the Sahel and a viable option for the issue of climate change in Nigeria and neighbouring countries

He asserted that technology exists to re-green the Sahel and opined that this will open a wide range of opportunities that will transform the socio-economic landscape of the region.

He, thereafter, recommended as follows:

- i. We need to tackle the issue of climate change and be bold and innovative in coming up with solutions.
- ii. Re-greening the Sahel should be a viable solution adopted for addressing climate change in sub-Saharan Africa.
- iii. There is need to respect existing free movement treaty.
- iv. There is need to douse the prevailing rhetorics of demonising the Fulani herdsmen as terrorist/criminals.

## **Discussant 3: Prof. E. Ikani**

The discussant reiterated the position of the 19 Northern Governors Forum in 2018 where they unanimously agreed to improve the living conditions of the pastoralists. He noted that agriculture in Nigeria runs on two main key activities, namely, crop production and livestock. He asserted that it is agriculture that made Nigeria giant of Africa. However, the Professor asserted that livestock has been neglected over time. He further observed that ranching has financial, infrastructural and structural importance. The discussant

emphasised that animal dung has far more economic benefits than the cow meat and milk. He cited that animal dung provides more economic benefits in Morocco than the meat and milk.

According to the discussant, elderly pastoralists hardly adapt to change. They are always intransigent to modernity. On this, he advised that the focus should be on the younger pastoralists than the aged.

In his concluding remarks, he suggested full implementations of all resolutions unanimously agreed upon at the end of this national conference. It is only when that is done that there would be tremendous change in the lives of the pastoralists in Nigeria. He also noted that mobile farming has been practiced since 1960s. He lamented about government's attitude towards livestock farming in Nigeria noting that government support for livestock farming is not encouraging.

The discussant capped up his presentation stressing the need for government to support livestock farming by creating conducive environment for the pastoralists. He enjoined the private sector to support pastoralists farming in Nigeria.

## **Discussant 4: Prof. Moses T. Aluaigba**

In his contribution, the discussant focused on the disconnect between policymaking and its implementation and the problem this has created for the Nigerian state. He corroborated the point of the lead speaker that the government has reneged on its responsibility to the extent that the farmer-herder situation has reached a crisis.

He also decried the demonisation of the Fulani as a people. He stressed the need for trust building and sensitisation of the communities about government programmes/policies and their significance to them. He attributed the failure of Cattle Colony in 2018 and Rural Grazing Area (RUGA) in 2019 to the failure of government to adequately sensitise the affected communities. The programmes were not properly conceived through consultation with all stakeholders.

In order to mitigate the perennial conflicts between farmers and pastoralists, the discussant offered the following recommendations:

1. The government and other critical stakeholders should make sacrifices. While the government needs to augment investment in the industry, the pastoralists should embrace modern methods of cattle rearing and treat it as a private business just like farming.
2. The government should demonstrate sincerity of purpose in addressing the issue. As a show of commitment, the Federal Government should immediately commence the construction of model ranches across each of the six geo-political zones of Nigeria based on which, state governments and investors will follow in building same in their various states.
3. Government should ensure that the law takes its course by punishing culprits.
4. The Federal, States and Local Governments should embark on institutionalising peace-building mechanisms in their respective spheres to enhance easy and quick resolution and reconciliation of future conflicts among groups.

## **Discussant 5: Dr. Murtala Ahmed Rufai**

The discussant noted that there is need for clear understanding of issues and to address the stigmatisation of the Fulani within the context of insecurity in Nigeria. It is important to view the situation from both economic and cultural perspectives.

Some of the major issues he raised are:

- The stigmatisation of the entire Fulani population is a result of the overrepresentation of Fulani in militant Islamist organisations in the Sahel. Renewed outreach and trust-building between Fulani pastoralist, the government, and farmers will be necessary to reverse this.
- The need to differentiate farmer/herder conflict from rural banditry. There is a multi-ethnic composition of bandits operating in the region.
- Statistics has indicated that 60% of victims of banditry are Fulani and 95% of the conflict between farmers and pastoralist is elite driven for economic reasons.
- There is great mistrust of government intention by the pastoralist, who believe government is not interested in dialogue but their eradication.
- The proactive approach to security by the Kano State Government has resulted in limiting banditry and militancy in the State.
- Over 70% of the arms used in the region comes from across the borders and to a large extent, supplied by Transhumance pastoralist.

*He however made the following recommendations:*

- i. Pastoralists need 100% peace not reform.
- ii. Government should consider reopening the doors of dialogue, peace and amnesty for bandits who want to reform.
- iii. There is need for grassroots' engagement and intervention to check insurgency and insecurity in the region.
- iv. There is need to eliminate the Fulani bandit/terrorist narration and to change the mindset of the insurgents as a mean to foster engagement between insurgents and government.

## 2.4: PLENARY SESSION 4

### SUB-THEME:

ENGENDERING PROSPERITY, WELLBEING AND PEACEFUL INTER-COMMUNAL COEXISTENCE  
AMONG FARMERS, PASTORALISTS, YOUTH AND WOMEN

### Chairman's Remark:

The Chair of this session in person of His Royal Highness, the Emir of Kazaure, HRH, Dr Najib Hussaini Adamu reiterated that there is no way that issues of concerns like the herder-farmer conflict can be adequately dealt with in a two-day seminar. He urged discussant at this plenary to do justice given to subtheme within the time allocated. He expressed trust on the caliber of discussants slated for the session and he then called on Prof Tukur Baba who he described as a nationalist to set the ball rolling.

### Lead paper: Prof. Tukur Baba

The paper identified various conditions which allow pastoralism to thrive to include the ecological and the social factors. The ecological factors encapsulate the facts that marginal areas that do not support significant crop production, areas of little, sporadic, scanty and unreliable rainfall; areas devoid of human and livestock

disease vectors and sparsely populated but which have sedentary settlements (towns and villages). The social factors according to the Lead paper include the fact that areas of social and political congeniality, devoid of violence and social conflicts, areas where grazing and watering rights and privileges can be negotiated and areas of communal, as opposed to private, ownership land tenure systems (communal ownership is more ideal).

The paper then submits that the conditions identified above support transhumance and its variant known as nomadism, which has continued to catch attention for the right and wrong reasons. The paper further identified alternative to transhumance and, especially, nomadism as sedentarisation; a situation where nomadic and semi-nomadic herders opt for permanent settlement and adopting sedentary live-styles, cultures, with or without retaining animal husbandry as major means of livelihood.

In his opinion, the traditional pastoralism has managed to survive, though in battered shape, because of factors inherent in the system itself. These factors include ability to adapt to emerging or new circumstances as hallmark of pastoral systems, long-term flexibility of the system, low production costs, freedom of movement as a production strategy availability of marginal lands unsuitable for crop husbandry and availability of supplementary feeds. According to the paper, the system had always survived/recovered from disasters, disease epidemics and droughts until recently and this is no longer so tenable in the current situation leading to crisis. The crisis in question continues to manifest in many ways including ecological imbalance/environmental degradation/climate change, rangeland degradation resulting from soil erosion, over utilization and associated practices, protracted conflicts, violence, generalized terror, etc., being visited on both herders and farmers alike, rigidification of international boundaries, which impedes movements across the artificial borders imposed by colonialism Population Growth (human & livestock).

In the opinion of the Lead Paper presenter, given the above, there is hardly much ground to expect traditional herding practices to survive and he then proceeded to proffer the following solutions:

- Grazing reserve idea should be deployed with caution devoid of ethic coloration and political gimmicks;
- Promotion of knowledge and awareness of alternative and complementary animal feeds;
- Encourage the diffusion of innovations and adoption of same by pastoralist;
- Provide access to land ownership by pastoralists;
- Encourage synergy and collaboration between farmers and herders such that together they form into communities of people with mutual but not necessarily of opposing interests in the utilisation of land resources on a sustainable basis;
- Return to host-family arrangements where farmers and herders relate on regular basis exchanging products (e.g. manure for crop residues);
- Encourage traditional leaders at all levels to commit to promoting sustained dialogue for mutual understanding, tolerance and cooperation among all stakeholders with interests in land resources;
- Focus on the youth as change agents; and
- Empowering women who remain central in the management of households, milk

## Discussant 1: Prof. Adeyinka Abideen Aderinto

The discussant submitted that the impact of the conflict has been far-reaching and several studies highlight the prevalence of farmer-herder conflict in Nigeria as a major threat to peaceful coexistence, human and national security, and sustainable national development. The proposed Grazing Bill for managing this conflict has shown implications for preserving local interests and promoting the federal system in the country. The paper also implicated competition over land and natural resources, climate change, political and economic factors, and ethnic and religious tensions as factors fuelling the crisis.

The social consequences of the conflict between farmers and pastoralists in Nigeria are far-reaching and include loss of human and animal lives, destruction of crops, reprisal attacks, displacement of persons and animals, distrust between Herdsmen and Farmers.

Possible solutions to the conflict as suggested by the discussant are as follows:

- a) A national policy framework on free movement and livestock production that would protect the interests of both farmers and herders. The Federal Government should take the initiative of negotiating a consensual policy framework that would address the issues.
- b) The programme for the country's transition to modern forms of animal husbandry must be accelerated and funded. The national stock would require rapid improvement and modernisation to meet market demands for meat, milk, hides and other products from the industry.
- c) Commercial ranches should be established in some of the sparsely populated zones in the North East and North West.
- d) Efforts should be made towards modelling best practices of pastoral-farmer relations as evident in countries such as Chad, Ethiopia and Niger, where the existence of institutionalised and functional mechanisms for pre-empting and resolving conflicts between farmers and pastoralists enable them to live in peace.
- e) Need for the development of a media code to be used in sensitizing the media on the relevant international standards on reporting issues of conflict and banditry.
- f) There should be advocacy and administrative guidance to return to traditional methods of conflict resolution.
- g) There should be capacity development of farmers and herders' associations so that they play a more positive role in the process.
- h) The creation of positive narratives showing how the interaction between herders and farmers could be peaceful and mutually beneficial.

In conclusion, the conflict between farmers and pastoralists in Nigeria is a complex issue with far-reaching consequences for the lives and livelihoods of local communities. To engender prosperity, wellbeing and peaceful inter-communal coexistence, a multi-faceted approach is needed that takes into account the underlying causes and consequences of the conflict and utilizes conflict management expertise. The government, communities, and relevant stakeholders must work together to find lasting solutions that address the root causes of the conflict, enhance peace and security, and promote social and economic development.

## **Discussant 2: Dr. Sale B. Momale**

According to the discussant, migration of pastoralists is not bad at all. It is a conventional practice that allows seasonal migration of pastoralists from highlands to lowlands in search of pasture for their cows. What is required is management and policy compliance. Even the provision of the ECOWAS transhumance protocol gave several lee ways if it can be studied properly. It allows for identification check and tracking of migrant pastoralists.

He highlighted the many challenges that made the problems associated with herders-farmers' conflict to linger to include the breakdown of inter communal relations, confusion of solutions to complex problems, politicisation of the issues, low productivity for both famers and herders as occasioned by poor capacity building and extension and veterinary services, poor management of dwindling resources and raising issues of criminality in rural areas.

As solutions to the challenges, the discussant proposed that government and other stakeholders should find ways to improve the local economy so that high framed local products can be marketed and consumed. Also, efforts should be made for development of grazing reserves with adequate high-level technologies as well as development of a mechanism to coordinate the movement of pastoralists by using the traditional rulers and broadening of existing policies and scrutinize the repressive laws that are causing issues in the sector.

### **Discussant 3: Aminu Murtala Nyako**

The discussant specifically reflected on the ideas used in the last 18 months at Sebore International Farm which was established since 1982 in Adamawa state. The farm according him specializes in the production of dairy products, tropical mangoes and renders extension services to integrated farmers and pastoralists under their project. The ideas according to him include giving access to market and training for their target groups, full integration of dairy farmers and provision of sources of income generation and value chain to integrated target groups. He emphasised that dairy farming in livestock can be an engine for growth to Nigerian economy as the entire Northern belt currently sits on over 20 million cows. According to him, the secret to their successes in the last 18 months was the partnership they have with the CBN which facilitated the establishment of the largest fresh milk processing plant in Nigeria that works on 5 megawatt of solar power as their source of energy. This has facilitated the following achievements:

- Taken care of the perishable nature of fresh milk which must be kept at under 4 degrees in the first 2 hours and guarantees the preservation of the quality of the produce;
- It solves the problem of high energy costs and scarcity.
- It safeguards the confidence of the consumers on the quality of the produce.
- It enables them to make their entire collection system to be based on renewable energy.
- Integration of 20,000 farmers into daily value chain starting from Biu in Borno state to Gembu in Adamawa state.
- Provision of the integrated farmers/pastoralists with the monthly source of income ranging from N180,000 to N780,000.
- Creation of a routine system of identification and banking; and records of the integrated farmers and pastoralists.

#### *His recommendations are as follows:*

- Government should endeavor to address problems that will go a long way in improving the quality of the products as well as the livestock productivity. With the quality of milk, other products like cheese, butter can be produced. He made mention that our cows produced quality milk with high content.
- Dairy industries in Nigeria need to be protected as found in developed societies.
- Transformation of livestock farming from a mere way of life to a business enterprise.
- More training is needed for farmers and herders.
- Encourage the adoption of renewable energy.
- Improve the collection center facilities and veterinary services.
- Grazing reserves should be equipped to incorporate the system of planting Mobia grass which is available in the North due to our climate (one hectare can feed 40 cows a day).

## **Discussant 4: Prof. Stella O. Odebode**

This discussant highlighted the roles livestock plays in providing employment opportunities, income, food, raw materials and foreign exchange earnings for people. The sector also plays a major role in sustainable food systems — e.g manure as a critical source of natural fertilizer and livestock are used as draught animals to help boost productivity in regions where there is low mechanization. The livestock sector is an integral part of agriculture and vital to the socio-economic development of the country as it contributes around 1.7 percent to the national GDP and around 9 percent to the agriculture value added.

The paper also discussed the importance of gender as an important consideration in livestock management where women make up a large percentage of the agricultural labor force. Women are typically responsible for milking, dairy processing and marketing, and they usually have control over the proceeds in order to feed the family. While men and boys are away tending the herd, pastoralist women are responsible for collecting fodder to supplement the feed of those livestock kept close to the homestead. They are also responsible for tendering pregnant stock, the calves, the kids and the lambs as well as taking care of sick animals that cannot keep up with the main herd. When rural women access and control the livestock or livestock products they own or manage, household coping strategies may be affected, resulting in a positive impact on overall household well-being and nutrition. The role of women at promoting understanding, peaceful coexistence and lasting peace between herders / pastoralists and farmers was also discussed.

Despite women crucial contribution to agriculture and food security, the paper listed poor access to natural resources, inadequate extension services, marketing opportunities and poor financial services in exercising their decision-making powers among many as the challenges faced by women in livestock sector. These constraints often prevent women from reaching their full potentials within the agricultural sector and hinder the attainment of household food security and nutrition. They also hinder socio-economic empowerment and overall economic growth and poverty reduction.

*In conclusion, the discussant made the following recommendations:*

- Provision of good extension and advisory services are essential for enhancing the adoption and efficiency of improved inputs
- Provision of good extension and advisory services will lead to full benefits of pastoral society which include provision of affordable, high-quality proteins and nutrients to meet local demand.
- Effective communication with the team including the herder, farmers, youth and children will enable prosperity and increase productivity, wellbeing and peaceful inter-communal co-existence among farmers, pastoralists, youth and women in Nigeria.
- Improving women's access to productive inputs (such as land, chemical fertilizer, improved seeds, and pesticides), reforming land discriminatory laws, and closing women's gaps in technology, agricultural finance, human capital, and extension services may help achieve gender equality in Nigeria.
- Government at all levels should partner with civil society organizations to provide psychological support to victims of conflict especially women and girls
- The federal and state governments should make available adequate funding for the implementation of state action plans on women's engagements in peace and security Intensification of peace building activities by Kano state peace building agency for peace, reconciliation and reconstruction
- Government should prioritize economic and livelihood support for women and other victims of farmer-herder conflicts
- The government should strengthen the role of religious and traditional leaders including the women leaders in the reconciliation process and social cohesion at community and state level.
- There should be constant counter negative reportage of farmer-herder conflict through transformative peace and trauma sensitive journalism

## **Discussant 5: Rotimi Williams**

The discussant x-rayed conflict resolution mechanism between farmers and herders. He shared his personal experience when herders destroyed his farm produces and the way the imminent conflict was resolved amicably. He also cited the failure of the general public to distinguish between communal clashes with herders-farmers' conflict as another source of the problem. The Discussant also spoke against payments of compensation to farmers for the destruction their farms, as the payees of the compensations may see to have a stake in the enterprises. Rather an inclusive mechanism will work better

In conclusion, the presenter recommended that, an effective communication mechanism be established in every community to communicate any security breach to the relevant security organizations before its escalation. And to give every section of the community sense of belongings, there is a need for the formation of all-inclusive community peace committees.



## **2.5: PLENARY SESSION 5**

### **Sub-Theme:**

**CITIZENS ENGAGEMENT, MEDIA SUPPORT AND INTER-CULTURAL COMMUNICATION AS PANACEA FOR FARMERS/HERDERS CONFLICTS MITIGATION IN NIGERIA**

## **Introduction**

The Chairman, Mr. Kingsley Osadolor started by joining others in appreciating the Governor and government of Kano State for organising this conference but also shared the sentiments of the Chairman of the fourth session that this should be the last on the issue.

He noted that references were made on the first day of the conference about Botswana and their exploits in livestock management. He asserted that before Botswana, there was Zimbabwe

He highlighted the mistake of not having representatives of the Ministry of Water Resources as participants at the conference, considering that the search for water has been a major cause of the conflicts.

A major question relating to citizen engagement is who owns the cattle? Should they be part of the stakeholders to be engaged?

## **Lead Speaker: Prof. Andrew Haruna**

The Lead Speaker started with the background of the ethnic and linguistic diversity in Nigeria. He asserted that language is different from ethnicity and also stated that language is a social tool. He further noted there is no culture that does not have a prejudice against others, but for the purpose of peace building, this prejudice should not be amplified.

He thereafter highlighted the roles of the media in peace building to include building bridges between people and groups, improving governance, increasing knowledge of complex issues, providing early warning of potential conflicts, act as an outlet to express emotions and as a motivator for action to promote peace.

He advocated for responsible journalism which is truly concerned with reportage of a truthful, balanced and fair account of events.

He x-rayed transhumance as a common activity among pastoral groups across the world, noting that the conflict between crop farmers and herders in Nigeria over land and water resources, is not a new phenomenon and is partly rooted in centuries of migration of herders across West Africa, preceding colonization.

He affirmed that pastoralists are “borderless” people, who largely do not subscribe to notions of sovereignty and territorial restrictions on their movement across state borders. Moreover, where they have their kinsmen spread across several states, it becomes difficult to restrict their movement across state borders.

According to him, media experts and professional peace mediators are increasingly paying attention to intercultural communication as an important component both in curtailing conflicts and promoting peaceful coexistence between farmers and herders. He however, noted that the appropriate intercultural communication needed for the aforementioned success is arduous to achieve because intercultural competence often implies a linguistic, sociolinguistic, and discourse components.

He touched on the difficulty associated with appropriately determining the victims and assailants in the farmer-herder conflict. He further noted that existing studies on the role of the media focus on reportage, framing, and coverage, whereas, the representations of the conflict centres on five overlapping themes, namely causes, victims, consequences, government's responses and resolution strategies to the conflict.

He also noted that the discourse of the dispute is constructed as a security issue which embodies other forms of security vis-a-vis national security, food security, the security of statehood and unity of the nations that make up the Nigerian state. However, the discourses often depict the conflicts based on the political and ideological dispositions of the papers. Hence, it can be argued that the link between the newspapers' representation of the conflict and the strategies they proposed for curbing the dispute may not be impartial.

Considering the central role of the journalists in promoting cultural diversity and peacebuilding, the lead speaker opined that the journalist should:

- Interact with people outside of their culture.
- Be open-minded to listen and let go of judgment.
- Speak out against culturally insensitivity.
- Accept that differences are beneficial and not harmful.

- Avoid forcing their beliefs on people with opposing views.
- Advocate working and living with people who are not within their culture.
- Absorb media and art from around the world.
- Learn a new language and communicate in a friend's native language rather than their own

He further identified the methodology for mitigating crisis to include using workshops/training, advocacy, focus group discussions, courtesy visits, media, Information, Educational, and Communication materials, mediation, conferences/seminars and theatre/drama.

He also highlighted the importance of using indigenous language in mitigating farmer-herder crisis.

*The following recommendations are therefore made:*

1. There is a need for exposure of media workers such as reporters, news writer to different beliefs, and practices, together with critical reflection on their attitudes and intercultural behaviours.
2. Professional communicators through various media outlets should feature programmes on intercultural sensitivity which is necessary for success in peaceful co-existence in society and life generally.
3. Non-governmental agencies and stakeholders on community welfare and development should utilise the agency of intercultural communication in their approach to proffer solutions to farmers-herders' conflict for a peaceful environment.
4. The approach to be used in coming up with a policy on the issue should be bottom-up in nature.

## **Discussant 1: Prof. Okey Ikechukwu**

The discussant began by reiterating the key points raised by the lead speaker around enlightened leadership, powerful educational values, and progressive media. He noted that every media has a perspective cum editorial policy.

He nonetheless posited that objectivity in the media practice is about honest reporting not the absence of taking up positions. He further stated that responsible reporting entails that journalists should not depict conflict in political and ideological terms. They should focus on the right type of language for reporting conflicts, and increase knowledge and provide early warning signals.

He argued that one important point that is often overlooked in media discourse is that linguistic prejudice is part of life. He mentioned that an important point to note is that how we speak is more impactful than what we actually say, depending on the connotation, not the denotation of the words and expressions we use.

He highlighted the importance of the print, social and electronic media, as well as NGOs, radio programmes, community round tables among other things. He lamented the practice of stratified engagements where elite conversations are mistaken as sustained communication with the rest of the people.

*In terms of his observations, he identified some problems and solutions as follows:*

1. The crisis of leadership as a major challenge to reaching people.
2. Access to the protagonists is lacking in terms of media communication. He suggested the use of the existing platforms to reach out to the communities through community leaders, traditional leaders and market leaders.

In conclusion, he noted that communication is not just about what the press has to offer, citing the railways as one of the strongest means of communication through which cattle were transported without being endangered or emaciated.

He concluded by advising the Kano State government to set an example by organising leadership programmes for youth leaders, not just about cattle, but also about reclaiming the future and the youth.

He also noted that the concept of communication for conflict management covers media mobilisation and advocacy and the reorientation of the younger generation.

## **Discussant 2: Dr. Martins Oloja**

The discussant opined that the Fulani herdsman/pastoralist has been demonised and not fairly represented by the media. There has been negative press and misrepresentation of the issue of farmer-herdsman conflict which has culminated in the stigmatisation of the Fulani.

He reasoned that with the unbundling of the study/field of Mass Communication, Public relation as a concept has been separated from journalism as a profession, there needs to be an elite consensus from the Fulani to utilise public relations to manage the perception and reputation of the Fulani.

He equally opined there is a total misunderstanding on the part of the media on the issue of the conflict between farmers and pastoralists. He concluded that the advent of social media and the emergence of citizen journalism has exacerbated the issues with fake news, poor reportage and misinformation.

*He therefore recommended that:*

- i. A comprehensive public relation strategy by the Fulani elite should be designed, adopted and implemented.
- ii. There is need for reputation management to redeem the negative image of Fulani in the media.
- iii. There is need for civic education in our learning institutions with a view towards changing the mindset of the public.
- iv. There is need to expedite the passage of the water resources bill into law by the National Assembly.

## **Discussant 3: Dr. Danladi Bako (Koguna Sokoto)**

The discussant began by expressing his profound gratitude to His Excellency, the Executive Governor of Kano State, Dr. Abdullahi Umar Ganduje, OFR, Deputy Governor, Dr. Nasiru Yusuf Gawuna, Chairman of the occasion, Mansur Muthtar, Vice President Islamic Development Bank (ISDB), Prof Attahiru Jega, OFR, and former Governor of Bauchi State, Alhaji Isa Yuguda.

He expressed his greatest dismay on the usage of certain term in the paper like Media Support. He posited that it ought to be Media Imperative not Media Support. He noted that, poor management of information occasioned by negative media reporting is responsible for some of the farmers and herders' conflicts recorded in Nigeria. He cited examples of poor reporting of events which have occurred in the Creeks and in other several communities in Nigeria.

According to him, people are fed with improper information which often results into communal conflicts. Lack of effective and efficient media coverage, coupled with misconception and mis-reporting or misinformation led to many innocent citizens being killed. He emphasised that many reporters only report without sifting or putting into context the implications of such negative information to the general public. Reporters do so in order to earn a living.

He further submitted that reporters do not pay attention to the source or to the authenticity of media information. It is a common phenomenon in the country where information is no longer clarified or cross-checked before they are being circulated to the public.

He, therefore, drew the attention of the participants of the National Conference to the fact that, the only source of information to the pastoral Fulani Man is radio since they are not connected to television, newspapers, internet or any social media.

He also identified ethnic profiling as a major factor responsible for media misinformation. He noted that, ethnic profiling has become a big problem in Nigeria in recent times. He reiterated that media contributed to the country's loss of the beauty and value of Nomadic Education introduced by Professor Jibril Aminu.

*In his concluding remarks, he came up with the following plausible recommendations:*

- Fulani residing in the designated areas should be well catered for, protected and provided with necessary welfare.
- An appeal for the promotion of national interest rather than ethnic sentiments or prejudice.
- Civil Education for the pastoralists is required and indeed urgent.
- Common goal for all Nigerians is fundamental irrespective of ethnicity or religion.
- Media based on National Integration and not profit-making should be encouraged.
- A country where Justice, fairness, equal rights and opportunity for all is required.

#### **Discussant 4: Mr. Sina Kawonise**

The discussant took off from where the last discussant stopped, noting that the media has so many biases and prejudices through which they profile different sections of the country, which detracts from the objectivity that is required to resolve the farmer-herder crisis. He highlighted the dangers of ethnic profiling, citing the example of Ondo State when the Governor advised the people to stop consuming cows with a view to avoiding capital flight from the Southwest to the North.

He estimated that over ₦2.5 billion is spent on beef per day in the Southwest as a result of their consumption of ten thousand cows per day. He however, noted that out of the over 21 billion eggs produced in Nigeria per day, the Southwest has comparative advantage of being responsible for the production of over seventy per cent of it, but the consumption is spread across the country, thereby, drawing the attention of the Conference to the interdependence that exists among the different zones of the country.

He concluded by admitting that most people see the issues from the prism of ethnic background, stressing that until Nigerians are able to break the vicious circle of biased reporting, they will not be able to address the conflicts associated with livestock production in Nigeria.

#### **Discussant 5: CP Fatai Owoseni rtd**

The discussant stated that serving in some key conflict areas between farmers and herders during his career in Benue State as well as other key positions has given him some insights from the security perspective of the conflict and some lessons learned.

*The lessons include:*

- There is a systemic lack of institutional memory which has resulted in a lot of initiatives, plans, proposal and programs of resolving the issues/conflict not followed through or implemented.
- Government at all levels needs to start treating the conflict between farmers and pastoralist with the gravity it deserves.
- Implementation of plans and strategies remain the bane of resolving the issue of farmer-herder conflict in Nigeria.

- Due to incessant stigmatisation in the media, the Fulani are now victimized in the society.
- In policing of the conflict, there is a proliferation of laws, however, the system does not have the necessary tools, facilities and capabilities to implement the laws.

*He recommended that:*

- i. There is need to remove ethnic and religious colourisation of criminality.
- ii. There must be a concise and focused approach to support the Fulani pastoralist in terms of ranching facilities as well as amenities, subsidies including fertilize, animal feed, housing healthcare, education etc.
- iii. The recommendations arrived at in this conference should be turned into a blueprint, benchmarked and a timeline for implementation should be outline including effective monitoring and evaluation.



## 2.5: PLENARY SESSION 6

### SUB-THEME:

STRENGTHENING ADOPTION OF CLIMATE SMART FARMING AND LIVESTOCK PRODUCTION PRACTICES TO MITIGATE IMPACT OF CLIMATE CHANGE

### Chairman remark:

The Chair of this session, Prof. Garba Hamidu Sharubutu, underscores the importance of climate smart farming as underpinning factor that could stem the tide of herder-farmer conflict submitting that the impact of realties of climate change precipitates drivers of the conflict between farmers and herders. He commended

the conference organizing committee for a well thought out topics that were covered by the conference. He expressed confidence that the conference will proffer far reaching recommendations to avail the government of way forward in addressing the national crisis.

## **Lead Paper: Prof. Demo Kalla**

After providing the operational definition of key terms germane to the topic of the discourse, the paper highlighted the goal of Climate Smart Agriculture (CSA) to include sustainably increasing productivity and income, reduce climate change vulnerability (enhance adaptation), reduce emissions that cause climate change (mitigation), protecting the environment against degradation and enhancing food security and improved livelihood. The paper then argues that if mitigation strategies as proposed by the CSA are adopted, it will foster productivity, increase resilience and positively impact the food security of herding and farming households. Thereafter, mitigation options opened to herders were enumerated to include feed/nutrient manipulations, biogas production, breeding for adaptable crop and animals (development of breeding programs; drought tolerant, for low-CH<sub>4</sub> and heat-tolerant animals), deploying carbon tax and nonconventional livestock production such as camels, quails, Guinea fowls. Other mitigation options suggested are multipurpose legumes, crop residue management, agroforestry, irrigation and water harvesting technologies. The paper suggested a number of policy interventions as follows:

1. Finalization of National Dairy Policy, National Animal Identification and Tracking System (NAITS) and National Feed Policy and Pasture Development Policy and Other Reports/Commissioned Studies, including 2015 Ministerial Committee on Stock Routes and Ranching and McKinsey –Beef Value Chains as well as the need to mobilize, educate, sensitize and inform the stakeholders.
2. Setting research agendas for CSA and the need to support multidisciplinary research programs that guide climate-smart investments and adoption, early warning systems and risk insurance.

The paper concluded by stating that framework for climate change financing is a sine qua non to attaining food security and sustained livelihoods and must be built into knowledge and capacity of our farmers to diversify and adopt CSA platform to Implement CSA related mitigation technology.

## **Discussant 1: Dr. R. J. Tanko**

The discussant identified space constraints as exemplified in farmland found along highways in Nigeria due largely to population growth, hence the continuous conflict between pastoralists and farmers. He lamented that though grazing reserves and ranching were contemplated as antidote to forestall the incessant clash between the two different economic groups, it is worrisome to observe that various grazing reserves are still in various stages of development that are not yet conducive for pastoralists business, therefore the need to bring these reserves to standard.

He further observed that open grazing is no brainer due to lack of control in terms of who uses the open grazing facilities. He recommended that cultivation of improved indigenous grass for fodders and pastures production to resuscitate the old grazing reserves. He urged private investments in this regard and projected that such investment will yield bountiful returns and become a lucrative venture in years to come.

## **Discussant 2: Prof. Abba Babagana Gambo**

In his discussion, he referred to his paper titled: *Climate Smart Agriculture as a Panacea for Mitigating Climate Change in the North-eastern part of Nigeria* where he stressed the importance of understanding the effect of Climate Smart Agriculture. He categorized the major manifestations of climate change in North-eastern

Nigeria into drought and desertification. According to him, their causes include climatic variability, extensive cultivation, overgrazing, cultivation of marginal lands, bush burning, fuel wood extraction, poor irrigation practices and poverty. To address these associated environmental risks on agriculture, he queried the emphasis given on climate change mitigation mechanism and prioritized the adoption of climate adaptation measures in Nigeria.

### **Discussant 3: Prof. I. R. Muhammed**

According to him, agriculture involves only two aspects namely crop and livestock productions. These two important aspects have common resources. To harness these resources, there is the need for a harmonious co-existence between herders and farmers. These, according to him, can only be achieved if we understand our challenges which stem from of the need for development that comes with the growth of population, urbanization and rapid industrialization. These invariably added more pressure on land and other natural resources and inevitably led to encroachment on grazing reserves. The prevailing laws also, according to him, are not helping matters as they encourage people to harvest the resources for their daily needs. To galvanise the importance of Smart Agriculture, he recommended that farmers should indulge in rotation, early cropping and mixed cropping. If done, it will help to improve soil fertility and other micro plants. Reservation of soil to grow postures for animals will improve productivity. For the ranching to work properly, he advocated for more pasture for the animals which required adequate financing. Changing the production system (transitional) and soil conservation will help in getting more pastures for the livestock.

### **Discussant 4: Prof. Daniel Gwary**

The discussant identified increasing temperature, deficit in rainfall and occurrence of droughts as evidences of weather aberrations indicating climatic risks. Agriculture, particularly in Nigeria with nearly 80% rain-fed area, has been a highly risky venture with the interplay of other abiotic and biotic factors. He stated that climate change has exacerbated the degradation of agricultural assets, decreased production and drastically reduced livelihood opportunities in the semi-arid Nigeria, combined with food insecurity and poverty, these impacts contribute to migration. To mitigate the consequences of the climate change, the presenter introduced Climate Smart Agricultural Technologies/Practices. Climate-smart agriculture (CSA) is an approach for transforming and reorienting agricultural development under the new realities of climate change. He concluded the discussion presenting the main general climate smart livestock production practices across the country to include:

1. Selective breeding via controlled mating
2. Feed Supplementation
  - Fodder bank preparation
  - Preparation of hay and silage
3. Livestock Disease Management (Vaccination and Treatment)
4. Manure Management

### **Discussant 5: Prof. Olutokumbo B. Oyesola**

The paper titled Funding, Infrastructure and Institutional Capacity Development for Effective Delivery of Functional Extension Services highlights contribution of livestock to agricultural development and sustainability of effective and functional livestock extension services in Nigeria. For the development of any sustainable livestock reform and mitigation to be effective, it must be through effective delivery of functional extension services. There is also a need to have adequate knowledge and understanding of the primary

stakeholders in the livestock sector of our economy and plan the reforms “with them” and “not for them.” In this present age, extension services reforms can only be sustainable when they are identified, planned, implemented and monitored with the end-users. The delivery of a functional and effective extension services can be achieved by understanding the term sustainability and putting into consideration the four pillars of sustainability (social, human, economic and environment) as outlined by United Nations.

The reforms must equally take into account a large view of the whole communities in terms of cultures, which is their norm, value, belief and taboo. It emphasizes preserving future generations and recognizing that our current actions have an impact on others and also our environment. It is assumed that when societal norms, values, beliefs and taboos of various stakeholders are put into consideration when extension messages are being prepared, the messages will be functional and effective and sustained through generations. This calls for the need to study in-depth the cultures of livestock systems in Nigeria to have socially acceptable messages to be delivered to livestock farmers

*The presenter made the following recommendations:*

1. Need for sustainable livestock reforms that will depend on the delivery of functional and effective livestock messages that are environmentally adaptable, socially acceptable, economically viable and human inclusive for its sustainability.
2. Need for additional institutional capacity building in the areas of community participation and engagement processes; resettlement review and social audit of all government/public or private lands to be used for piloting the livestock reforms.
3. Need for the development of locality/state specific FRILIA and incorporation of Nigeria environmental guideline for agricultural and rural management that will mitigate anticipated and associated conflicts and improve the delivery of functional and effective livestock extension services.

As an addendum to the aforesaid, a Lead Researcher in Jathropha from the Federal University of Technology, Minna, Prof S. Y. Daniyan submitted that in the livestock sector, *Jatropha curcas* can serve as a source of collaboration and mutual benefit for herders and farmers. By working together to cultivate and harvest the plant, they can improve their relationship and develop a shared understanding of each other's needs and perspectives. Furthermore, farmers can plant *Jatropha curcas* around the edges of their farms to serve as a form of perimeter fencing for their crops. This prevents herds from entering the farm to cause havoc because animals do not browse the *Jatropha curcas* plant. Overall, the benefits of *Jatropha curcas* in the Livestock sector are summarized below:

- *Jatropha curcas* can serve as a source of income for herders and farmers, as they can sell the seeds or the oil produced from the plant. This can help reduce poverty and improve the standard of living for the herder communities which in turn can reduce the likelihood of conflicts.
- Additionally, *Jatropha curcas* can help reduce greenhouse gas emissions as it is a renewable source of energy that can replace traditional fossil fuels. This can have a positive impact on the environment and help to mitigate the effects of climate change.

In conclusion, she submitted that *Jatropha curcas* plant has the potential to play a significant role in mitigating the associated conflicts in the livestock sector.

At the end of the six plenary sessions and fruitful, insightful and thought-provoking submissions and recommendations, **the reform communiqué** was read. Motion for the adoption of the communiqües was moved by Jazuli Muhammad Bichi of the Center for Dry-land Agriculture, Bayero University, Kano, representing Arewa Research and Development Project and was seconded by Dr (Mrs) Olutoyin Catherine Adetuberu of the Nigeria Veterinary Medical Practitioners Association.



# **SECTION THREE**

## **Recommendations and Resolutions**

### **1.1 Resolutions**

*The Conference observed and resolved as follows:*

- i) Globally, there are around 500 million pastoralists who rely on livestock herding for food, income, source of wealth and livelihoods, as well as providing social safety nets.
- ii) The Nigerian livestock sector with a population of about 20.8 million cattle is worth more than N33 trillion constituting 7% of the total Agricultural GDP with the potential for making enormous contributions to livelihood and overall national economic development. The sector also contributes through the provision of raw materials to diverse industries, utilization of agricultural wastes, provision of nutrition, enhancement of food security and employment generation, and also assisting in fertility maintenance, among other benefits.
- iii) The indigenous breed of cattle in Nigeria possesses one of the most nutritious and high-quality natural milk. Additionally, Nigeria and other West African countries have the highest cattle genetic resources in the World with potentials for high value export of beef and associated livestock products such as hides and skin.
- iv) Population expansion, land degradation, climate change and associated challenges are leading to degradation of key agricultural and pastoral resources thereby affecting productivity and livelihoods with serious negative consequences on the rural economy.
- v) There is low level of investments by both the public and private sectors in the livestock value chain occasioned by low level of funding and inadequate policy coordination at all levels, resulting in inadequate extension service delivery, poor animal health management and inadequate delivery of basic education to the herder communities.
- vi) Notwithstanding the low level of investments, the private sector players in the livestock and crops value chains including the numerous dairy farms are investing in backward integration, supporting communities of farmers and herders to improve productivity, better ways to manage conflicts and learn modern skills of production.
- vii) The pastoral production system is characterized by low productivity, inadequate application of technology and insufficient skills to meet the national demand for milk, meat and other livestock products, necessitating the quest to transform the production system for greater national development.
- viii) There are numerous policies and programme that have been initiated by both the Federal government and numerous state governments directed towards modernizing traditional livestock management

systems and addressing conflicts with variable levels of implementation and impact. The implementation of such programme will go a long way in addressing the fundamental challenges facing the livestock sector.

- ix) There exists sufficient knowledge and experiences for managing the complexities of the livestock production and modernizing the sector for enhanced value chain addition.
- x) Media narratives and profiling by some sections of the Nigerian mainstream media and more recently the social media are negatively affecting inter-communal relations and development of the livestock production sub-sector.
- xi) The traditional rulers and community leaders have proven to be effective institutions in managing farmers - herders relations in all parts of the country, with well-established framework for resolution of all forms of disputes.
- xii) The Conference underscores the importance of engagements, dialogues, mediation and community-based interactions in addressing disputes and conflicts among farmers and herders communities in the country.
- xiii) There exists several laws, legislations, policies, reports and expert research findings that guide current policies and programme for sustainable transformation and improvement of livestock production. Such laws include the Grazing Reserves Law of 1965, the Land-use Act of 1978, the ECOWAS Protocol of 1998 and other recent legislations enacted at state level.
- xiv) The National Assembly is committed to enacting necessary laws and legislation geared towards sustainable transformation of the livestock sector in the country.
- xv) The contributions of women and youths in efforts required for reforming livestock production systems, which need to be adequately provided for in policy formulation and implementation.
- xvi) Farmers and herders harmoniously co-existed for centuries, managing access to and use of resources in a relatively peaceful manner with beneficial crops-livestock exchanges that have supported environmental sustainability and peaceful coexistence with potentials for replication in many parts of the country.
- xvii) The negative consequences of the recurring conflicts between farmers and pastoralists which include loss of lives and property, worsening security in the country, deepening of disunity among the citizens and lowering of agricultural productivity. This has indeed aggravated the risk of food insecurity.
- xviii) Insecurity in the forms of cattle rustling, raiding of villages and kidnapping of persons for ransom is significantly affecting farmers and herders with enormous consequences on inter-community relations, livelihoods, access to social services and social wellbeing. The rising crimes have also led to heightened fears, absence of social cohesion and acrimony among some farmers and herders' communities.
- xix) There is increasing use of sophisticated arms in farmer-herder conflicts in the country resulting in high casualties and destruction of means of livelihood and dwellings of rural farming and herding communities.
- xx) Notwithstanding the level of insecurity associated with criminal activities as well as conflicts between herders and farmers, there are many states where the challenges have been effectively managed. States with good security management system are; Kano, Jigawa, Nasarawa and Oyo States. Sustained community engagements, robust state government support to farmers and herders in an inclusive manner and the strong involvement of traditional rulers in managing relations between farmers and herders is responsible for the peaceful relations in these States and communities.
- xxi) There exist many impediments affecting policy and programme implementation in the country that require paradigm shift in programme design and implementation to create the needed impact.

## **1.2 Recommendations**

*Based on the observations and resolutions, the following recommendations made:*

- I) Government at all levels need to invest in creating the needed infrastructure and delivery of essential services in education, health care, veterinary services, extension service delivery, access to information and training to provide the needed skills and capacity for transforming traditional livestock production systems.
- ii) Review the National Livestock Transformation Plan (NLTP) and other similar programmes and broaden the development options with clear funding framework and mechanisms to ensure effective implementation, supported by strong political will. Such programmes should be environmentally adaptable, socially acceptable and economically viable over the short, medium and long terms periods.
- iii) There is the need to deploy innovative and adaptable technologies grounded in scientific and indigenous people's knowledge, jointly designed and implemented with strong producers' participation. Such livestock production practices should lead to increased crops-livestock integration, development of grazing reserves, establishment of smallholder and commercial dairy and beef farms, establishment of ranches, breeds improvement, establishment of pastures and feedlots and management of livestock migration, among other development strategies.
- iv) Strengthen the role of traditional rulers and community leaders in managing the affairs of farmers and herders including the sustenance of inter-communal relations for effective management of disputes and conflicts.
- v) Strengthen peace-building interventions at all levels among farmers and herders by adopting proactive early warning and early response mechanisms. It will also include adoption of alternative dispute resolution and training of community leaders and other community gatekeepers on techniques of mediation.
- vi) Work out practical mechanisms for increased and viable private sector investments in the agricultural and pastoral production industry with framework for strengthening backwards integration in the livestock value chains.
- vii) Establish the Ministry of Livestock Resources in line with practice in many other West African countries. In the alternative, Federal and State Governments should expand the scope of existing Departments of Livestock Production to address the broader needs of the industry. Similarly, there is the need for the creation of additional research institutions for beef, dairy and pasture production as a strategy for expanding funding and enacting policies and programmes for the development of the sector at all levels of government.
- viii) Media organizations need to create awareness at all levels that will promote inclusive communities, strengthen harmonious relations to encourage government and private sector investments for cohesive societies and improved productivity. Similarly, profiling and reportage that malign socio-economic and ethnic groups need to be avoided.
- ix) UN Agencies, Bilateral Institutions, Regional Organizations (AU and ECOWAS), national and international CSOs and other support organisations should increase the level of funding and support to the government of Nigeria in mitigating the impact of climate change, addressing technology gaps, addressing poverty and skills gap and improving people's livelihoods.
- x) Agricultural and pastoralists organizations, cooperative societies and relevant producer associations and professional bodies need to be supported for improved productivity.
- xi) There is the need to re-visit and review sub-national, national and regional laws, legislations and policies so as to make applicable reforms for improving Livestock production and addressing conflicts.

- xii) There is the need to adopt Climate Smart Agricultural (CSA) practices, including the adoption of integrated approach to managing landscapes of croplands, rangelands, forests and fisheries that address the interlinks between the quest for food security and mitigation of the challenges of climate change.
- xiii) There is the need to strengthen and improve the security architecture for the prevention of violent crimes including cattle rustling, raiding of villages, kidnapping of persons for ransom and trade in illicit arms and drugs.
- xiv) There is the need to strengthen the process of litigation for more effective dispensation of justice and handling of the various litigations relating to violent crimes and other perpetrators of violent conflicts.
- xv) There is the need to reform the security and judicial architectures to ensure the curtailing of farmer-herder conflicts, cattle rusting, illegal arms trade, importation and proliferation in the country.
- xvi) Political leaders at all levels need to refrain from politicizing the issue of farmer-herder conflicts and other associated issues while pursuing inclusive processes that will strengthen unity and co-operation in the country.



Front row: L-R, SSG Kano, Prof Jega, Dr Muktar, Sultan of Sokoto, Governor Ganduje, Deputy Governor, Nasiru Gawuna, Emir of Kano, Senator Barau Jibrin and Emir of Wase at the Conference



## The Conference Communiqué

### SUB-THEME:

COMMUNIQUÉ ISSUED AT THE END OF THE NATIONAL CONFERENCE ON LIVESTOCK REFORMS AND MITIGATION OF ASSOCIATED CONFLICTS ORGANISED BY THE KANO STATE GOVERNMENT HELD AT NAF CONFERENCE CENTRE, ABUJA, 14TH FEBRUARY, 2023

### Preamble

The Conference on Livestock Reforms and Mitigation of Associated Conflicts was organised and sponsored by the Kano State Government and held on 13<sup>th</sup> and 14<sup>th</sup> February, 2023 at the NAF Conference Centre, Abuja. The Conference was declared opened by Dr. Abdullahi Umar Ganduje, the Executive Governor of Kano State. Goodwill messages were delivered by His Eminence, Alhaji Sa'ad Abubakar III, the Sultan of Sokoto; His Royal Highness, Alhaji Aminu Ado Bayero, the Emir of Kano; representative of the Minister of State, Agriculture and Rural Development; the representative of the Senate President; and representatives of Civil Society Organisations and Development Partners. The Vice-President of the Islamic Development Bank, Dr. Mansur Muktar chaired the opening session while the Keynote address on Sustainable Livestock Production in Nigeria was presented by Professor Eustace A. Iyayi, the Registrar, Nigerian Institute of Animal Science.

The main feature of the Conference was lead paper presentations, followed by panel discussions by scholars, professionals, policy makers, captains of industry and practitioners in the field of agricultural development, value chain specialists and researchers in diverse fields of animal production. Also present were specialists in range management, veterinary services, economics, history, cultural studies, climate change, natural resources management, governance and conflict management, among others.

### Rationale and Objectives

With the theme 'Sustainable Livestock Reforms and Mitigating Associated Conflicts' the National Conference was primarily initiated to provide solution to the age-long conflict between herders and farmers and to propose the ways forward for the economic development of the sector. The objective was to examine the critical issues surrounding the conflicts associated with farmers – herders' relations as well as the need for reforms in the livestock sector. The outcome of the Conference is expected to form a major input in developing a "Blueprint" for reform of the traditional livestock/cattle rearing system for improved productivity and social wellbeing as well as ensuring peaceful and harmonious relations in Nigeria.

*The sub-themes of the Conference were:*

- i) Productivity and Business of Value Chain Development for Livelihood Restoration in Farmers/Herders Conflict Mitigation in Nigeria;
- ii) Funding, Infrastructure and Institutional Capacity Development for Effective Delivery of Functional Livestock System (Extension and Veterinary Services);
- iii) Governance, Policy Reforms and Enforcement of National and Regional Provisions (Laws and/or Legislations) with Strategic Framework for Coordination of Cross-border and Internal Migration of Pastoralists;
- iv) Engendering Prosperity, Wellbeing and Peaceful Inter-communal Co-existence among Farmers, Pastoralists, Youths and Women;
- v) Citizens Engagement, Media Support and Inter-cultural Communication as panacea for Farmers/Herders Conflict mitigation in Nigeria; and
- vi) Strengthening adoption of Climate Smart Farming and Livestock Production Practices to Mitigate Impact of Climate Change.

The Conference was conducted in six plenary sessions, with each focusing on one of the sub-themes. The Lead paper presentations were followed by expert panel discussions and interactive sessions where participants contributed to the discussions. Breakout sessions were also held to provide avenue for more detailed examination of the issues raised in the plenary with a view to evolving practical solutions.

*The lead papers presented are as follows:*

- Productivity and Business Value Chain Development for Livelihoods Restoration in Farmers/Herders Conflicts Mitigation in Nigeria by Professor Suleiman Elias Bogoro, former Executive Secretary, Tertiary Education Fund (TetFund)
- Funding, Infrastructure and Institutional Capacity Development for Effective Delivery of Functional Extension and Veterinary Services by Dr. Junaidu Maina, former Chief Veterinary Officer of Nigeria
- Governance, Policy Reforms and Enforcement of National and Regional Provisions (Laws and/or Legislation) with Strategic Framework for Coordination of Cross-border and Internal Migration of Pastoralists by Professor Isaac Albert, University of Ibadan
- Engendering Prosperity, Well-Being and Peaceful Inter-Communal Co-Existence among Farmers, Pastoralists, Youths and Women in Nigeria by Professor Tukur Baba, Federal University, Birnin Kebbi
- Citizens Engagement, Media Support and Intercultural Communication as Panacea for Farmers/Herders Conflict Mitigation in Nigeria by Professor Andrew Haruna, University of Jos
- Strengthening Adoption of Climate Smart Farming and Livestock Production Practices to Mitigate the Impact of Climate Change by Prof. Demo Kalla of the Abubakar Tafawa Balewa University, Bauchi

*From the presentations and discussions, the Conference noted the following:*

- i) Globally, there are around 500 million pastoralists who rely on livestock herding for food, income, source of wealth and livelihood as well as providing social safety nets.
- ii) The Nigerian livestock sector with a population of about 20.8 million cattle is worth more than N33 trillion constituting 7% of the total Agricultural GDP with the potential for making enormous contributions to livelihood and overall national economic development. The sector also contributes through the provision of raw materials to diverse industries, utilization of agricultural wastes, provision of nutrition, enhancement of food security and employment generation and also, assisting in fertility maintenance, among other benefits.

- iii) The indigenous breed of cattle in Nigeria possesses one of the most nutritious and high-quality natural milk. Additionally, Nigeria and other West African countries have the highest cattle genetic resources in the world with potentials for high value export of beef and associated livestock products such as hides and skin.
- iv) Population expansion, land degradation, climate change and associated challenges are leading to degradation of key agricultural and pastoral resources thereby affecting productivity and livelihoods with serious negative consequences on the rural economy.
- v) There is low level of investments by both the public and private sectors in the livestock value chain occasioned by low level of funding and inadequate policy coordination at all levels, resulting in inadequate extension service delivery, poor animal health management and inadequate delivery of basic education to the herder communities.
- vi) Notwithstanding the low level of investments, the private sector players in the livestock and crops value chains including the numerous dairy farms are investing in backward integration, supporting communities of farmers and herders to improve productivity, better ways to manage conflicts and learn modern skills of production.
- vii) The pastoral production system is characterized by low productivity, inadequate application of technology and insufficient skills to meet the national demand for milk, meat and other livestock products, necessitating the quest to transform the production system for greater national development.
- viii) There are numerous policies and programmes that have been initiated by both the Federal government and numerous state governments directed towards modernizing traditional livestock management systems and addressing conflicts with variable levels of implementation and impact. The implementation of such programmes will go a long way in addressing the fundamental challenges facing the livestock sector.
- ix) There exists sufficient knowledge and experiences for managing the complexities of the livestock production and modernizing the sector for enhanced value chain addition.
- x) Media narratives and profiling by some sections of the Nigerian mainstream media and more recently the social media are negatively affecting inter-communal relations and development of the livestock production sub-sector.
- xi) The traditional rulers and community leaders have proven to be effective institutions in managing farmers - herders relations in all parts of the country, with well-established framework for resolution of all forms of disputes.
- xii) The Conference underscores the importance of engagements, dialogues, mediation and community-based interactions in addressing disputes and conflicts among farmers and herders communities in the country.
- xiii) There exists several laws, legislations, policies, reports and expert research findings that guide current policies and programmes for sustainable transformation and improvement of livestock production. Such laws include the Grazing Reserves Law of 1965, the Land-use Act of 1978, the ECOWAS Protocol of 1998 and other recent legislations enacted at state level.
- xiv) The National Assembly is committed to enacting necessary laws and legislation geared towards sustainable transformation of the livestock sector in the country.
- xv) The contributions of women and youths are required for reforming livestock production systems and need to be adequately provided for in policy formulation and implementation.

- xvi) Farmers and herders harmoniously co-existed for centuries, managing access to and use of resources in a relatively peaceful manner with beneficial crops-livestock exchanges that have supported environmental sustainability and peaceful coexistence with potentials for replication in many parts of the country.
- xvii) The negative consequences of the recurring conflicts between farmers and pastoralists which include loss of lives and property, worsening security in the country, deepening of disunity among the citizens and lowering of agricultural productivity. This has indeed aggravated the risk of food insecurity.
- xviii) Insecurity in the forms of cattle rustling, raiding of villages and kidnapping of persons for ransom is significantly affecting farmers and herders with enormous consequences on inter-community relations, livelihoods, access to social services and social well-being. The rising crimes have also led to heightened fears, absence of social cohesion and acrimony among some farmers and herders communities.
- xix) There is an increasing use of sophisticated arms in farmer-herder conflicts in the country resulting in high casualties and destruction of means of livelihood and dwellings of rural farming and herding communities.
- xx) Notwithstanding the level of insecurity associated with criminal activities as well as conflicts between herders and farmers, there are many States where the challenges have been effectively managed. States with good security management system are Kano, Jigawa, Nasarawa and Oyo States. Sustained community engagements, robust state government support to farmers and herders in an inclusive manner and the strong involvement of traditional rulers in managing relations between farmers and herders is responsible for the peaceful relations in these States and communities.
- xxi) There exist many impediments affecting policy and programmes implementation in the country that require paradigm shift in programmes design and implementation to create the needed impact.

*Following the deliberations at the Conference, the following recommendations are proffered:*

- i) Government at all levels need to invest in creating the needed infrastructure and delivery of essential services in education, health care, veterinary services, extension service delivery, access to information and training to provide the needed skills and capacity for transforming traditional livestock production systems.
- ii) Review the National Livestock Transformation Plan (NLTP) and other similar programmes and broaden the development options with clear funding framework and mechanisms to ensure effective implementation, supported by strong political will. Such programmes should be environmentally adaptable, socially acceptable and economically viable over the short, medium and long-term periods.
- iii) There is the need to deploy innovative and adaptable technologies grounded in scientific and indigenous people's knowledge, jointly designed and implemented with strong producers' participation. Such livestock production practices should lead to increased crops-livestock integration, development of grazing reserves, establishment of smallholder and commercial dairy and beef farms, establishment of ranches, breeds improvement, establishment of pastures and feedlots and management of livestock migration, among other development strategies.
- iv) Strengthen the role of traditional rulers and community leaders in managing the affairs of farmers and herders including the sustenance of inter-communal relations for effective management of disputes and conflicts.
- v) Strengthen peace-building interventions at all levels among farmers and herders by adopting proactive early warning and early response mechanisms. It will also include adoption of alternative dispute resolution and training of community leaders and other community gatekeepers on techniques of mediation.

- vi) Work out practical mechanisms for an increase and viable private sector investments in the agricultural and pastoral production industry with framework for strengthening backwards integration in the livestock value chains.
- vii) Establish the Ministry of Livestock Resources in line with practice in many other West African countries. In the alternative, Federal and State Governments should expand the scope of existing Departments of Livestock Production to address the broader needs of the industry. Similarly, there is the need for the creation of additional research institutions for beef, dairy and pasture production as a strategy for expanding funding and enacting policies and programmes for the development of the sector at all levels of government.
- viii) Media organizations need to create awareness at all levels that will promote inclusive communities, strengthen harmonious relations to encourage government and private sector investments for cohesive societies and improved productivity. Similarly, profiling and reportage that malign socio-economic and ethnic groups need to be avoided.
- ix) UN Agencies, Bilateral Institutions, Regional Organizations (AU and ECOWAS), national and international CSOs and other support organisations should increase the level of funding and support to the government of Nigeria in mitigating the impact of climate change, addressing technology gaps, addressing poverty and skills gap and improving people's livelihoods.
- x) Agricultural and pastoralists' organizations, cooperative societies and relevant producer associations and professional bodies need to be supported for improved productivity.
- xi) There is the need to revisit and review sub-national, national and regional laws, legislations and policies so as to make applicable reforms for improving Livestock production and addressing conflicts.
- xii) There is the need to adopt Climate Smart Agricultural (CSA) practices, including the adoption of integrated approach to managing landscapes of croplands, rangelands, forests and fisheries that address the interlinks between the quest for food security and mitigation of the challenges of climate change.
- xiii) There is the need to strengthen and improve the security architecture for the prevention of violent crimes including cattle rustling, raiding of villages, kidnapping of persons for ransom and trade in illicit arms and drugs.
- xiv) There is the need to strengthen the process of litigation for more effective dispensation of justice and handling of the various litigations relating to violent crimes and other perpetrators of violent conflicts.
- xv) There is the need to reform the security and judicial architectures to ensure the curtailing of farmer-herder conflicts, cattle rusting, illegal arms trade, importation and proliferation in the country.
- xvi) Political leaders at all levels need to refrain from politicizing the issue of farmer-herder conflicts and other associated issues while pursuing inclusive processes that will strengthen unity and cooperation in the country.

### **The Conference Concludes as follows:**

Participants expressed satisfaction with the proceedings of the Conference and were unanimous that the implementation of the recommendations will greatly contribute in facilitating seamless transition from traditional livestock production to a more robust market and technology driven livestock industry that will meet the animal resources requirements of the country.

The Conference was viewed by participants as timely in view of how the nation is grappling with the challenges of farmer-herder conflict, cattle rustling, banditry and other associated challenges of insecurity, which is taking a heavy toll on the socio-economic development of the country.

The participants unanimously commended the Kano State Government under the leadership of His Excellency, the Governor, Dr. Abdullahi Umar Ganduje, OFR, for initiating and sponsoring the National Conference which demonstrates his patriotism and strong commitment towards enhancing peaceful co-existence, unity and development in the country;

The participants urged His Excellency, Governor Ganduje to use his good office and influence to present the resolutions and proceedings of this National Conference before the National Council of State and the Nigeria Governors Forum (NGF).

Participants appreciated the Organising Committee under the leadership of Professor Attahiru Jega, OFR, for successfully hosting of the Conference.

Signed

**Professor Attahiru Jega, OFR**  
*Chairman  
Conference Planning Committee*

**Dr. Rabe Mani**  
*Chairman  
Communiqué Drafting Committee*



# SECTION FIVE

## **Members of the Kano State Committee On Livestock Reforms**

**COMMITTEE ON NATIONAL CONFERENCE ON LIVESTOCK REFORMS  
AND MITIGATION OF ASSOCIATED CONFLICTS IN NIGERIA**

Under the auspices of Kano State Government

### Membership

S/N	NAME	POSITION
1.	Prof. Attahiru Jega, OFR Former INEC Chairman	Chairman
2.	Prof. Jibrila Dahiru Amin Pro-Chancellor, Yusuf Maitama Sule University, Kano/Former VC, FUD	Vice Chairman
3.	Prof. Muhammad Yahaya Kuta Former SSG, Niger State (Professor of Development Communication and Agricultural Extension, University of Ibadan)	Member
4.	Mr. Martins Oloja MD, Guardian Newspaper	Member
5.	Prof. Bashir Haruna Usman Executive Secretary, National Commission for Nomadic Education	Member
6.	M. D. Abubakar MD/CEO L&Z Integrated Farms Ltd.	Member
7.	Arch. Kabiru Ibrahim Chairman, AFAN	Member
8.	Rabe Isah Mani PhD Former FAO Representative in Nigeria	Member
9.	Prof. Aminu Ibrahim Daneji Usman Danfodio University, Sokoto	Member
10.	Prof. Isma'il Zango Department of Sociology, BUK	Member

S/N	NAME	POSITION
11.	<b>Representative of the Senate</b>	Member
12.	<b>Hon. Bello Kaoje</b> Rep. House of Representatives	Member
13.	<b>ACP Isa Garba</b> Representative. of Nigeria Police Force	Member
14.	<b>Aliyu Bello</b> Representative of DSS	Member
15.	<b>Mrs. Winnie Lai Solarin</b> Director, Animal Husbandry Services, Federal Ministry of Agriculture and Rural Development	Member
16.	<b>H.E. Musa Sani Nuhu</b> Ambassador/Permanent Representative of Nigeria to the ECOWAS (Rep. Ministry of Foreign Affairs)	Member
17.	Representative of Federal Ministry of Interior	Member
18.	<b>Prof. Nkiru Meludu (Mrs)</b> (South east)	Member
19.	<b>Prof. Rashid Aderinoye</b> (South west)	Member
20.	<b>Dr. Saleh Momale</b> Executive Secretary, Pastoral Reserve	Member
21.	<b>Prof. Garba Kawu</b> Faculty of Arts and Islamic Studies, BUK	Member
22.	<b>Dr. Usaini Ganduje</b> Permanent Secretary, Ministry of Water Resources, Kano State	Member
23.	<b>Alhaji Baballe Ammani</b> DG, Kano State Bureau of Statistics	Member
24.	<b>Prof. Anselm Onyimonyi</b> Department of Animal Science, University of Nigeria, Nsukka	Member
25.	<b>Prof. Eugene Nwachukwu</b> Depertment of Animal Breeding and Physiology Michael Okpara University of Agriculture, Umudike	Member
26	<b>H. E. Isa Yuguda</b> Former Governor, Bauchi State	Member
27	<b>Baba Othman Ngelzarma</b> National President, Miyetti Allah Cattle Breeders Association of Nigeria (MACBAN)	Member
28	<b>Prof. Olorunfemi Jegede</b> Dean, Faculty of Veterinary Medicine , University of Abuja	Member
29	<b>Prof. Edet Joshua Udooh</b> Department of Agricultural Economics and Extension University of Uyo	Member
30.	<b>Malam Muhammad Garba</b> Commissioner of Information Kano State	Member/Secretary



■ Members of Conference Organizing Committee in a group photograph with His Excellency, Dr Abdullahi Ganduje at the end of the Conference at the NAF Centre

#### Secretariat:

1. **Inuwa Idris Yakassai**  
Director of Information  
Ministry of Information, Kano
2. **Yahaya Umar**  
Director Archives & Publication  
Council Affairs Directorate  
Office of the SSG, Kano
3. **Naziru Tanko Kyaure**  
Director Admin & Gen. Services  
Kano State Bureau of Statistics



# SECTION SIX

## WAY FORWARD AND CONCLUSIONS

### 6.1 Proposed implementation Module and Quick-wins for Livestock Reforms and Mitigation of Conflicts in Nigeria

S/NO	Solution	Time frame	Responsibility	Remark
Sub-theme 1: Productivity and Business of Value Chain Development for Livelihood Restoration in Farmers/Herders Conflicts Mitigation in Nigeria				
1	Establishment of ranches, investment in breeds improvement, pastures and feedlots establishment and management	Immediate	Federal and State governments, private investors, livestock extension department	Continuous
2	Mechanisms for increased and viable private sector investments in the agricultural and pastoral production industry with framework for strengthening backwards integration in the livestock value chains	Immediate	Federal and State government, private investors, livestock extension department	Continuous
3	Support for agricultural and pastoralists organizations, cooperative societies and relevant producer associations and professional bodies	Short term	Federal and State government, international funding agencies, non-governmental organizations, livestock extension department	Continuous
Sub-theme 2: Funding, infrastructure and Institutional Capacity Development for Effective Delivery of Functional Extension and Veterinary Services				
4	Invest in infrastructure to deliver essential services in education, health care,	Long term	Federal and State governments, private investors, international	Continuous

	veterinary services, extension service delivery, access to information and training to provide the needed skills and capacity for transforming traditional livestock production systems		funding agencies, livestock extension department	
5	Review the National Livestock Transformation Plan (NLTP) and other similar programmes with clear funding framework and mechanisms to ensure effective implementation	Immediate	Federal and State governments	
6	Prospecting for funding and support to the government of Nigeria in mitigating the impact of climate change, addressing technology gaps, addressing poverty and skills gap and improving people's livelihoods	Long term	Federal and State governments, private investors in collaboration with UN Agencies, Bilateral institutions, regional organizations (AU and ECOWAS), national and international CSOs.	Continuous
7	Need to revisit and review sub-national, national and regional laws, legislations and policies so as to make applicable reforms for improving Livestock production and addressing conflicts	Immediate	Federal and State governments, ECOWAS, AU, and relevant organisations with such mandate	
8	Deliberative support to the Livestock sub sector of the economy through robust funding and Local content policy	Immediate	Federal Government and NASS and CBN and other special intervention agencies	Taxes on imported milk and demand for 20-30% local content
Sub-theme 3: Governance, Policy Reforms and Enforcement of National and Regional Provisions (Laws and/or Legislations) with Strategic Frameworks for Coordination of Cross -border and Internal Migration of Pastoralists				
9	Strengthening the role of traditional rulers and community leaders in managing the affairs of farmers and herders including the sustenance of inter-communal	Immediate	Federal and State governments	Continuous

	relations for effective management of disputes and conflicts			
10	Establish the Ministry of Livestock Resources in line with practice in many other West African countries	Immediate	Federal and State governments	To provide regional leadership and quality representation as in other countries
11	Need for security and judicial architectural reforms to ensure the curtailing of farmer-herder conflicts, cattle rusting, illegal arms trade, importation and proliferation in the country	Short term	Federal and State governments	Continuous
12	Need to refrain from politicizing the issue of farmer-herder conflicts and other associated issues while pursuing inclusive processes that will strengthen unity and cooperation in the country	Immediate	Federal and State governments, media organisations, national and sub-national levels, National Orientation Agency and National Broadcasting Commission (NBC)	Continuous engagement of stakeholders in both traditional and conventional media with local content and decorum
Sub-theme 4: Engendering Prosperity, Wellbeing and Peaceful Inter -Communal Coexistence among Farmers, Pastoralists, Youth and Women				
13	Adoption of proactive early warning and early response mechanisms	Immediate	NEMA, SEMA, LEMA, CBOs	Continuous
14	Adoption of alternative dispute resolution and training of community leaders and other community gatekeepers on techniques of mediation	Immediate	Federal and State government, CSOs	Continuous
15	Need to strengthen and improve the security architecture for the prevention of violent crimes including cattle rustling, raiding of villages, kidnapping of persons for ransom and trade in illicit arms and drugs	Immediate	Federal and State government through the Nigerian Police and local vigilante groups	Continuous

16	Need to strengthen the process of litigation for more effective dispensation of justice and handling of the various litigations relating to violent crimes and other perpetrators of violent conflicts	Long term	Federal and State government through NJC, NBA.	Continuous
Sub-theme 5: Citizens Engagement, Media Support and Inter-Cultural Communication as Panacea for Farmers/Herders Conflicts Mitigation in Nigeria				
17	Creation of awareness at all levels that will promote inclusive communities, strengthen harmonious relations to encourage government and private sector investments for cohesive societies and improved productivity	Immediate	National Orientation Agency and ministries of information at state and federal levels,	Continuous engagement with stakeholders across media, culture and society with media organisations across the country as part of their CSR and professional responsibility
18	Avoidance of profiling and reportage that malign socio-economic and ethnic groups	Immediate	NUJ, NBC and media organizations	Continuous
Sub-theme 6: Strengthening Adoption of Climate Smart Farming and Livestock Production Practices to mitigate impact of Climate Change				
19	Need to deploy innovative and adaptable technologies grounded in scientific and indigenous people's knowledge, jointly designed and implemented with strong producers' participation	Long term	Federal and state government through their livestock extension departments	Continuous
20	Need to adopt Climate Smart Agricultural (CSA) practices, including the adoption of integrated approach to managing landscapes of croplands, rangelands, forests and fisheries that address the interlinks between the quest for food security and mitigation of the challenges of climate change	Immediate	Federal and state government through their livestock extension departments	Continuous

# APPENDICES

# **Annex I:**

## **The Conference Programme**

The activities for the Conference include:

- Registration of Guests
- All Guests Seated (Participants, Dignitaries, Governors and President FRN)
- National Anthem
- Introduction and recognitions
- Welcome address by the Secretary to the State Government, Kano State, Alhaji Usman Alhaji
- Opening remarks by Professor Attahiru Jega, OFR, Chairman Conference Committee
- Address by the Chairaman of the Occasion, Dr Mansur Mukhtar, Vice President, Islamic Development Bank (IsDB)
- Keynote Address by Professor E. A. Iyayi, Registrar/CEO, NIAS
- Goodwill Messages
- Address by His Excellency, Dr Abdullahi Umar Ganduje, OFR, The Executive Governor of Kano State
- Group Photograph and Tea Break
- Plenary Sessions

### **Theme:**

### **Livestock Reforms and Mitigation of Associated Conflicts**

Sub-themes:

1. Productivity and Business of Value Chain Development for Livelihood Restoration in Farmers/Herders Conflicts Mitigation in Nigeria
2. Funding, infrastructure and Institutional Capacity Development for Effective Delivery of Functional Extension and Veterinary Services
3. Governance, Policy Reforms and Enforcement of National and Regional Provisions (Laws and/or Legislations) with Strategic Frameworks for Coordination of Cross-border and Internal Migration of Pastoralists
4. Engendering Prosperity, Well-being and Peaceful Inter-Communal Co-existence among Farmers, Pastoralists, Youth and Women
5. Citizens Engagement, Media Support and Inter-Cultural Communication as Panacea for Farmers/Herders Conflicts Mitigation in Nigeria
6. Strengthening Adoption of Climate Smart Farming and Livestock Production Practices to Mitigate Impact of Climate Change

## **CHAIRMEN OF SESSIONS, LEAD SPEAKERS AND PANELISTS**

### **Session 1:**

- Chairman: HRH; Alhaji (Dr) Muhammadu Sambo Haruna, Emir of Wase  
Lead Speaker: Prof. Sulaiman Elias Bogoro.  
Panelists:  
1. Dr. Andrew Kwasari  
2. Alhaji Usman Alhaji (SSG Kano State)  
3. Alhaji Ibrahim Ahmad Matane (SSG Niger State)  
4. Prof. Chukwuemeka Jaja Nwanegbo

### **Session 2:**

- Chairman: Architect Kabiru Ibrahim  
Lead Speaker: Dr Junaidu Maina  
Panelists:  
1. Prof. Luqman Akinbile  
2. Prof Eze Chinedu Athanasius  
3. Alhaji M. D. Abubakar  
4. Prof. Shola Olorunisomo  
5. Prof. Dauda Bitrus Bawa

### **Session 3:**

- Chairman: Mohammed Ndaranai Mohammed, SAN (Hukunci Nupe)  
Lead Speaker: Prof. Isaac Albert.  
Panelists:  
1. Prof. Saka Nuru  
2. Prof. Oka Martin Obono  
3. Prof. E. Ikani  
4. Prof. Moses T. Aluaigba  
5. Dr. Murtala Ahmed Rufai

### **Session 4**

- Chairman: His Royal Highness, the Emir of Kazaure, HRH; Dr Najib Hussaini Adamu  
Lead Speaker: Prof. Tukur Baba.  
Panelists:  
1. Prof. Adeyinka Abideen Aderinto  
2. Dr Sale Momale  
3. Aminu Murtala Nyako  
4. Prof. Stella O. Odebode  
5. Mr Rotimi Williams

### **Session 5:**

- Chairman: Mr Kingsley Osadolor  
Lead Speaker: Prof. Andrew Haruna.  
Panelists:  
1. Prof. Okey Okechukwu  
2. Dr. Martins Oloja  
3. Dr. Danladi Bako (Koguna Sokoto)  
4. Mr. Sina Kawonise  
5. CP Fatai Owoseni (Rtd.)

**Session 6:**

Chairman: Prof. Garba Hamidu Sharubutu,  
Lead Paper: Prof. Demo Kalla.  
Panelists:  
1. Dr R. J. Tanko  
2. Prof. Abba Babagana Gambo  
3. Prof. I. R. Muhammad  
4. Prof. Daniel Gwary  
5. Prof. Olutokunbo. B. Oyesola

Other participants include top traditional rulers the Sultan of Sokoto; Alhaji Sa'ad Abubakar, the Emir of Kano; Alhaji Aminu Ado Bayero, Emir of Wase; HRH; Alhaji (Dr) Muhammad Sambo Haruna, the Emir of Kazaure, HRH; (Dr) Najib Hussaini Adamu.

# **Annex II:**

## **Blueprint Outline**

### **Blueprint for Promoting Sustainable Livestock Reforms And Mitigation Associated Conflicts In Nigeria**

1. **Background**
  - i. Contribution of Livestock to Nigeria's economy, food security, job creation etc
  - ii. Review of past interventions with lessons learnt.
2. **Introduction and Rationale**
  - i. Identify major factors hindering rapid transformation of Nigeria's Livestock Production System
3. **Goal and Objectives of the Blueprint,**
  - a) Models of Livestock reforms that are desirable and sustainable,
    - i. *Investment opportunities along Livestock Value Chain*
    - ii. *Small, medium and large commercial enterprises*
  - b) Reforming Traditional Livestock Production System
    - i. *Systematic transformation from transhumance to extensive system*
    - ii. *Private sector investment in Ranching (Cluster Ownership),*
  - c) Measures to Enhance and Sustain Peaceful Co-existence.
    - i. Institutionalize community and traditional natural resources management committees
    - ii. Institutionalize conflict mitigation and resolution committees
    - iii. State laws to empower traditional rulers to chair and resolve conflict
  - d) The Policy and Governance Frameworks of the Nigerian Federation.
    - i. Creation of Federal Ministry of Livestock
    - i. Deliberative robust funding and Local content policy
4. **Strategies for Achieving the Objectives:**
  - I. Characterizing Livestock Production Systems
    - i. Traditional producers
    - ii. Commercial beef and dairy farms
    - iii. Entrepreneurs investing in ranching
    - iv. Commercial forage producers
    - v. Compounded feed manufacturers
    - vi. Animal Healthcare Service Providers
    - vii. Other inputs service providers
  - II. Improving Production and Productivity
    - i. Breed Improvement
    - ii. Forage, fodder, feed production
    - iii. Capacity building on improved husbandry of traditional producers

- iv. Access to land
  - v. Access to Financial Services
  - vi. Access to extension and technology support
- III. Conflict Mitigation and Resolution
- i. Identification and Biometric Census of Primary Livestock Producers.
  - ii. Support to victims of cattle rustling and banditry to rebuild their herds.
  - iii. Clear roles of Traditional Rulers and Community Leaders
  - iv. Management and Administration of Transhumance
- IV. Review of Laws and regional Conventions
- i. ECOWAS Protocol on Transhumance
  - ii. Land use Act
  - iii. Grazing Reserves Law
  - iv. Anti-open Grazing Laws (*implementation and implications*)
  - v. Strengthening Federal and State Institutions
- V. i. Creation of Federal and States Ministries of Livestock Resources  
ii. Expansion of Livestock Research Institutes  
ii. Security Architecture in Relation to Livestock Production
5. **Implementation Plan**
- 5.1 Outcomes, Outputs and Activities,
  - 5.2 Baselines, Targets, Time frame etc,
6. **Responsibilities of Stakeholders,**
- i. Roles of the Federal, State and LGAs in the Concurrent Constitutional Responsibilities of Agriculture
  - ii. Roles and Responsibilities of the Pastoralists and Farmer Organizations Traditional Livestock Producers
7. **Funding and Resource Mobilization**
- i. Roles of the Federal, State and LGAs Financial Institutions
  - ii. Roles of Private Sector Financial Service Providers
  - iii. Roles of Development Partners and Financial Institutions

## **Annex III:**

### **Photos of National Success Stories of Private Sector Driven Ranches and Rangeland/Pasture Development Initiatives**

















# **Annex IV:**

## **Transcript of Opening Ceremony**

### **Cyril Stober**

The Executive Governor of Kano State, Dr. Abdullahi Umar Ganduje, OFR. The Deputy Governor of Kano State, Dr. Nasiru Yusuf Gawuna, the Chairman of today's occasion, Dr. Mansur Mukhtar, Vice-President, Islamic Development Bank, Secretaries to State Governments who are here present, the Chairman of the Conference Committee, Prof. Attahiru Jega, Representatives of MDAs, Representatives of Service Chiefs, the Inspector General of Police, our Royal Fathers who are here present, Resource Persons, Participants, Distinguished Guests Ladies and Gentlemen.

This is the national conference on livestock reforms and mitigation of associated conflicts taking place here in Abuja, Nigeria's capital city. We would try as much as possible to shorten the list of what has come to be known as protocol list. This is for reason that this Conference is expected dwell on very serious matters and therefore, the participants, resources persons drawn from diverse backgrounds and very distinguished background and very important personalities that if we spend time mentioning everyone, then we would have taken almost half of the time allotted to this Conference. Rest assured that those who had key role to perform in today's conference would be recognized appropriately as they step up to perform the function that has been allotted to them. My name is Cyril Stober and I have a very simple task of guiding you through the programme of event of this Conference. And at this point in time, may I request that the Secretary to the Kano State Government, Alhaji Usman Alhaji steps up here to formally welcome you all to this Conference and put the theme of it into proper perspective

### **Secretary To Kano State Government**

In the name of Allah, Most Gracious. Most Merciful. Your Excellency, the Executive Governor of Kano State, I stand here on your behalf and on behalf of the government and the people of Kano State to sincerely and from our hearts, welcome each and everyone that has honoured the invitation to this very unique, probably first time type of Conference that Kano State Government under the leadership of His Excellency, Abdullahi Umar Ganduje, has organised. Those who have come from far and near, I welcome you sincerely.

Your Excellency, let me quickly begin by mentioning and appreciating those friends of Kano State Government, the stakeholders that are here for this unique conference. Distinguished invited guests, accept our welcome and our appreciation for responding to this invitation.

Let me quickly thank and appreciate the Conference Committee for organising this very important conference and for all the hours and time put into the preparation. But allow me to single out the Chairman, Prof. Attahiru Jega, we thank you; we appreciate you for supporting Kano and all its noble cause. And I know our Chairman of the occasion is fully aware of the influence he has on so many Nigerians and he has inspired so many of us. Thank and you are most welcome, sir.

The Chairman of this occasion is the son of soil and a respected economist who has reached high on the ladder and I am sure he has made a great sacrifice to come to this very important occasion. Thank you, sir. We appreciate your support all the time.

Let turn to the lead presenters of papers as well as discussants; we thank you for accepting our invitation and we welcome you. I know today, from the list that I have seen, there will be a heavy rain of professorial knowledge in this hall. Thank you for accepting our invitation.

Our traditional fathers, I single out my Emir, the Emir of Kano, who is also the Chairman of Council of Emirs in Kano. Thank you, sir. Allah ya kara wa sarki lafiya. Muna godiya, our Deputy Governor, in sha Allah, our governor tomorrow, Dr. Yusuf Nasiru Gawuna, you are welcome because all the successes of this government you are a part of it. And I am sure there would be sustainability and continuity in this great effort that His Excellency, the Governor has made. I welcome all the Representatives of your Excellencies, members of the national assembly, I thank you for supporting Kano State Government and its people.

I want to specifically say that since His Excellency, the Governor, Dr. Abdullahi Umar Ganduje, is the Chief host, and I am making this welcome remark on his behalf, I am not welcoming him; I am appreciating him. Your Excellency, you have done so much to Kano State in the last 8 years. The 5 minutes given to me to make this remark of course will not be sufficient to appreciate you for all the things you have done. All I can say, your Excellency, is that, at a forum of discussion when I went down the list of all the things you have done in Kano State on various sectors of human endeavour, somebody said, well you are the SSG, you are a long-term associate of His Excellency, so we are not surprised. Then I said, you have a doubt with what I said contradictory, tell me that in the educational sector, His excellency has not declared free and compulsory education, comprehensive which include even people with sufficient needs. Say that, if you can. The facts are facts. Tell me as I said about the health sector, that we have now built the most comprehensive cancer treatment centre in this country.

And in our infrastructural development, if you are not a Kano man, you will be lost in Kano after 2 to 3 years of Ganduje's administration because so much have taken place in that sector. I went on and on and then I ended with security, I said tell me if Kano people do not sleep with their two eyes closed. Alhamdulillahi, one of the most populated States; it is center for commerce, people come in day in day out even from our neighbouring countries and that is a recipe of course for insecurity. But we thank God for the steps taken, deployment of technology in all our major cities, major streets, the involvement of our fathers, the traditional rulers, ulamas, the involvement of the public in general to ensure that security thrives in Kano.

It is also a fact that one can simply summarise that his Excellency, the Executive Governor of Kano State has created and established other achievements that are not visible by the eye – laws that control private schools, private hospitals, contributory healthcare scheme and a lot of laws that have made the life of Kano people much richer, much safer. When I am trying to run down the achievements of this government, and I realise the little with short time that I have, I normally summarise it as follows:

That the Excellency, the Governor has definitely laid the foundation for modern Kano. And definitely, history will be kind to him because he has achieved what no other regime in 8 years has achieved in Kano State since its creation. People who are too important and I have not mentioned their names; please understand the time but you are in our heart.

Ladies and Gentlemen, I welcome you all. We thank you; we appreciate you. And may God bless. Assalam Aalikum wa Rahmatullahi wa BARAKATUHU.

*Cyril Stober: Thank you very much, Albaji Usman Albaji, Secretary to the State Government, Kano State. Your Excellencies, Distinguished Ladies and Gentlemen, our Royal Fathers, let me at this point invite Chairman of the Conference Committee, Prof. Attahiru Jega, (OFR) to make his remarks.*

## **Professor Attahiru Jega**

His Excellency, the Governor of Kano State, His Excellency, the Deputy Governor of Kano State, the Distinguished Chairman of today's occasion, our distinguished traditional rulers here present, distinguished invited guests, keynote speaker, Lead Speakers, participants, Ladies and Gentlemen. Salam Alaikum Wa Rahmatullahi wa Barakatuhu. Peace be upon you and good morning to you all.

On behalf of the members of the Organizing Committee of this Conference, I join in welcoming all our distinguished invited guests and participants to this National Conference with the theme: Sustainable Livestock Reforms and Mitigation of Associated Conflicts in Nigeria. It pleases us immensely that, by the grace of God Almighty, the tireless effort to organize this Conference has been crowned by your acceptance and presence here today.

The Conference is designed as an all-inclusive process to generate ideas that would contribute to addressing an acute national problem. That is, the relative underdevelopment of the Nigerian livestock sector and the perpetual crises and conflicts associated with it.

As Nigeria searches for sustainable ways and means of diversifying its economy, becoming self-sufficient in food production as well as a major competitive exporter of Agro-allied and other products in the global economy and also becoming a stable, more cohesive developing democracy, a national strategic focus on the livestock sector and its perennial challenges is indeed imperative and has assumed significance.

Pertinent questions requiring cogent and realistic answers include what model or models of reforms are desirable and sustainable? How can the traditional livestock production and development sector be suitably reformed, with remarkable and sustainable value-addition to Nigeria's economic growth and enhanced peaceful co-existence amongst diverse Nigerian communities? Finding answers to these questions and situating them appropriately within the policy and governance frameworks of the Nigerian Federation, requires putting all hands on deck by the best of the best of our resource persons, theorists and practitioners alike. Furthermore, it requires a non-partisan or more appropriately, a multi-partisan inclusive approach. That is what we have tried to do in organizing this Conference.

We believe that the outcome would be deliberations with viable recommendations which can be taken further to develop a Blueprint for implement programmes and projects for sustainable Livestock Reforms and Mitigating Associated Conflicts in our country.

Distinguished Guests, Ladies and Gentlemen gathered here, the best of the best are our resources persons drawn, not only from the agricultural, veterinary medicine but also social sciences who represent practitioners in the livestock industry as well as associations of farmers and the herders. Of course, also other Civil Society Organisations that have been grappling with crisis in the livestock sector as well as the conflict in many areas of our society. So, we have no doubt in the course of the next two days, we would be able to have a thorough deliberations that can generate ideas that can go along way in helping us to draft a Blueprint which would be most useful not for the federal government but also for state governments and indeed, all stakeholders in the need to develop and improve this sector, as well as address and mitigate the perennial challenges which bedevil the sector.

We thank His Excellency, the Governor and the Government of Kano State for giving us the opportunity to organize this Conference and for providing the necessary support towards the success of the planned programme of activities.

We also thank all the distinguished invited guest for positively responding to our invitation. We especially, appreciate the keynote speaker, as well as all the Lead Paper presenters and Discussant and indeed all participants for accepting our invitation and sparing time to be with us here today and tomorrow. We look forward to fruitful deliberations in the course of the two-day Conference.

Thank you very much.

## **Chairman of the Occasion**

His Excellency, the Executive Governor of Kano State, Dr. Umar Abdullahi Ganduje, His Excellency, the Deputy Governor, His Royal Highness, Emir of Kano, Distinguished Conference Participants, ECOWAS delegates and representatives of the media, academia, industry, and government as well as members of different farmers' and herders' associations. My brothers and sisters from different parts of Nigeria, all other protocols duly observed.

Let me begin by saying that it is such a great honour to be appointed by His Excellency, Gov. Abdullahi Ganduje as Chairman of this important national conference on '**Livestock Reforms and Mitigation of Associated Conflicts in Nigeria**'. I am humbled by the opportunity to deliver the opening remarks and share my perspectives on the subject and set the context for what promises to be fruitful deliberations on this topical issue of national importance.

Conflicts between farmers and herders/pastoralists have been an issue of national concern in recent years. Perhaps the most significant issue of concern is the growing number of casualties associated with it. Between 2016 and now, at least 4000 people lost their lives in these conflict with several thousand others sustaining injuries, both physical and emotional. While fatalities were initially confined to the North Central, they have since spread across the country increasing pre-existing religious and ethnic tensions.

In addition to the unfortunate loss of lives, this conflict manifested by an increasing number of internally displaced persons, leading to the breakdown of family units, the bedrock of our society and disruption in education especially for young girls. This crisis has also undermined agricultural production compromising our nation's food security especially during these periods of rising food prices.

Northern parts of Nigeria have been the epicenter of this conflict, although this is spreading to other regions. In the context, given the relatively poor performance of the region, in terms of education, health and other human development indicators, this situation is untenable and threatens the future of our young, growing, and promising population.

Equally important is the security challenges caused by the conflict. With the passage of every single day that this crisis goes unresolved, our already fragile national security is further threatened. We cannot continue like this.

Therefore, the decision by His Excellency, Gov. Ganduje to lead the national conversation on this issue is highly commendable and we should appreciate him. We should also be grateful for the distinguished 27-man Committee that he assembled comprising leaders from academia, media, industry, and government. I would like to especially thank Prof Attahiru Jega, former INEC Chairman and former VC of the Bayero University, who was appointed by His Excellency to chair this Committee. I am delighted to note that Professor Jega and his team have worked tirelessly to set forth a robust agenda to bring this Conference to life. I sincerely appreciate the dedication of the members of this high-profile Committee, all of whom have taken time off their busy schedules to address this critical issue.

The agenda they have articulated for today's conversations charges us to reflect profoundly on how to improve productivity in Nigeria's livestock sector. We are also being tasked with thinking through ways to mitigate conflict and promoting harmonious living in the affected regions, keeping in mind that socio-economic development is incredibly difficult to achieve without long-lasting peace and security.

This Conference is very crucial in re-shaping the dialogue on the subject. National discourse on this issue has, in the last several years, been characterized by a divisive ethno-religious narrative which has done very little to resolve it. Instead, it has excessively politicized the issue, clouding it with sentiments that have prevented meaningful and constructive dialogue. The harmful rhetorics emanating there from have been further amplified by the deliberate peddling of fake news, as well as co-ordinated misinformation and disinformation campaigns. I hope that today's Conference provides a model of a more constructive approach to this subject, and that our conversations will take us a step closer to helping our people, farmers and herders alike, as well as other citizens, lead safer to more productive, and prosperous lives.

Moreover, this Conference is perfectly timed as our nation prepares for elections in a matter of days. It is my ardent hope that winners of these elections would draw on the deliberations from this event to inform policies, strategies and programs towards livestock production. The Buhari administration has done well by developing the National Livestock Transformation Plan (NLTP). However, a significant amount of work is needed to achieve its ambitious goals.

Once again, I want to thank Gov Abdullahi Ganduje for creating this avenue for robust conversations. I hope that everyone present shall utilise this vital platform to engage in thoughtful conversations and leave with an improved understanding of how to address these issues.

Finally, legal and legislative inconsistencies including the tensions between the 1964 Grazing Reserves Act and the 1978 land Use Act have made the governance of land in the region and across the country more difficult.

## The Potential For Ranching

This Conference has proposed ranching and other sedentary livestock production as potential solutions to these problems. Indeed, the idea of ranching appears to be gathering support and gradual momentum from key stakeholders, including the federal government, the UN Food and Agricultural Organisation (FAO) and the Miyetti Allah Cattle Breeders Association of Nigeria (MACBAC) which had initially been reticent about ranching.

The Buhari administration's Agriculture Promotion Policy (APP) 2016 -2020 as well as the National Livestock Transformation Plan (NLTP), approved in 2019, proposed ranching as one of the solutions to the problem.

The NLTP proposed the 'development of market-driven ranches in 7 pilot States (Adamawa, Benue, Kaduna, Nasarawa, Plateau, Taraba and Zamfara) for improved livestock productivity through breed (genetic) improvement and pasture production'.

It is envisaged that these ranches will operate as an integrated business and will involve many aspects, including (i) the development of commercial crop production to support livestock through the supply of fodder; (ii) the formation of producers into clusters to create viable ranch herd sizes and; (iii) the creation of co-operatives to facilitate increased access to inputs, infrastructure, finance, markets and support services.

The government hopes that by the end of 2028, there will be at least 119 ranches operating in all participating States. This is a very ambitious plan that, if well implemented, could lead to a radical transformation of the livestock value chain and will go a long way at reducing the tension between farmers and herders.

Unfortunately, more than three years into its launch, a single ranch is yet to be built. Limited public engagement and buy-in have undermined the legitimacy of the plan while funding constraints and lack of ranch development expertise have hampered its progress.

## The Way Forward

Ranching, which is very important, is insufficient to effectively address the fundamental drivers of the farmer-herder crises not only because of the challenges identified above but also because of the complexity of the crises which calls for a multi-stakeholder intervention. As we deliberate today, I hope we critically consider the following issues.

First, the abysmal performance of the National Livestock Transformation Plan (NLTP) shows that we need far greater political will than has been demonstrated thus far. The NLTP appears to have great potential, but it requires community buy-in and the full cooperation of all levels of government. Moreover, the modernization of the livestock sector cannot be left to government alone given the need for financing and capacity building. We require support from private investors, the international donor communities and Development Finance

Institutions (DFIs). The Islamic Development Bank, where I work, recently provided financing the Kano State Agro-Pastoral Development Project (KSADP) which includes the establishment of a 3000Ha Grazing Reserve. There is certainly space for other Development Finance Institutions to render support.

Second, we cannot talk about mitigating conflicts without reforming our security and justice architecture. There are far too many incidences of the Police failing to prevent attacks or protect people even when they had credible intelligence. Also, there is a widespread belief that perpetrators are hardly punished and this has undermined public trust in the police.

There is, therefore, an urgent need to train our security forces on modern policing practices that may be more effective in addressing these issues. State governments should show more initiative in this area. For example, the Police Anti-Cattle Rustling Squad in Kano State launched by His Excellency, Gov, Abdullahi Umar Ganduje has helped to curtail the activities of cattle rustlers. This is an initiative worth emulating by other governors.

Thirdly, multilateral agencies like the ECOWAS need to play a more active role in addressing the security situation as there is an increasing evidence of the role of migrant herders in the proliferation of arms. The thriving and lucrative illicit arms trade in West Africa poses serious challenges to the implementation of the Transhumance protocol as it can provide an opportunity to transport arms across borders.

Fourth, states and federal governments need to take the issue of climate change more seriously. We need strategies to mitigate the impact of climate change and to manage environmentally-induced migration. Even though, we have a national policy on climate change, adopted in 2012, very little progress appears to have been made on its implementation. This must change.

Finally, distinguished conference participants, we need to continue to dialogue, not only at this level but also at the community level. It is very critical that we enhance engagement at the local community level, involving primary stakeholders, and led by traditional community leaders, to continuously and consistently engage, interact, build trust and establish more amicable ways to resolve disputes.

I hope that the few issues highlighted here would stimulate our discussion. I encourage participants to share their rich perspectives, insights, knowledge and experience in a candid and constructive manner during these few days of the Conference.

Thank you.

## GOODWILL MESSAGES

**CYRIL STOBER:** May I handover to Professor Mohammed Kuta Yahaya who will conduct the goodwill messages and keep his eyes on timing as well.

**PROFESSOR KUTA YAHAYA:** Distinguished participants, may I seek for your indulgence to allow us call for the goodwill messages in two minutes each so that we can set for the task because whatever you want to say, some of the speakers have already said it but goodwill is goodwill. So, let me have the honour to invite Senator Jibril, on behalf of the Senate President, to give the goodwill message.

**SENATOR BARAU JIBRIN:**

Your Excellency, the Governor of Kano State, Dr. Umar Abdullahi Gnaduje, the Deputy Governor, Dr. Nasiru Gawuna, His Eminence, the Sultan of Sokoto, Muhammad Sa'ad Abubakar III, His Royal Highness, the Emir of Kano Alhaji Aminu Ado Bayaro, His Royal Highness, the Emir of Wase, Chairman of this Conference, Prof. Attahiru Jega, please permit me to stand on the existing protocol.

Senate President wanted to be here personally but he was engaged in a very pressing national assignment. But he had asked me to tell you that he stands shoulder to shoulder with you on the intentions of this Conference, that he shares the same clue and that he commends the organisers. And that whatever is resolved here at the end of this Conference that needs legislation, the National Assembly and indeed, the Senate would not hesitate to begin the process of bringing laws, if such is needed or amending the existing laws because if you talk about reforms, it comes with the amendment of the existing laws or creation of new law. He told me to tell you that he stands with you and that he wishes you well in deliberations throughout this conference. Thank you very much.

**PROF KUTA YAHAYA:** On this note, let me invite, on behalf of the Nigeria Governors Forum who have sent a goodwill message, Professor Abba Gambo, the Adviser to the Nigeria Governors Forum on Agriculture. And shortly after that, we would like to invite the President of the Common Wealth Association who aborted a trip to the US to attend this Conference.

**PROF ABBA GAMBO:**

Thank you very much Prof Kuta, my lecturer at the University of Ibadan. Your Excellency, the Executive Governor of Kano State, our own very dear member of the Nigeria Governors Forum, Your Eminence, the Sultan of Sokoto, Your Royal Highness, the Emir of Kano and Your Royal Highness, the Emir of Wase, Representative of the Senate President, other Distinguished Guests, most especially the Chairman of the Occasion, Wazirin Gaya, Dr. Mansur and my former Chairman, Professor Attahiru Jega. All other protocol duly and respectfully observed.

The Nigeria Governors Forum is an association of the 36 State governors, all standing on equal footing. It was founded in 1999; the Nigeria Governors Forum is the technical and administrative arm of the Nigeria Governors Forum headed by Director General and 2 Executive Directors. The NGF is a policy and resource centre that provides reliable and current information, policy formulation, implementation and...we at the NGF have 36 principles and I think we are the only one that have 36 principles, all of them with equal footing.

Over the years, the Nigeria Governors Forum has deepened policy conception; it has also ensured timely, reliable, release of accurate data and research materials and it has also built capacity across the various states. The Nigeria Governors Forum is like the bridge between the Federal and the sub-nationals. So, we now deal with all the issues that are coming from the federal and taken down to the national. We go to the sub-nationals and build them up to federal.

His Excellency, Dr. Abdullahi Umar Ganduje is one of the most vibrant members of the Nigeria Governors Forum. Governor Kano, as he is well known at the Nigeria Governors Forum, Dr. Ganduje has brought vibrancy, experience, proactiveness, and pragmatism to the Nigeria Governors Forum over the years. Governor Ganduje has also earned the respectability of his thirty-five other colleagues. Whenever the governors are meeting, he is a man of very few words but once he talks, they listen and once he says something, he hits the nail on the head instantly. So, at this juncture, I want to thank him formally. We have discussed all these issues of climate change, farmers/herders crisis among others in the Nigeria Governors Forum. But as the Special Adviser, he has done the best thing for me today by taking the bull by the horn for establishing and making this policy a reality.

And may I also, say that he has some hairs of respectability to particularly, not just to his fellow governors, but even the Secretariat Staff. Governor Ganduje will call me and ask for a particular thing on how a particular thing had happened. And I will tell him and that is how we have been making progress as far as the Agricultural sector is concerned. And at this juncture, I want to call on Northern Governors Forum to please copy good examples of this man, His Excellency, the Executive Governor of Niger State.

May I briefly, Your Eminence, the Sultan of Sokoto, I want to thank you for the adaptability as a son. I went to the Usmanu Danfodio University, Sokoto, for my Doctorate degree...and I was accepted wholeheartedly into the Sultanate Council.

Your Eminence, I must say that as a first class military Officer, you brought charm to the traditional system. You will see him today in Rivers; you will see him tomorrow in Abia; you will see him tomorrow in Kaduna, talking about peaceful co-existence etc.

Finally, the crisis we are all talking about, hopefully, we are talking about climatic change, farmers/herders crisis, we have to go back to the basis, let the traditional rulers handle it the way they handled it several years ago. They know the farmers; they know the herdsmen; they know the grazing reserve; they know all routes; they know them. So, let the traditional rulers be given a more robust and active role in the affairs of this country and definitely, things would change for better. Thank you very much for your attention.

## **THE PRESIDENT OF THE COMMONWEALTH ASSOCIATION**

Let me stand on the already established protocol because of time constraint. We are very happy for this laudable programme which the Kano State Government is championing in terms of transformation of livestock in a sustainable way.

Let me say that the Commonwealth Association is an association of commonwealth countries. The English-speaking countries in the world is particularly happy about this because it is a programme that we believe if well done and if well implemented, will resolve the conflict that we have in the country for over a decade. But talking from the veterinary perspective, we want to say that there is nothing we can do without actually making sure that the health value chain of livestock is given a prominent role. And there are so many things that are very key to this. I want to talk about the production health which is very important. So, I want us to look at the production health; I want us to look at the governing process that does not take cognizance of the tariffs and taxes. Let me just give you just two examples. Right now, NAFDAC is asking some Veterinary industries to pay \$11, 000 before they can register or re-register. It is going down to the man on the street. Every tax charge, it is the man on street that is going to pay for it. So, when we are having our discussions at the plenary sessions, we should also talk about these issues that are not just about security or insecurity. But

we also have to talk about these issues that are militating against effective implementation of livestock production. Thank you very much for listening.

### **DR GODWIN ATSER**

Good afternoon, Your Excellencies. Distinguished Ladies and Gentlemen. Permit me to thank my lecturer, Prof. Yahaya Kuta from the University of Ibadan. On behalf of Sasakawa , I would like to thank the Kano State Government for putting this Conference together. The issues around conflict are well known to us. Of course, we know that climate change is actually driving and exacerbating the conflict. As it has been said earlier, we need a political will to actually address the issues that are confronting us. But of course, we need Science and Technology to also tackle these problems.

Once again, I would like to thank His Excellency, the Governor of Kano State who has taken the bull by the horn. He has gone into investment with loan from Islamic Development Bank and today, we have the Kano State Agro-Pastoral Development Project; we are implementing that as a means of bringing harmony, increasing productivity of Farmers so that they don't only expand but also have enough. They realized more yield on the unit of land that they grow the crops. And also bring the livestock component on board so that their activities would also increase productivity of the cattle that they rear; while the cattle would do better. These are the things that we are doing on ground in Kano State and we can see the benefit is tickling down. We urge other States to also emulate what is happening in Kano State today. Today, Kano is one of the most peaceful States in Northern Nigeria. Thank you so much, your Excellency for being so proactive. We are not just talking but also leading by example by taking initiatives, implementing things on ground that will bring about peace.

Distinguished Ladies and Gentlemen, I have been given one minute to give a goodwill message. But I invite most of us seated here who have not been to Kano to come to Kano State and see how we are bringing about agricultural revolution. Thanks to the KSG project and thanks to the Islamic Development Bank who provided the funds for project to bring transformation in Kano. I think Nigeria can learn from what is happening in Kano. Thank you.

### **MINISTER OF STATE FOR AGRICULTURE**

Your Excellency, Executive Governor of Kano State, the Deputy Governor of Kano State, my friend and boss, the Secretary to the Kano State Government, His Eminence, Sultan of Sokoto, our Royal Fathers here present, the Senate President, ably represented by Senator Barau, distinguished guests and members of National Assembly here present, Chairman of the occasion and Chairman of the Conference Committee, it is my singular honour and privilege to deliver the goodwill message by Honourable Minister of State for Agriculture and Rural Development.

The meeting is coming at a critical period in our nation's history when national security is threatened by heightened and frequent farmer/herder conflict, banditry and cattle rustling. When national and state governments are emphasizing the development of grazing reserves, as well as embracing ranching as panacea for tackling the conflict, the Ministry of Agriculture and Rural Development developed programmes that are targeted to pastoralist development in Nigeria such as national Pastoral Development Programme, National Animal Identification and Sustainability System, National Animal Breeds Improvement Programme, and National Strategic Animal Feeds Development Programme. They are all under National Livestock Transformation Plan being implemented and coordinated by the Ministry which the objective of all these mentioned above is to produce safe feeds that can meet the international standard and export of quality of animal products such as milk, meat, herb and skin.

I appreciate the timeliness of having this Conference to build the capacity of herders; it would be addressing the age-long farmer/herder conflict which is due to dynamic of availability and access to natural resources,

growing population of human and animals, neglect of livestock sub-sector in the development increases political unrest and conflict terrorism and banditry.

Distinguished Ladies and Gentlemen, this is a time for collective decision to bring about a change that we need to work together to build on and sustain change by mitigating conflict to open the opportunity for healthy living and wealth creation through improved animal production, processing and marketing, transportation, livestock identification. Thank you for listening.

## **EMIR OF KANO**

His Excellency, the Executive Governor of Kano State, His Excellency, the Deputy Governor, my Leader, His Eminence, Sultan of Sokoto, other prominent personalities that time would not permit to mention their names. Assalam Alaikum Wa Rahmatullahi Ta'ala Wa Barakatuhu. It is a great honour to be here in this Conference to discuss promoting livestock Reforms and Mitigation of Associated Conflicts in Nigeria. as you know, Nigeria is the second largest livestock producer in Africa.

The main cause of these conflicts is the competition for resources, land and opportunities among stakeholders and in some cases, different ethnic groups. We have seen instances where pastoralists clash with sedentary farmers over very limited resources and land. Furthermore, in some cases, bad eggs among herders have caused significant damage to land and crops. While at the same time, over zealous farmers usually go beyond acceptable limits in an attempt to take revenge. It is clear that something has to be done about this situation. Calling for reforms at this time is the most sensible thing to do and a right step in the right direction. We most certainly have to find ways to ensure that all stakeholders involved have equal access to resources and means to sustain their livelihoods. We need livestock reforms that will promote level playing ground for peace and stability.

One of the primary ways to achieve this is to create a reform agenda which centers around conflict mitigation and resource management. This Agenda should include the establishment and resuscitation of grazing reserves as suggested by many experts and well-meaning Nigerians and other methods of land utilization. It should also include creating awareness about the importance of livestock reform and its associated benefits. We must ensure that all stakeholders are educated about the various conflict resolution methods and have access to grievance and complaint services. We must also prioritize enforcement of existing laws and regulations related to pastoralism and grazing rights and boundaries. We need to make sure that grazing rights and sanctity of farmland are respected. We must extend our support to those affected by the conflicts by providing necessary relief and rehabilitation as well as compensation. We wish to call on all stakeholders and experts gathered here to come up with a comprehensive reform agenda. We must work together in order to make sure that livestock production is done in a more modern and efficient manner as done in most advanced countries of the world. The farmers and herders conflicts have been an ongoing issue and source of great concern in Nigeria for many years. As an agrarian economy, it's critical that the two sectors work in harmony for our country to thrive and prosper. These conflicts had caused significant damage to both parties involved and also has a larger implication for long-term economic growth.

The conflict between farmers and herders has been fueled by a variety of factors. These include limited access to resources, competition for land, changing climatic patterns and acute shortage of employment opportunities. All of these have exacerbated tensions between the two groups and have further inflamed by violence in some regions and states of the federation especially in recent years when the conflicts were given political and etho-religious colorations. To address this conflict, we must take a holistic and long-term approach to ensure a peaceful, sustainable and equitable agricultural environment in Nigeria. We must ensure that both farmers and herders have equitable access to resources. We must also ensure that both have access to training and technology to help increase production and reduce waste. Other options include strengthening local and regional conflict resolution mechanisms and creating alternative modern livelihoods for herders and extending agricultural credit facilities to real farmers instead of big politicians posing as

farmers so as to benefit from Anchor Borrower Schemes. In addition, we must increase dialogue between farmers and herdsmen so as to encourage understanding and tolerance. We must promote understanding of the root causes of the conflict and work together to find equitable and long-term solutions. Harmless practical jokes and inter-tribal banter should be encouraged. The Tivs and Fulanis, for example, have been tribal playmates for hundred of years before the current unhealthy relationship created by political opportunists set them apart. Finally, we must ensure that government policy is fair and inclusive and does not favour one group over the other. We must ensure that our political system is inclusive and that which engages all citizens, regardless of their backgrounds. We must work together to create a lasting peace and security in Nigeria. Let me pause at this junction to recognize and commend the efforts of His Excellency, Governor Abdullahi Umar Ganduje for his efforts in ending and resolving the clashes between farmers and Fulani herders in Kano State and Nigeria in general.

Since taking office, almost eight years ago, His Excellency has worked hard and taken several initiatives to promote peace and friendship between these two warring parties. He established the Kano State Peace and Reconciliation Commission to mediate the conflict between farmers and herders and to settle disputes peacefully. The Governor's administration has set up the Office of State Coordinator of Conflict Resolutions, which serves as a platform to foster dialogue among all members of the agricultural community and solicit feedback to help improve the situation.

In addition, Governor Ganduje has implemented the "level land and invest" initiative in several local communities. This programme enables the farmers and Fulani herders to lease land for agricultural and pastoral purposes thereby avoiding potential conflicts stemming from land use rights. The Governor has also supported and encouraged the formation of multi-ethnic peace-building groups in various communities to encourage dialogue, create common understanding and prevent conflicts.

We are all living witnesses that his government has provided financial and material support to the farmers and herdsmen, including grants and subsidies to help them increase their production and incomes. His Excellency has, on several instances, provided succor to Fulani herders who were unjustifiably expelled from other regions.

To sum up, we believe Governor Ganduje has done a commendable job in engaging all stakeholders and finding solutions to the conflict between farmers and Fulani herders. We, therefore, urge all of you to further support his efforts and work together to achieve lasting peace and harmony in Nigeria.

May Allah give us peace. May Allah forgive our parents and protect all His servants. Assalam Alaikum.

## **SULTAN OF SOKOTO**

I stand on the existing protocol. But I must recognize the brain behind this, the Governor of Kano State. I would like to thank Almighty Allah (SWT) for bringing us to Abuja and to this Conference for this very important and timely conference.

We always believe and we will continue to believe in dialogue. We believe dialogue is the best option to settle anything in this world. So, I am an advocate of dialogue. So, there is need for us to sit together and discuss issues affecting our lives as human beings. I have always said it is always our hope to keep peace. so, let us continue to live together and address issues that affect us.

Your Excellency, we congratulate you for this initiative. I came when Prof Mansur Dambata whom I queried the picture I saw in the poster in the suite as the District Head of Dambata, he spoke and I listened attentively to what he said. He made very important points **and one thing I would pick is the proliferation** of arms in West Africa. I was in the ECOWAS as a Military Officer. We fashioned out the monotarium of these small arms and light weapons in Gambia. Where is this monotarium? Is it still being implemented by **ECOWAS or has gone to the dustbin?** There is need for us to bring the monotarium. How can we, based on what we discuss here today use that monotarium to help ECOWAS in checking the illegal acquisition of small arms and light

weapons in West Africa? It is very important.

What the Emir of Kano had said is all I wanted to say. He captured the exact things that we need to discuss in this conference. People have turned the herders and farmers conflict into political issue. And whatever issue of development you bring into is going to fail.

We don't have problem holding Conferences; the problem we have is lack of implementation. Whatever that will come out of this Conference, we must find a way of implementing it. Let us see how we can use some of the documents of our previous Committee. Forget about the issue of politics. Some Governors would say they have no land to give for grazing reserve. You don't own the land and whatever you are going to do should be beneficial to the poor **because you cannot take it anywhere because as a Governor**, your 8-year tenure will end and people will still be there. So, let us keep politics aside. The issue of development especially for the commoner should be non-political. And Allah will ask how we use the power He gave us. So, let us do the best we can and we should do what we believe we should do.

All these long grammar here, how does it get to the Fulani man who doesn't know anything? So, I believe after this, may be we can have a Conference...but this long grammar will not get to the ears of the people at the grassroots. In Benue, we met with traditional rulers and government to discuss peace but at the end of the day, our suggestions were thrown away. Everything went back to square one. Let this Conference not be in the same manner. Whatever we want to do, let us do it well and let us do it now. People are angry and hungry; let see how we can douse the tension. We need to come together and do the best we can. And I think, I would like to suggest as I said that the Jega Committee, your Excellency, may be you look at it....and they are given free hand to meet the Governors and traditional rulers, let them do something about it; let people see that we are serious if not, we won't be able to sit in our houses.

I would like to thank the Governor and all those that have attended this Conference and we are always ready and very open to share things we have to know due to our experiences in the military and in our position...So, I wish you all the very best and may the outcome be the best for us. Assalam Alaikum wa Rahamatullahi Wa Barakatuhu.

## **GOVERNOR ABDULLAHI UMAR GANDUJE**

Your Excellency, the Deputy Governor of Kano State and our gubernatorial candidate and our Governor, In Sha Allah. His Eminence, the Sultan of Sokoto, Alhaji Sa'ad Abubakar III, we thank you for coming. His Royal Highness, Emir of Kano, His Royal Highness, Emir of Wase, the representative of the President of the Senate, Senator Barau Jibrin, the Chairman of the Occasion, Dr. Mansur Mukhtar...

It is with great pleasure that I welcome you all to this National Conference being hosted by the Government of Kano State to provide a platform of re-straining the movement of cattle, boost livestock production and control the country's deadly herder-farmer conflict in Nigeria.

I understand that professionals **numbering over 500 in different fields of development that included the** academia, development partners, agro-industry, livestock management, veterinary, conflict resolution, among others are invited to this crucial National Conference. I believe where experts gather in such great numbers, there can be no doubt that important deliberations are in the offing.

Let me thank members of the Organizing Committee of this Conference for working tirelessly up to this day. It is really a wonderful job. And I especially commend the Chairman of the Committee, Prof. Attahiru Jega for the leadership he provided in the organization effort. I also want to say a special thanks, to all the distinguished members of the Committee for accepting to be part of this initiative by the Government of Kano State.

This Conference, which has the theme: "Sustainable Livestock Reforms and Mitigation of Associated Conflicts in Nigeria," to discuss topical issues in Nigeria which grew out of the need to provide solution to the age-long conflict between herders and farmers and also suggest way forward for economic development of

this very important sector.

The theme of the Conference is relevant in the current scheme of events, given the appropriateness of the time when Nigeria has been persistently experiencing other security challenges. For many years in Nigeria, farmers and cattle herders have been in conflict over land rights. But the disputes have reached crisis levels in recent years, killing thousands of people and displacing many thousands more from their homes and left in relics by attacks.

The livelihoods of farmers and herders have, historically, complemented each other. They exchanged produce with one another and when conflicts arose, they were addressed by traditional institutions and existing conflict resolution mechanism. However, over the past few decades, a wide range of factors have resulted in tensions often ending in deadly violent conflicts between the two groups. This is why this Conference is pertinent!

In those days, the relationship between herders and farmers was symbiotic because the farmers were using the dumps of the cattle as manure. But the relationship is now seen as parasitic. So, this is the issue that we should look into. While the farmers were able to get modern fertilizer, the herders did not get grasses to feed. So, what we are doing today is to see how we can develop certain things.

Climate change which resulted in desertification and soil erosion has enraged competition over natural resources, pushing herders to venture into new areas to seek pasture for their herds.

Drifting away from traditional migratory routes and encroaching on farming lands have fueled negative perceptions, contrasting sedentary communities versus nomadic ones, often signaling the latter as cultural and/or religious intruders.

Also, the climate change shrinks the amount of arable land which is contributing to cycles of violence and putting additional strain on the relationships among farmers and herders. It is our hope that this Conference will work out ways to strengthen strategies for peace between the two groups.

While herders have had to change their grazing routes along which they move cattle from one grazing ground to another on a seasonal basis, farmers, on the other hand, say herders are intruding on their lands.

A second element to consider is the weakness of state institutions and lack of infrastructures which have resulted in the inability of governments to effectively control their territories, enforce the law and provide formal avenues for the peaceful resolution of disputes. The reason why I said failed institutions is because the pastoralist himself is a victim of his inability to control his herd from encroaching on the farmer's crops. And because of this, one becomes a victim of the traditional ruler especially the Mai-ungwan System because if the issue is taken to the mai-ungwa, he would have to sell his cow before the issue could be resolved. If it goes to the police, as an institution, he would have to sell his cow to save himself. And to the judiciary, he would have to sell his cow to save himself. So, institutions have failed in this aspect. There are other appendages of the result.

Topic selected for discussions during the Conference will hopefully bring to light key factors for driving the continued crisis including climate change, inter-cultural communication, cross border and internal migration, value chain development and business productivity as well as synergy among different actors working to improve farmer-herder relations.

Distinguished Ladies and Gentlemen, while the teething problems between herders and farmers were ignored over the years snowballed into armed bandits ravaging the country, it is still not too late to work out plans and strategies to reduce the conflicts

The Rural Grazing Area (RUGA) or ranching, which has been deliberately politicized, remains the only option that would go a long way in mitigating existential problems, as pastoralists would have lands to graze without cattle encroaching on people's farmlands.

I think this issue needs to be explained properly. Rural Grazing Area, that is, the meaning of RUGA has been politicised. If you say build houses for them, somebody would say whose money are you going to use to build houses for them? whose money do we use to provide affordable housing for other people? it is either bank loan or government money. So, providing affordable housing for the population can also be utilized to providing affordable housing for the herdsmen so that they can stay in one place. You should provide dams, water...whose money do we use to provide water in towns and villages, boreholes, tap water. Whose money do we use to do that? We can provide dams; we can provide education for their children. You talk of improving the livestock, you talk of security but one important thing is that education of their children is the ultimate because we usually say a herdsman has not succeeded in killing poverty and poverty has not succeeded in killing the herdsman. What do I mean by that? Herdsman is a threat from the Middle Belt to the Southern part of this country....someone with hundreds of cattle, do you call him a poor man? He is certainly not a poor man. Before you go the bank and cash money, somebody with a cow will get to the market and get money. so, he is not a poor man. People coming from South Africa because of climate change....that is why we invited the Ministry of Foreign Affairs to check the ECOWAS protocol of which we are signatory. Can this continue with herdsmen? Finally, they even discovered that the arm is another trade; it is another transaction....

Ladies and Gentlemen, I would like to thank you for coming and with this speech, I declare this Conference open. Thank you.



■ Governor Ganduje with Attahiru M. Jega Chairman, Conference Organizing Committee

# Annex V:

## Transcript of GOOD MORNING NIGERIA ON NTA Network Monday, February 20, 2023

**Anchor: Kingsley Osadolor**

### How will the outcome of this Conference be different from others?

#### Responses:

##### **PROF KUTA**

I can tell you without any contradiction that this is a Confab that is with a difference. It was an assemblage that comprised of practitioners, experts; the real practitioners who are in the livestock sector and policy makers from national and international arena of practice. We had in attendance, not only Chief Executives, Governors and Deputy Governors and Secretaries to State government, particularly Kano State Government. We must give kudos to the Kano State Governor, His Excellency, Dr. Abdullahi Umar Ganduje. He was not only present at the Opening Ceremony but sat throughout the sessions for two days. That was the first time I had witnessed a Chief Executive Officer participate in this kind of Confab who stay and participate fully. And we had in attendance, the Vice President of Islamic Development Bank, Dr. Mansur Mukhtar who was present throughout the proceedings. I feel gratified that the realities and deliberations from experts from Commonwealth Veterinary Association, to practicing livestock farmers, ranchers from different parts of Nigeria. We could see it is clear that the solution had come because they were able to propound practical solutions based on what they are doing on the field. So, the blueprint is in process and we are going to develop a blue print that will be used by any government to advance frontiers in this sector. And we must give kudos that we have 3 weeks to prepare and galvanise the participants that came from all over the country and beyond. So, we must give kudos to our Chairman, Professor Attahiru Jega, his integrity capital was brought to bear on participants that this time around, it is going to work. We have come with a blueprint and the implementation module and that all these things have been done, this government would start working on the implementation and subsequent government would not resist these recommendations. What will interest you to know is that, part of this Committee is that we have gathered virtually every document that had to do with livestock reforms in this country. They are in our custody, we are reviewing them; to tease out how we can adopt it for practical implementation and as solution package for Nigeria.

##### **ARCHITECT KABIRU.**

I am pleased with the outcome of the Conference especially having participated in so many of these Confabs. You know we looked at what has been done since 1976 and we also looked at it in 2015, the BY-led Committee on which we served has x-yaed everything over the years. The first thing that I said when I was invited to be part of this was that thing that I noticed of all the Confabs that we did not have a deliberate methodology of funding. Now, the Kano State programme experience was that the government borrowed money from Islamic Development Bank to do something and we have seen the results. We have not seen any scanish degenerating into violence among farmers and herders in Kano State. So, I think that all the Governors in affected areas should emulate the Kano State experience to do this. Now, coming from there, we would now be able to touch results and anybody who leaves the matter unattended to is looking for trouble. We are practical people; we

are people who have been denied our productivity. I was given the opportunity to invite all farm leaders in the affected areas and even beyond. Everybody came and saw and participated in what was there. And like Prof Kuta had said, there is a Blueprint and I am member of the Blueprint Committee. We are going to bring out things that would be implementable and everybody will key into it. I understand that government can only do so much but the onus is on the private sector to really be able to bring the change that is desired. And I think the private sector is on its way to doing this and we are definitely affected by what is happening in the society. Some people are taking over and blaming herders and farmers in all the matters but once we key into these reforms, we would be able sieve the chaff from the grains and those coming in as criminals, these criminals will be weeded out and we would be better for it. In fact, if you take the UK for instance, about a hundred years ago, they had the same problem; today I think all the livestock sector is sedentarised. We used to go royal Agricultural Show and you move distances by rail and from left and right, you see animals feeding on fresh green and they were confined. And everything was value added; the cattle make more milk; there was more meat and there was more prosperity and progress on the farmer and pastoralist. So, this kind of thing should be done in Nigeria. there is a programme already in place that needs implementation that brings about this and that NLTP. The NLTP once implemented would take us to that promise land. The NLTP means National Livestock Transformation Plan. The aim is to semi-sedentarised or even sedentarised the pastoralists by giving them amenities such as water, school, pastures, hospital for both human and animals and encourage the value addition so that your animals do not move a long distance in search of grass and they come back as bone and they don't produce anything and the herders too don't get anything and sometime because of the encroachment of the pathways, the animals stretch into farm lands and these problems occur. That is why we are having farmer/herder conflict. everybody is talking about the conflict but there is more to it, while we concentrate on that, let us solve all the problems associated with that and we weed out all those things that stray to that.

## **DR SALE MOMALE**

Thank you for bringing the issue with respect to the impact of the conflict. first and foremost, I think the Conference clearly brought out the viability and the importance of livestock industry to the social and economic development of the country. Currently, cattle production alone was estimated by professionals to be an asset and an investment of over N30 trillion. That is a huge national asset that Nigeria needs to properly develop. Secondly, most of the programmes and projects that were planned in the past I think from the Conference, it was emphasized that the implementation was the major issue and much more public sector centered and otherwise. The government was expected to implement most of these policies with little framework for the producer and private sector. The third thing that was clear was that, some of associated conflicts are driven more by breakdown in inter-community relations with the fact that people no longer cooperate for various reasons and that was a major trigger of some of these conflicts. If we would able to engage out community-based institutions, our traditional rulers and promote unity and cooperation among citizens, we will be able to resolve many of these problems and there would peaceful coexistence. For example, as was highlighted in Kano, Jigawa and part of Nasarawa State where we had this kind of social harmony despite the huge population of farmers and pastoralists, there is minimal of conflict. Then, finally, the role of the media in public engagement was very clear that the narratives and the kind of reportage and the way we project these issues matters a lot, either worsening or reducing the conflict. Now coming back to the issue of impact of the conflict, for sure, there are many States in the country, not in equal proportion, some States were more affected and there is need for robust peace building, conflict management and interventions including initiating community-based dialogue and supporting those dialogues to restore communities back to social cohesion. These were brought out at the Confab and I hope the Blueprint that professor and the Architect will bring out should be able to incorporate this. These are the things public sector can do but private sector can also help through corporate social responsibility and promote cooperation as exemplified in the discussions by the Sabore Farms among others. To add to this, there is also the issue of skills gap where extension and capacity development for farming and pastoralist communities would play a central role. So, I do hope and we are all optimistic that the Blueprint is designed taking into cognizance the challenges of the previous

implementation and broadening the development options within the National Livestock Development plan, Reviewing all the national policies to be in tandem with current realities will provide an enabling environment for robust extension, capacity development and enhance private sector investment for more social cohesion and cooperation among communities for broader participation of Nigerians including our Community-based Organization and traditional rulers, our religious bodies, the media as well as our diverse Civil Society Organizations.

### **AMINU MURTALA NYAKO**

Thank you for having me this morning. Yes, I did participate in the Conference. And I must say that it is highly commendable that the government of Kano as well as other Professors and private sector people came together to actually look at some of the challenges facing the livestock sector. What we have done in Sebore Farms is that we have looked at what was prevalent among our people; what our people are known for and that is livestock rearing and management. A lot of people in the livestock sector look at the conflict between Adamawa and Benue and proffered solutions that tried to adjust this head-on. In 2021, we started the idea of Bakoli Integrated Livestock Farm into the diary value chain which we believed was at the very centre to the solution that private sector can give. Today, we have actually integrated about 18, 000 local diaries and we actually created an infrastructure of collection that spans from Biu LG in Borno State which is very close to Sambisa, all the way down to the Southern part of Taraba State. To be honest with you, we have seen that the herder/farmer crisis, the very base of the problem is market problem because you have very resilient farmers who struggle to make a living through crop production and you also have dairy farmers who rear cattle and trying to earn a living through that process. What we came to realize was that the private sector can bridge that gap by creating a market for crop production and also creating a market for livestock farmers. It is a firm belief that in the coming decades, milk or diary would become an epicentre of gold for Nigeria in terms of contribution to GDP. Nigeria has a population of over 200 million and about a hundred are below the age of 18 and young Nigeria, we really want them to fulfill their potential, they require [protein and the cheapest protein...and for us having imported 1.9 billion dollar worth of milk imported into the country and we are sitting on livestock base. Our vision is to make Nigeria the Milk Capital of Nigeria and we have the potential and tenacity and vibrancy to make this a reality.

### **MUHAMMAD DAMAKA**

What we do in Kano, L & Z Integrated Farm came together with the Kano State government and development partners so what we asked the Kano State government to do was to identify some grazing reserves and then bring in the pastoralists to those grazing reserves and provide basic amenities. And then, the government can bring in financiers such as the partnership with the Islamic Development Bank. So, what we are providing is the market and the training of the pastoralists on the best practices and we go to the milk collection centres every month to evacuate the milk they produce. We produce market and what this public and private partnership does is to take the attention of the pastoralists from only the engaging in selling their cows to make money by milk production. So, while this psychology is inbuilt, the issue of cattle rustling would be reduced to the barest minimum because the attraction now is more on milk than on beef. The beef is what attracts cattle rustling because it is only when you sell the cow that you make money but you can keep your cow and you make money without necessarily selling the cow. Also in Jigawa State, we partnered with the State government and they have been able to identify grazing reserves that they will bring pastoralists and we partner with them in establishing Milk Collection Centres. And we train pastoralists too especially on Climate Smart Dairy Production process. So, we have taken care of the upstream and midstream. What happens to the downstream? This is value chain and once one linkage is missing, the entire process collapses. The downstream is where the market is and unfortunately, this is controlled by multinationals. So, I want the government to change the narrative and make Nigeria the major producer of milk. And we can do it because we have over 20 million cows.

## Annex VI:

### Photo Gallery



■ Inuwa Idris Yakassai, Director of Information,  
Kano State Government



■ Alhaji Sani Garba, promoter of made in Nigeria  
goods and services





















# **INAUGURATION OF THE COMMITTEE FOR THE CONFERENCE ON LIVESTOCK REFORMS AND MITIGATION OF ASSOCIATED CONFLICTS**

By His Excellency,  
The Executive Governor of Kano State,  
**DR. ABDULLAHI UMAR GANDUJE, OFR**

At Aminu Kano House, Asokoro, Abuja  
On Thursday 19<sup>th</sup> January, 2023

## **PREAMBLE**

Until recently, the incessant conflicts between cattle herders and sedentary farmers was a rarity in the whole country as the two communities co-existed peacefully for centuries in a mutually beneficial relationship of give-and-take with the herders' cattle providing the much-needed manure in return for fodder on the farmlands. However, some factors such as climate change, the encroachment/disappearance of grazing reserves/cattle routes, competition for land, population explosion and urbanization, ethnic nationalism, among others have led to conflicts between these communities with devastating consequences to the polity such as enormous loss of lives and property, insecurity, banditry, displacement of people, etc. What is more worrisome is that these conflicts often take ethno-religious coloration thereby eroding the foundation of unity in the country.

These conflicts have wrought a great havoc on the polity thereby becoming a cog in the wheel of progress, national development and cohesion, mutual understanding among citizens, peaceful coexistence and tolerance to the extent that the problem has seemingly defied any workable solution.

Therefore, in his characteristic foresight and dovish disposition which has contributed in making Kano State one of the most peaceful and secured State in the whole federation despite being surrounded by some States that are bedeviled by security challenges coupled with its huge population and cosmopolitan nature, Governor Abdullahi Umar Ganduje, (OFR) has seen the need to set up a Committee composed of reputable personalities from all walks of life from across the country charged with the responsibility of organizing a befitting National Conference with the theme, *Livestock Reforms and Mitigation of Associated Conflicts in Nigeria* to provide a platform for critical stakeholders to brainstorm and find lasting solution to the now outdated pastoralism that has more often led to avoidable conflicts between herders and farmers in the country and leaving in its trail death and destruction.

While inaugurating the Committee, His Excellency, Dr. Abdullahi Umar Ganduje, *OFR* stated that modernizing the livestock sector is the key to resolving the herder-farmer conflict which threatens Nigeria's political stability, corporate existence and food security, disclosing that since his assumption of office in 2015, his administration has been in the forefront of initiating programmes and policies aimed at revolutionizing the livestock sector which include collaboration with the security agencies to tackle the menace of cattle rustling, establishing a 16-man Committee for the establishment of *Ruga* settlements and milk markets in the state, conduct of census of all herdsmen in the State and training of 72 young herders of both sexes on modern rearing techniques and artificial insemination method in Istanbul, Turkey to boost their economic activities, among other laudable initiatives.

He then commended the Chairman and members of the Committee for accepting this challenging assignment of high national significance in spite of their individual crowded schedules which demonstrated their patriotism and keen interest to the unity, peace, security and development of the country.

## **MEMBERSHIP COMPOSITION**

1.	<b>Prof. Attahiru Jega</b> <i>Former INEC Chairman</i>	- <i>Chairman</i>
2.	<b>Prof. Jibrila Dahiru Amin</b> <i>Pro-Chancellor, Yusuf Maitama Sule University, Kano</i> <i>Former VC, FUD</i>	- <i>Vice Chairman</i>
3.	<b>Prof. Muhammad Yahaya Kuta</b> <i>Former SSG, Niger State</i> <i>(Professor of Agricultural Extension &amp; Development Communication, University of Ibadan)</i>	- <i>Member</i>
4.	<b>Mr. Martins Oloja</b> <i>MD, Guardian Newspaper</i>	- <i>Member</i>
5.	<b>Prof. Bashir Haruna Usman</b> <i>Executive Secretary, National Commission for Nomadic Education</i>	- <i>Member</i>
6.	<b>M. D. Abubakar</b> <i>MD/CEO L&amp;Z Integrated Farms Ltd</i>	- <i>Member</i>
7.	<b>Arch. Kabiru Ibrahim</b> <i>Chairman, AFAN</i>	- <i>Member</i>
8.	<b>Rabe Isah Mani, PhD</b> <i>Former FAO Representative in Nigeria</i>	- <i>Member</i>
9.	<b>Prof. Aminu Ibrahim Daneji</b> <i>Faculty of Veterinary Medicine, Usman Danfodio University, Sokoto</i>	- <i>Member</i>
10.	<b>Prof. Isma'il Zango</b> <i>Department of Sociology, Bayero University, Kano</i>	- <i>Member</i>
11.	<b>Representative of the Senate</b>	- <i>Member</i>
12.	<b>Hon. Bello Kaoje</b> <i>Rep. of House of Representatives</i>	- <i>Member</i>
13.	<b>Mrs. Winnie Lai Solarin</b> <i>Director, Animal Husbandry Services</i> <i>Federal Ministry of Agriculture and Rural Development</i>	- <i>Member</i>
14.	<b>ACP Isa Garba</b> <i>Representative of the Nigeria Police Force</i>	- <i>Member</i>
15.	<b>Aliyu Bello</b> <i>Representative of DSS</i>	- <i>Member</i>
16.	<b>H.E. Musa Sani Nuhu</b> <i>Ambassador/Permanent Representative of Nigeria to the ECOWAS</i> <i>(Rep. Ministry of Foreign Affairs)</i>	- <i>Member</i>
17.	<b>Representative of Federal Ministry of Interior</b>	- <i>Member</i>
18.	<b>Prof. Nkiru Meludu (Mrs)</b> <i>Dean, Faculty of Agriculture, Nnamdi Azikiwe University, Awka (South East)</i>	- <i>Member</i>
19.	<b>Prof. Rashid Aderinoye</b> <i>Former Executive Secretary,</i> <i>National Commission for Nomadic Education (NCNE) (South West)</i>	- <i>Member</i>
20.	<b>Dr. Saleh Momale</b> <i>Executive Secretary, Postural Reserves</i>	- <i>Member</i>
21.	<b>Prof. Garba Kawu</b> <i>Faculty of Arts and Islamic Studies, Bayero University, Kano</i>	- <i>Member</i>

22.	<b>Dr. Usaini Ganduje</b> <i>Permanent Secretary, Ministry of Water Resources, Kano State</i>	Member
23.	<b>Alhaji Baballe Ammani</b> <i>Director-General, Kano State Bureau of Statistics</i>	Member
24.	<b>Prof. Anselm Onyimonyi</b> <i>Department of Animal Science, University of Nigeria, Nsukka</i>	Member
25.	<b>Prof. Eugene Nwachukwu</b> <i>Department of Animal Breeding and Genetics, College of Animal Science, Michael Okpara University of Agriculture, Umudike</i>	Member
26.	<b>H. E. Isa Yuguda</b> <i>Former Governor, Bauchi State</i>	Member
27.	<b>Baba Othman Ngelzarma</b> <i>National President, Miyetti Allah Cattle Breeders Association of Nigeria (MACBAN)</i>	Member
28.	<b>Prof. Olorunfemi Jegede</b> <i>Dean, Faculty of Veterinary Medicine, University of Abuja</i>	Member
29.	<b>Prof. Edet Udoh</b> <i>Department of Agricultural Economics, University of Uyo</i>	
30.	<b>Malam Muhammad Garba</b> <i>Commissioner of Information, Kano State</i>	Member/Secretary

### **SECRETARIAT**

1. **Inuwa Idris Yakasai**  
*Director of Information  
Ministry of Information, Kano*
2. **Yahaya Umar**  
*Director Archives & Publication Council Affairs Directorate  
Office of the SSG, Kano*
3. **Naziru Tanko Kyauye**  
*Director Admin & General Services  
Kano State Bureau of Statistics*

### **TERMS OF REFERENCE**

1. To organize a befitting National Conference on farmers-herders conflicts in Nigeria;
2. To select appropriate theme for the Conference;
3. To nominate/select Chairman, paper presenters/speakers, panelists, special guest(s) of honour, guests of honour, other dignitaries and delegates for the Conference;
4. To select appropriate date and venue for the event;
5. To provide adequate publicity before, during and after the event;
6. To submit a report on the Conference with observations and recommendations for appropriate action;
7. To examine the ECOWAS Protocol pertaining to the movement of cattle across member countries of the sub-region;
8. To draft a Blueprint for reform of traditional livestock/cattle rearing and mitigation of associated conflicts in Nigeria;
9. To undertake any other activities towards the successful planning and organizing the Conference in accordance with the terms of reference as specified.



**REPORT  
OF  
NATIONAL  
CONFERENCE  
ON  
LIVESTOCK  
REFORMS AND  
MITIGATION OF  
ASSOCIATED  
CONFLICTS**

**PAPERS PRESENTED  
AT THE CONFERENCE**

# **WELCOME ADDRESS**

## **BY THE CHAIRMAN ORGANIZING COMMITTEE OF THE NATIONAL CONFERENCE ON LIVESTOCK REFORMS AND MITIGATION OF ASSOCIATED CONFLICTS,**

**PROFESSOR ATTahiru M. JEGA, OFR,**

February 13, 2023, At the NAF Conference Centre, and suites, kado Abuja

### **Protocols**

On behalf of the members of the Organizing Committee of this conference, I join in welcoming all our distinguished invited guests and participants to this National Conference, with the theme: "Sustainable Livestock Reforms and Mitigation of Associated Conflicts in Nigeria". It pleases us immensely that, by the Grace of God Almighty, the tireless effort to organize this conference has been crowned by your acceptance and presence here today.

The Conference is designed as an all-inclusive process to generate ideas that would contribute to addressing an acute national problem: the relative underdevelopment of the Nigerian Livestock sector and the perpetual crises and conflicts associated with it. As Nigeria searches for sustainable ways and means of diversifying its economy, becoming self-sufficient in food production as well as a major competitive exporter of Agro-allied products in the global economy; and becoming a stable, more cohesive developing democracy, a national strategic focus on the Livestock sector and its perennial challenges is an imperative that has assumed significance.

Pertinent questions requiring cogent and realistic answers include: what model(s) of reforms are desirable and sustainable? How can the traditional livestock production and development sector be suitably reformed, with remarkable and sustainable value-addition to Nigeria's economic growth and enhanced peaceful coexistence amongst diverse Nigerian communities? Finding answers to these questions and situating them appropriately within the policy and governance frameworks of the Nigerian federation, requires putting all hands-on-deck by the best of the best of our resource persons, theorists and practitioners alike. Furthermore, it requires a non-partisan, or more appropriately, a multi-partisan inclusive approach. That is what we have tried to do in organizing this conference. We believe that the outcome would be impassioned deliberations with viable recommendations, which can be taken further to develop a Blueprint for implementable programs and projects for sustainable Livestock reforms and mitigating associated conflicts in Nigeria.

We thank His Excellency the Governor, and the Government of Kano State, for giving us the opportunity to organize this conference, and for providing the necessary support towards the success of the planned programme of activities. We also thank all the distinguished invited guests, for positively responding to our invitation. We especially appreciate the keynote speaker, as well as all the lead paper presenters and discussants, and indeed all participants, for accepting our invitation and sparing time to be with us here today. We look forward to fruitful deliberations in the course of the two-day conference.

Thank you.

# OPENING REMARKS

BY DR MANSUR MUHTAR

Vice President, Islamic Development Bank

## AT THE NATIONAL CONFERENCE ON LIVESTOCK REFORMS AND MITIGATION OF ASSOCIATED CONFLICTS DELIVERED

On Monday, 13th February,  
At The Naf Conference Centre And Suites, Kado, Abuja.

### Protocols

#### i. Introductory Remarks

Distinguished Conference Participants, including ECOWAS delegates and representatives of the media, academia, industry, and government as well as members of different farmers' and herders' associations. My brothers, and sisters from different parts of Nigeria, all other protocols duly observed.

Let me begin by saying that it is such a great honour to be appointed by His Excellency Gov. Abdullahi Ganduje as Chairman I of this important national conference on '**Livestock Reforms and Mitigation of Associated Conflicts in Nigeria**'. I am humbled by the opportunity to deliver the opening remarks and share my perspectives on the subject, to set the context for what promises to be fruitful deliberations on this topical issue of national importance.

Conflicts between farmers and herders/pastoralists have been an issue of national concern in recent years. Perhaps the most significant issue of concern is the growing number of casualties associated with it. Between 2016 and now, at least 4000 people lost their lives in these conflicts, with several thousand others sustaining injuries, both physical and emotional<sup>1</sup>. While fatalities were initially confined to the north central, they have since spread across the country increasing pre-existing religious and ethnic tensions.

In addition to the unfortunate loss of lives, this conflict has often been manifested by an increasing number of internally displaced persons, leading to the breakdown of family units, the bedrock of our society, and disruption in education, especially for young girls. This crisis has also undermined agricultural production compromising our nation's food security, especially during these periods of rising food prices .

Northern parts of Nigeria have been the epicentre of this conflict, although this is spreading to other regions. In the context, given the relatively poor performance of the region, in terms of education, health and other human development indicators, this situation is untenable and threatens the future of our young, growing, and promising population.

Equally important is the security challenges caused by the conflict. With the passage of every single day that this crisis goes unresolved, our already fragile national security is further threatened. We cannot continue like this.

Therefore, the decision by HE Gov Ganduje to lead the national conversation on this issue is highly commendable and we should appreciate him. We should also be grateful for the distinguished 27-man committee that he assembled comprising leaders from academia, media, industry, and government. I would like to especially thank Prof Attahiru Jega, former INEC Chairman and former VC of the Bayero University, who was appointed by his excellency to chair this committee. I am delighted to note that Professor Jega and his team have worked tirelessly to set forth a robust agenda and bring this conference to life. I sincerely

<sup>1</sup> Amnesty International (2018) Nigeria: Government failures fuel escalating conflict between farmers and herders as death toll nears 4,000

appreciate the dedication of the members of this high-profile committee, all of whom have taken time off their busy schedules to address this critical issue.

The agenda they have articulated for today's conversations charges us to reflect profoundly on how to improve productivity in Nigeria's livestock sector. We are also being tasked with thinking through ways to mitigating conflict and promoting harmonious living in the affected region, keeping in mind that socio-economic development is incredibly difficult to achieve without long-lasting peace and security.

This conference is very crucial in reshaping dialogue on the subject. National discourse on this issue has, in the last several years, been characterised by a divisive ethno-religious narrative, which has done very little to resolve it. Instead, it has excessively politicized the issue, clouding it with sentiments that have prevented meaningful and constructive dialogue. The harmful rhetoric emanating therefrom has been further amplified by the deliberate peddling of fake news, as well as coordinated misinformation and disinformation campaigns. I hope that today's conference provides a model of a more constructive approach to this subject, and that our conversations will take us a step closer to helping our people, farmers and herders alike, as well as other citizens, lead safer, more productive, and prosperous lives.

Moreover, this conference is perfectly timed, as our nation prepares for elections, literally in a matter of days. It is my ardent hope that winners of these elections would draw on the deliberations from this event to inform policies, strategies and programs towards livestock production. The Buhari administration has done well by developing the National Livestock Transformation Plan (NLTP); however, a significant amount of work is needed to achieve its ambitious goals.

Once again, I want to thank HE Gov Abdullahi Ganduje for creating this avenue for robust conversations. I hope that everyone present in this room shall utilise this vital platform, engage in thoughtful conversations and leave with an improved understanding of how to address these issues.

## **ii. Setting the Context**

Before I delve into the key issues that I believe we should consider today, I would like to state that herders and farmers have not always had acrimonious relations. There is well-documented evidence of peaceful co-existence between both groups- they have lived together harmoniously, interacted, married, traded, and built meaningful relationships that span generations. Sure, there might have been occasional skirmishes but nothing at the scale that we have today. Conflicts and skirmishes did occur, but there were effective ways to resolving them amicably.

I share this so that we can be encouraged to think of ways to foster more harmonious relations and restore those peaceful times. I do acknowledge of course that this has become a bit more difficult, due to the increasing scarcity of land, water, and pasture. These scarcity-induced tensions have been driven by a multitude of factors including climate change, increased demographic pressures, migrant herders, and poor land governance.

In this context, I often find it unsettling when many Nigerians, including those in government, make it seem as though climate change is primarily a western issue. There is clear and unambiguous evidence of its impact on our daily life in Nigeria. In the northern part of the country, desertification has increased; some studies have shown that within this century, about two-thirds of Nigeria's far northern states could become deserts or semi-desert regions<sup>2</sup>. So, it is not surprising that people who earn their livelihood from the soil have struggled to contend with decreasing water resources, shrinking grazing routes as well as limited land for cultivation.

The impact of climate change on critical resources is exacerbated by Nigeria's rapidly growing population which intensifies the need for the food and livestock produced by farmers and herders. It is further compounded by urbanization.

<sup>2</sup> Bauchi, Borno, Gombe, Jigawa, Kano, Kaduna, Katsina, Kebbi, Sokoto, Yobe and Zamfara. Federal Ministry of Environment, National Policy on Desertification and Drought, 2008.

Another factor which has to be reckoned with is the ECOWAS Transhumance protocol<sup>3</sup>, to which Nigeria is a signatory. This protocol guarantees the free movement of pastoralists and herders across the subregion. While having positive aspects, it has also contributed to the increased pressure on land, water, and pasture. Besides, there is some evidence of these migrant herders engaging in international arms trade further worsening these issues.

Finally, legal and legislative inconsistencies including the tensions between the 1964 Grazing Reserves Act and the 1978 Land Use Act have made the governance of land in the region and across the country more difficult.

### **iii. The Potential for Ranching**

This conference has proposed ranching and other sedentary livestock production as potential solutions to these problems. Indeed, the idea of ranching appears to be gathering support and gradual momentum from key stakeholders, including the federal government, the UN Food and Agricultural Organisation (FAO)<sup>4</sup> and the Miyetti Allah Cattle Breeders Association of Nigeria (MACBAC)<sup>5</sup> which had initially been reticent about ranching.

The Buhari administration's Agriculture Promotion Policy (APP) 2016 -2020 as well as the National Livestock Transformation Plan (NLTP)<sup>6</sup>, approved in 2019, propose ranching as one of the solutions to the problem.

The NLTP proposes the 'development of market-driven ranches in 7 pilot states (Adamawa, Benue, Kaduna, Nasarawa, Plateau, Taraba and Zamfara) for improved livestock productivity through breed (genetic) improvement and pasture production'.

It is envisaged that these ranches will operate as an integrated business and will involve many aspects, including (i) the development of commercial crop production to support livestock through the supply of fodder; (ii) the formation of producers into clusters to create viable ranch herd sizes and; (ii) the creation of cooperatives to facilitate increased access to inputs, infrastructure, finance, markets and support services.

The government hopes that by the end of 2028, there will be at least 119 ranches operating in all participating states. This is a very ambitious plan that if well implemented could lead to a radical transformation of the livestock value chain and will go a long way in reducing the tension between farmers and herders.

Unfortunately, more than 3 years into its launch, a single ranch is yet to be built. Limited public engagement and buy-in have undermined the legitimacy of the plan while funding constraints and lack of ranch development expertise have hampered its progress.

### **iv. The Way Forward**

Ranching, while very important, is insufficient to effectively address the fundamental drivers of the farmer-herder crises, not only because of the challenges identified above but because of the complexity of the crises which calls for a multi-stakeholder intervention. As we deliberate today, I hope we critically consider the following issues.

First, the abysmal performance of the National Livestock Transformation Plan (NLTP) shows that we need far greater political will than has been demonstrated thus far. The NLTP appears to have great potential, but it requires community buy-in and the full cooperation of all levels of government.

<sup>3</sup> ECOWAS (2012) The Cross-border Transhumance in West Africa. Proposal for Action Plan

<sup>4</sup> International Crisis Group (2017) Herders Against Farmers: Nigeria's Expanding Deadly Conflict

<sup>5</sup> "MACBAN lauds efforts to tackle farmers/herdsmen clashes", Leadership, 26 April 2017.

<sup>6</sup> International Crisis Group (2021) Ending Nigeria's Herder-Farmer Crisis: The Livestock Reform Plan

Moreover, the modernization of the livestock sector cannot be left to the government alone given the need for financing and capacity building. We require support from private investors, the international donor community, and Development Finance Institutions (DFIs).

The Islamic Development Bank, where I work, recently provided financing for the Kano State Agro-Pastoral Development Project (KSADP) which includes the establishment of a 3000Ha Grazing Reserve. There is certainly space for other Development Finance Institutions to render support.

Second, we cannot talk about mitigating conflicts without reforming our security and justice architecture. There are far too many incidences of the Police failing to prevent attacks or protect people even when they had credible intelligence. Also, there is a widespread belief that perpetrators are hardly punished, and this has undermined public trust in the police.

There is therefore an urgent need to train our security forces on modern policing practices that may be more effective in addressing these issues. State governments should show more initiative in this area, for example, the Police Anti-Cattle Rustling squad in Kano state launched by HE Gov Abdullahi Umar Ganduje has helped to curtail the activities of cattle rustlers. This is an initiative worth emulating by other governors.

Moreso, multilateral agencies like the ECOWAS need to play a more active role in addressing the security situation as there is increasing evidence of the role of migrant herders in the proliferation of arms. The thriving and lucrative illicit arms trade in west Africa poses serious challenges to the implementation of the Transhumance protocol as it can provide an opportunity to transport arms across borders.

Fourth, states, and federal governments need to take the issue of climate change more seriously. We need strategies to mitigate the impact of climate change and to manage environmentally induced migration. Even though, we have a national policy on climate change, adopted in 2012, very little progress appears to have been made on its implementation. This must change.

Finally, distinguished conference participants, we need to continue to dialogue, not only at this level but also at the community level. It is very critical that we enhance engagement at the local community level, involving primary stakeholders, and led by traditional community leaders, to continuously and consistently engage, interact, build trust and establish more amicable ways to resolve disputes.

I hope these few issues highlighted here would stimulate our discussion. I encourage participants to share their rich perspectives, insights, knowledge and experience in a candid and constructive manner during these few days of the Conference.

I wish you fruitful deliberations.

Thank you.

# PROMOTING SUSTAINABLE LIVESTOCK PRODUCTION AND MITIGATING ASSOCIATED CONFLICTS

**Prof Eustance A. Iyayi**

Registrar/CEO,  
Nigerian Institute of Animal Science, ABUJA

## Protocol

I wish to thank the organizers of this Conference for inviting me to give the keynote paper on a subject that is of immense importance both to me as someone who is active in the Animal Husbandry industry as a practitioner and a regulator. Secondly, it is a subject that is of outmost importance to the nation, moreso now than ever before because of the huge potential that the Animal Husbandry industry possesses to earn foreign exchange for the country. Indeed a sector with value chain that employs millions of people and that has about 20.5 million others deriving their livelihood from it with a total value of about N33 Trillion should be given all necessary attention. Due to certain underlying factors, domestic supply of animal protein is growing at 1.8 percent while the overall demand is estimated to be rising at 51 percent. Also out of the estimated demand of about 1.7 million tonnes of milk, only about 692,570 tonnes are produced locally. The shortfall has to be imported at an annual estimate of about \$1.5 billion. Our meat consumption is 360,000 tonnes annually, accounting for half of all West Africa. Revenue in the meat segment amounted to \$30.68 billion in 2022 and the market is expected to grow by 8.79 percent in the next five years. Our demand for beef is met by importation of trade of animals from neighboring countries. For poultry meat, our national output is 551,000MT and demand is 1,080,000 MT leaving a supply gap of 529,000 MT.

## 1. The Role of Livestock Production to National Development

Agriculture in Nigeria provides livelihood for more people than any other industry. Growth in agricultural production and productivity has been influential in raising rural incomes, to support the increasing numbers dependent on the industry and to meet the food and raw material needs of the fast-growing urban population. Enhancing agricultural productivity contributes to industrial growth by providing cheap labour, capital investment, foreign exchange and markets for manufactured consumer goods (FAO, 2019).

Agriculture contributes to a significant part of the country's GDP. It is a key activity for Nigeria's economy after oil. Nevertheless, agricultural activities provide a livelihood for many Nigerians whereas the wealth generated by oil reaches a restricted share of people (Statista, 2021).

Livestock contributes nearly 40% of total agricultural output in developed countries and 20% in developing ones supporting the livelihood of at least 1.3billion people worldwide (FAO, 2013). Livestock is reported to provide over half of the value of global agricultural output and one third in developing countries which is viewed as a 'food revolution'. Livestock is capital asset, produced in the past and contributing to future product output. Investment in, or the acquisition of livestock involves saving or borrowing, justified by the expected future return on capital.

The Nigerian livestock sub-sector is very vital to the socio-economic development of the country and it represents an important source of high-quality animal protein contributing 36.5 percent of the total protein intake of Nigerians, generates employment, income and earns foreign exchange for the country. The livestock sub-sector in 2022 was estimated to contribute about 17 percent of the Agricultural Gross Domestic Product (GDP) and 5.0 per cent of the national GDP (Thisday Newspaper, 25<sup>th</sup> September, 2022).

The Nigerian livestock sector (with a population of 20.8 million cattle) has a huge potential such that if harnessed through sustainable production systems can contribute more than ₦33 trillion in earning, livelihood, and contribution to GDP as seen in other countries such as Botswana, Namibia, South Africa, the US and Netherlands. In Botswana and Namibia, livestock constitutes a relevant economic sector, representing, respectively, 80% and 70% of the national agriculture sector (Syed and Gomez, 2022). Additionally, livestock is a relevant driver towards social sustainability and food security. Animals participate in the household economy in a range of ways, from every-day work like traction to securing collateral, sustained income and thus livelihood. They provide a formidable source of high-quality protein that thus contributes towards food security. The same is the case in South Africa where livestock constitutes an important natural resource for the Southern African Region with over 60% of the region's total land area suitable for livestock farming, contributing significantly to Food Security across its communities with an estimated livestock population of 64 million cattle, 39 million sheep, 38 million goats, and an estimated 75% out of the above livestock population is kept under smallholder traditional farming systems (ECOWAS Commission and SWAC/OECD, 2008).

In the US, reports have it that the cattle industry had the highest agricultural value of production at roughly \$50.2 billion. The value of milk production was about \$38.1 billion, 9.8 percent higher than in 2020. In 2021, agriculture, food and related industries contributed 5.4 percent to U.S. Gross Domestic Product and provided 10.5 percent of U.S. employment. Americans' expenditures on food amount to 12 percent of household budgets on average. Among Federal Government outlays on farm and food programs, nutrition assistance far outpaces other programs (NASS, 2017).

Livestock plays a major role in sustainable food systems. For example, manure is a critical source of natural fertilizer while livestock used as draft animals can help boost productivity in regions where there is low mechanization. Livestock is an important asset for vulnerable communities. Globally, around [500 million pastoralists](#) rely on livestock herding for food, income and as a store of wealth, collateral or safety net in times of need. Locally, livestock production systems have the potential to contribute to the preservation of biodiversity and to carbon sequestration in soils and biomass. In harsh environments such as mountains and drylands, livestock is often the only way to sustainably convert natural resources into food, fiber, and work power for local communities (The World bank, 2022).

## **2. The definition and necessity of sustainable livestock production**

Livestock has provided crucial contributions for the human wellbeing in social and economic terms since the time of civilization and domestication of animals. Livestock systems have drastically evolved since then and in light of global challenges such as climate change, population growth and the urgency of ensuring the availability of nutritious and secure food for everybody. The optimization of sustainable livestock production is more important than ever.

*Sustainable livestock production is a production process that is aimed at making livestock systems economically more efficient and striking a balance between meeting the growing demand of animal-origin products and at the same time reducing to the minimum, the negative side effects and externalities from the livestock sector (Agrilink 2019).*

Livestock farmers are facing a number of challenges today. Demands for a lower impact on the environment, especially reducing greenhouse gas emissions, for more animal welfare and for less intensive production need to be balanced with a stable production and a good income. While there are challenges for livestock farmers, there are also many opportunities to increase the resilience and profitability of their farms.

Sustainable livestock management can offer ways to provide good feed to dairy cattle, help reduce livestock emissions, build up and store carbon in the soil, help mitigate the effects of climate change, and much more. Digitization and decision support tools can support farmers in better managing their livestock, for instance for more resource- and cost efficiency.

Sustainable livestock production usually focuses on references to financial, environmental, ethical, social and product quality issues. In addition to those considerations, sustainable livestock production also needs to address animal welfare issues.

*Keys to sustainable livestock production include;*

- extensive preplanning,
- knowledge of one's goals,
- understanding of marketing options and the ability to review and adapt plans as needed.

In order to be optimal, livestock systems need to promote advancements in the technological and infrastructural aspects of the sector and, at the same time, institutions and experts should support the progression of knowledge with policies that define and shape sustainable livestock development from a social, economic and environmental perspective.

a) *The current production systems*

Livestock production contributes to sustainability through use of uncultivable land for food production, conversion of energy and protein sources that cannot be used by humans into highly nutritious animal-sourced food and reduction of environmental pollution with agro-industrial by-products, while generating income and supporting livelihoods of millions of people all over the world. While livestock production systems generally contribute to sustainability, poorly managed livestock systems may have adverse effects on the environment and human and animal health and welfare.

There are different types of livestock production systems, depending on availability of resources, environmental conditions, and social and economic contexts, and they vary considerably in sustainability. These are extensive or pastoral system, the semi-intensive or agro-pastoral system and the intensive or commercial system.

- In the extensive animals' management systems, animals are moved from place to place in search of food, mainly grasses and water. This is mostly practice in Northern Nigeria by among the nomadic communities.
- In the agro-pastoral system, animals are being reared along with crops growing. Some animals are allowed to graze on demarcated range land and supplementary feeding are also given.
- In the intensive management system, animals are kept indoors, fed with high quality feeds, provided with adequate housing and medical care. Exotic breeds, especially dairy animals, are the one raised in this type of condition.

With increasing global awareness about climate change and studies indicating that livestock is one of the contributors to greenhouse gases, environmental degradation and loss of biodiversity. Various concerted efforts should be aimed at developing and or ensuring the sustainability of livestock systems that deliver economic and ecosystems services without compromising the future integrity, health, and welfare of the environment, humans and animals. Increasing competition for the requisite resources for feed and food production, especially under more intensive livestock production systems, has raised concerns about the economic and environmental sustainability of some livestock production systems (Intensive and Semi-intensive systems). Feed production and processing, and enteric fermentation of feed contribute to 45% and 39%, respectively, of the total emissions from agriculture. About 90% of livestock emissions are produced by ruminants through enteric fermentation (188 million tons) and the remaining 10% from manure.

This is important because, inadequately managed livestock production systems may cause negative environmental consequences such as eutrophication in intensive high input systems, overgrazing and soil and range land degradation in extensive systems and negative human health outcomes.

*b) The needed change in system for optimal productivity*

With increase in rural-urban migration, livestock production systems, and more so livestock markets, should be increasingly structured to satisfy the demand for animal source foods of urban dwellers. As Nigeria's rural infrastructure is still to be fully developed, in the next few decades the production of perishable livestock products will tend to move closer to consumption, with an increased number of market-oriented livestock operators emerging in peri-urban and urban areas. Already today, livestock density in and around urban areas is as much as high as in rural areas.

The way forward should be for livestock related policies and plans to focus on urban and peri-urban livestock farming and value chain that has specific focus on the prevention, detection and control of zoonoses, including (re)emerging zoonotic diseases, and of inappropriate use of antimicrobials in livestock. The government of Nigeria should support a One Health multi-disciplinary multi-stakeholder process to enhance the country capacity to deal with livestock related public health threats. The adoption of good practices along the urban and peri-urban livestock value chain to detect, prevent and control public health risks is a precondition for the sustainable development of the livestock sector, and of Nigeria's society as a whole.

The need for change in systems for optimal productivity should be focused on improving;

1. Good husbandry with health and welfare as first priority.
2. Reduction of stress with more natural rearing systems.
3. Optimal nutrition to promote animal health.
4. Housing to conform to ethological needs.
5. Limitation of group size.
6. Absence of mutilation.
7. Limitation of transportation to slaughter (8 hours maximum).
8. High standard in abattoirs.

*c) The benefits of Agro-forestry*

Agro-forestry is a sustainable method of protecting and strengthening our agricultural system needs that should be put in place. The need for this sustainable technique is ever critical to the ecosystem of marginal lands of the semi-arid area predominant in Northern Nigeria. A need for a strategy that can ensure the resource poor farmer maintains the benefits he derives from the farmland in a setting where artificial fertilizers are virtually beyond his reach becomes imperative, hence the practice of Agro-forestry.

Agro-forestry is defined as an intensive land management practice in which trees and/or shrubs are deliberately incorporated with crops in an agricultural setting. It can also be described as a "collective term for a land use systems and practices whereby woody perennials are intentionally integrated with crops and/or animals on the same land management unit (ICRAF, 2004). Leakey (1996) opined that agroforestry is a dynamic, ecologically based, and natural resource management system, in which socio-economic and environmental benefits in smallholder farms was diversified and sustained through the integration of trees on farms and on range lands.

The practice of Agro-forestry is also associated with numerous benefits to sustainable livestock production which are both economic as income generation and environmental such as decreased run off and increased infiltration rates among others. Depending on the type of environment and soil type of the particular farm plot, different tree-crops combination is used to get the optimum returns from the land. Areas in close proximity to protected areas can experience improvement in biodiversity and reduce the rate or restore degraded land altogether, thus aiding conservation of biodiversity. In cases where land is limited and susceptible to erosion, the practice offers viable benefits over long-term

agricultural sustainability. It is used as a tool that simultaneously reverses environmental degradation and at same time maintain sustainable agriculture to the rural and poor farmers.

Tantawi et al (2017) while studying the benefits of agro-forestry to sustainable livestock production among small holder livestock farming communities in Jigawa State enumerated its benefits as follows;

- a. Enhancement of soil fertility maintenance through nitrogen fixation via rooting system or litter fall,
- b. Consolidation of soil by organic matter thereby checking erosion are ecological benefits.
- c. Provision of fodder (animal feed),
- d. Provision of fuelwood
- e. Natural means of checks and balances for regulation of the environment.
- f. The nitrogen and water cycle also help to maintain ecological balance.
- g. Agro-forestry has the propensity to facilitate soil renewal.
- h. Trees and shrubs on farms help with this process of soil fertility refurbishment.
- i. environmental stability
- j. Income generation of agro-forestry to the resource poor farmers
- k. Provision of the soil, protective cover from accelerated erosion through reduction of velocity of runoff and increase in infiltration rate.
- l. Modifying of micro-climate through sheltering crops in the field from heavy draught.
- m. Trees yield suitable niche for the nesting of various species of aves (birds) support to companion crops on the farm

### **3. The Constraints of Feeding and Feeding Materials**

Animal feed and nutrition are the essential in the livestock production chain for sustainable livestock production. Surging demands and struggling supplies result in stressed surroundings in which livestock feed operators and farmers need to balance their activities continuously, taking into account livestock performance as well as customer, consumer and societal demands. As livestock feed contributes to up to 80% of the total costs in meat/milk production, and profits in the chain are usually under pressure, improving feed and feeding programs are important component of sustainable production systems in order to optimize productivity and efficiency.

#### *a) Feed quality and quantity:*

Natural grazing is the major source of livestock feed and livestock production in Northern Nigeria mainly depends on it. However, the grazing lands do not fulfil the nutritional requirements of the animal particularly in the dry season due to poor management and their inherent poor productivity and poor quality. With the inherent increase in population and migration, pasture lands are gradually been converted to farmlands while marginal lands unsuitable for grazing such as steep and waterlogged soils are the ones left for grazing.

Another challenge arises from environmental degradation rising from deforestation and overgrazing which continues to reduce substantially soil fertility and productivity. Gradual encroachment of cultivation into grazing lands is common in both highlands and mid-altitude areas. So many meadows in flood plains have been converted into croplands. Due to vegetation clearance many steep areas have become vulnerable to wind and water erosion. Important browse that was dry season forage has been wiped out to supply urban fuel and construction wood. Natural grazing land is deteriorating rapidly due to lack of attention and its carrying capacity declining due to high stocking rates especially in pastoral areas of the country.

*b) Soil Fertility*

The annual food and livestock feed deficit of the country is attributed directly to soil erosion and degradation of soil nutrient due to continuous cropping. This is because majority of our lands are cultivated without conservation measures.

*c) Land tenure/change of ownership*

In Nigeria, land ownership is communal, ethnic or managed by family. Grazing lands are unavailable in certain areas especially where individual acquire lands for their private investments. Beside the loss of grazing lands, investments and urbanization usually hinders the free movement of pastoralists and creating boarder conflicts.

*d) Water resource depletion*

The water used by the sector exceeds 8 percent of the global human water use. The major part of this is water used for feed production, representing 7 percent of the global water use. Although it may be of local importance, evaluating the effect water depletion has on the livestock sector is a much more complex process. The volume of water depleted is only assessable for water evapotranspiration by feed crops during feed production. This represents a significant share of 15 percent of the water depleted every year. The contribution of water depletion to the decline in feed production for the livestock sector is not easily quantified with our current knowledge but there is strong evidence that water depletion is a major driver.

*e) Grazing reserves and their challenges*

Grazing Reserves in Nigeria are areas set aside for the use of pastoralists and are intended to be the foci of livestock development. Grazing reserves resemble group ranches in that both consist of clearly defined areas of rangeland which provides grazing for determined herds of livestock. The stated purpose of Grazing Reserves is the settlement of 'nomadic' pastoralists; they offer security of tenure as an inducement to sedentarization through the provision of land for grazing and permanent water. Some of the challenges with the grazing reserves are that the limited forage resources are depleted by accidental and deliberate fires, herds are seasonally moved out of the grazing reserves to exploit crop residues in neighbouring farmers' fields, apart from these short-distance movements, some pastoralists with home bases on grazing reserves still practice transhumance, also the cultivators among whom the pastoralists now live were traditionally subsistence farmers with extensive swidden (slash and burn) agriculture. An unfortunate consequence of this situation is that all the most fertile pockets of land in the zone have been occupied. Grazing reserves cannot be sited in populated regions without dislocation of indigenous populations and consequent ill-will.

The challenge of food and feeding materials for sustainability is a global trend. And the volatility in food and feed commodity prices and even struggling supplies due to scarcity will continue. As a consequence, it affects livestock production. This could even become more serious, because of trade barriers often caused by lack of harmonized legislation, the great dependency on global sourcing and the competition between industrial, urban and agricultural users. It should not be forgotten that producing the additional food needed to feed all people and livestock in 2050 will require a 9 percent expansion of arable land, a 14 percent increase in cropping intensity and a 77 percent increase in yields (FAO, 2009b).

Improvement can also be made on the raw material side. Available feed resources are not always used and significant amounts of feeds are wasted because of improper storage. Moreover, novel feed resources need to be explored. Sustainability should be based on practices that aimed at meeting expected demand while curbing environmental impacts, they include improved feeding and feed use efficiency, improved digestibility, protein and mineral contents, optimally matching the animals' requirements, breeding and herd management. They contribute to the sustainable intensification of agriculture and provide many benefits for society.

#### **4. Livestock as Business in Nigeria**

Livestock farming is one of the most profitable businesses in the agricultural industry, it can be defined as the management and breeding of livestock for the purpose of consumption by obtaining their meat and products (milk, meat, wool, fur, etc.). livestock farming is the process of rearing animals for meat, milk (consumption), or labor purposes like plowing, irrigation, etc. As long as meat, leather products, milk, etc. are in demand, livestock production will always remain a profitable business. There are several ways to make money in this business. You can either go into dairy farming (milk production) or breed animals for their meat.

*Livestock production is a business with the following advantages;*

- Production of protein rich, high quality food products with good return on investment ranging from production, processing, by-products packaging, sales, marketing and distribution.
- It has a huge potential both for local and international earnings, contributing more than 40% of the contribution of agriculture to the global economy.
- It is one of our human activities that is truly sustainable, providing employment to many (farmers, butchers, transporters, service providers, input suppliers, sales and marketing distributors) as well as a source of income and livelihood to the rural people.
- It also has huge contribution to environmental sustainability through its contribution to the ecosystem and biomass through conversion of un-used energy from human activities as feeds and also conversion of its waste to energy, bio-gas and fertilizers for human utilization.

*The potential of maximizing high profit and return on investments for livestock production is dependent on;*

- a. Production of livestock and livestock products that the consumers are ready to pay for
- b. Providing a wide variety of products that can always be made available to the consumers
- c. Livestock and livestock products should meet up with safety and health requirement that are safe for the consumer
- d. Information on the products in the markets must be made available as well as their benefits.
- e. Products must be made available at fair prices and uniformity of products is also important.

#### **5. The Breeds of Beef and Dairy in Nigeria**

The popular breeds of cattle in Nigeria include White Fulani, Red Bororo, Sokoto Gudali, Adamawa Gudali, Wadara, Muturu, Ndama and Kuri. The Sokoto Gudali and White Fulani are dairy breeds, while the Muturu, N'dama, Adamawa Gudali, wadara etc. are predominantly reared for beef production.

- a. **White Fulani (Bunaji):** White Fulani is the most numerous and widespread of all Nigerian cattle breeds. It is estimated that, the white Fulani represents 37% of the national herd. They are found from Lagos to Sokoto, Katsina and Kano States and spread across the Nigerian Middle Belt. They are superior to all other breeds of Zebu in resisting diseases with the ability to thrive under a variety of conditions. The White Fulani cattle are, however, important for their genetic predisposition of hardiness, heat tolerance and adaptation to local conditions. The White Fulani is a triple-purpose animal, with milk production of 2,300 kg per lactation. It may be fattened for beef, kept for milk production, or used as draught animal, especially the bull. Crosses of White Fulani and Holstein recorded increased milk production at NAPRI-Shika, Zaria (Alphonsus et al., 2012).
- b. **Sokoto Gudali:** Gudali represents 32% of the national herd. There are two quite distinct types of Gudali in Nigeria: The Sokoto Gudali (Bokoloji) and the Adamawa Gudali. The Sokoto Gudali stereotypically occurs mainly in the North-West of Nigeria, but in reality, it is now distributed widely throughout the country. The Sokoto Gudali is a uniform cream, light grey or dun, the dewlap and skin

folds are highly developed and the horns almost absent. The hair is short and the skin is thick and pigmented. The ears are pendulous and are useful milkers. Their milk yield at the National Animal Production Research Institute (NAPRI), Shika was higher than that of White Fulani (Alphonsus et al., 2012). The udders in the female are well developed with good teats, hence they are regarded as indigenous dairy breed. At maturity, the female weighs an average of about 330 kg, while the male weighs about 450 kg. The female produces an average of 1,500 kg of milk per lactation (Payne & Wilson, 1999).

- c. **Adamawa Gudali:** The Adamawa Gudali, as its name implies, is restricted to Adamawa. It is estimated that, Adamawa Gudali represents 2% of the national herd. At least two local types were originally recognized in Nigeria: the Banyo, with Rahaji blood and rather large horns, often with a white face and red eye patches, and the Yola. The Adamawa Gudali resembles the Bunaji in conformation. It is medium to large sized, with medium length horns and usually pied, however, the pendulous hump is the feature that most reliably distinguishes it from the Bunaji. Many farmers regard Adamawa Gudali as the indigenous race of the region and they are common in villages, where they are favored for ploughing, but when they become too large to pull a plough effectively, they are further fattened in the compound and sent to market.
- d. **Wadara:** Wadara cattle, another Nigerian breed, are medium-sized, lightly built cattle, and are usually dark-red, black, pied or brown. They are short horned and have a small erect hump, representing some 6.6% of the national herd. Wadara cattle are the 'indigenous' cattle of Borno and are referred to by the Koyam and related pastoralists as 'our' cattle. They are frequently called 'Shuwa' in the literature, after the Shuwa Arabs who, also, herd them.
- e. **Muturu:** The West African dwarf short-horn or Muturu is small bodied, and blocky in conformation with short, fine-boned limbs. It has a compact body, no hump, a straight back, and a broad head. The face is slightly dished, and the horns are very short. In South-Central Nigeria, the Muturu is generally black, or black and white. The Muturu on the Jos Plateau itself are usually black and white but are distinctly larger than the low-land animals. There are more variations in the Northern populations; where brown, red or tawny animals are recorded. Within Nigeria, Muturu cattle have a very disjointed distribution, suggesting, a gradual retreat of a once more widespread population.
- f. **N'dama:** N'dama cattle are native to Senegambia and adjacent parts in the West of West Africa and were first brought into Nigeria from Guinea in 1939 on an experimental basis, because they were trypano-tolerant and yet were larger than Muturu. The N'dama has a medium-sized compact body with lyre-shaped black-tipped horns and no hump. There is a small dewlap in the male, but a fairly large head. Although those imported into Nigeria are generally light brown, there are black and pied animals in Guinea. N'dama cattle have been sold to farmers and pastoralists with a view to improving the resistance of local herds to trypanosomiasis
- g. **Kuri:** The Kuri is a large-bodied humpless long-horn, whose exact historical origin is unknown. The Kuri has distinctive, inflated, spongy horns unknown in any other breed and with a mean height of 1.5 m, and weight up to 550 kg. It is one of the largest breeds of African cattle. Kuri is noted for their extremely variable colors and their ability to thrive in semi aquatic conditions. The nucleus of the Kuri cattle population is within the region of the former Lake Chad, and along its eastern shores. In Nigeria, Kuri is found not only on the Lake but on its shores and along the Yobe valley, as far west as Gashagar. There is, also, a restricted export of the Kuri as traction animals to the region North-East of Kano. The breeds along the Komadugu Yobe are crossed with the Zebu and are generally referred to as Jetkoram.

## 6. Quality Beef Characteristics

Beef production in Nigeria, in particular, is by pastoralism with only few entrepreneurs doing cattle fattening as an additional source of income. Most of the cattle produced in Africa are dual-purpose with no stratification

and specialty in the industry. The common breeds in Nigeria suitable for beef production are the Boran, Muturu and N'dama which are widely distributed in the southern Nigeria. The body measurement exhibits high significant difference to the breeds as to body weight, wither height and body length.

*The Characteristics of Cattle to be used for Beef Production includes;*

- a. **Body size** is best evaluated as weight at a stated level of condition or body fatness. Weights, at all ages, tend to be positively related: That is, cattle heavier at birth tend to be heavier throughout life, though there are exceptions. Genetically larger animals usually gain weight faster, and weight and nutritional requirements for body maintenance are closely related.
- b. **Hot climate adaptability** Animals with lighter colored, short hair coats and dark skin are most adapted. High humidity intensifies effects of heat, especially since hot, humid climates often add the stresses of parasites and low-quality forage. Heat with humidity stresses cattle that fail to shed long, thick hair coats, particularly dark-colored ones. As might be expected, animals tolerant to hot climates are less adapted to cold.
- c. **Fleshing ability** is the body's capacity to fatten and retain fat. Fleshing ability tends to drop with increases in genetic body size, maintenance requirements relative to size, milking level, and inherent muscularity. Animals poorly adapted to their environment generally are low in fleshing ability. Easy-fleshing cattle tolerate periods of nutritional energy deficiency more easily and therefore may reproduce more consistently, but they also over fatten more readily in the feedyard unless properly managed.
- d. **Muscle expression** is inherent muscularity, independent of other body tissues. Muscling is the second most important factor in cutability. Heavy-muscled types often are low in fleshing ability, so reproductive efficiency may be reduced.
- e. **Cutability** depends on relative amounts of fat (which varies greatly), muscle, and bone (which varies least). When genetic types or breeds are compared for differences in cutability, it is assumed that the breeds have similar nutrition levels. But producers can readily alter inherent cutability differences by varying nutrition to achieve similar degrees of fatness.
- f. **Marbling**, or Intra-muscular Fat is the primary indicator of the palatability factors of tenderness, juiciness, and flavor. Marbling increases with age up to physiological maturity and generally is higher in earlier-maturing and higher-milking types. most heavy-muscled, low-milking types have relatively low marbling. Because marbling relates somewhat to body fatness, especially in comparing breeds or types, there is usually a trade-off between yield grade and quality grade. As one increases, the other decline.

## **7. Quality Milk Characteristics**

The major functional traits important in beef production include body size, milking potential, age at puberty, hot climate adaptability, fleshing ability, muscle expression, cutability and marbling.

- a. **Dairy Character:** This indicates that a cow shows evidence of being a good producer. A cow with good dairy character is one who is sharp, particularly at the shoulders and withers, and one who shows no excess flesh or fat. A long, lean neck showing refinement and not coarseness is desirable. Thickness at the shoulders, neck, withers or thighs indicates a lack of dairy character
- b. **Dairy Cattle Type:** This refers to body conformation or physical appearance. Type is controlled by structure of bone and other body components and how well all these components fit together as a unit.
- c. **General Appearance:** This refers to the how the cow looks overall. If a cow is immediately attractive being large, straight, well boned, having style, balance and being feminine, we consider her good in

general appearance. Some terms which describe cows of good general appearance include: straighter topline, size and scale, length and stretch, substance of bone, style and balance, straighter and stronger rear legs, longer flatter rump, and width at hips and pins.

- d. **Mammary System:** This refers to the udder and teats. Since we are concerned with dairy cows, the mammary system is of prime importance. To produce large quantities of milk, cows must have sound udders which will remain strong and not be subject to disease or physical damage. A good udder is one that is large, spacious and well balanced. It should be firmly and smoothly attached in both front and rear. The udder should extend well up under the belly wall and should be level on the floor. A desirable udder is uniformly wide from top to bottom when viewed from the rear. The rear attachment should be high as well as wide. Teats should be of uniform size and shape. They should be squarely placed and should point straight down.
- e. **Body Capacity:** This indicates a cow's ability to consume large quantities of feed and thus greater milk production potential. All cows have the same number of ribs, so those cows with ribs that are wider and farther apart have longer bodies and those with longer ribs have deeper bodies. Length, width and depth of body all determine capacity. Width and depth of chest are associated with good body capacity. The chest cavity serves as the container for the heart and lungs. Maximum space is desired for adequate heart and lung capability. Some terms used to describe good body capacity include: deeper and fuller in the heart, depth of fore rib, depth of rear rib, depth of body, length of body, width of chest, and spring of rib.

*The various economic characters in Dairy Cattle management are;*

Lactation yield

- Lactation period
- Persistency of yield
- Age at first calving
- Service period
- Dry period
- Inter calving period
- Reproductive efficiency
- Efficiency of feed utilization
- Disease resistance.

## **8. The Market Potentials**

Marketing encompasses all business activities associated with the transfer of a product from the producers to the consumers. It is concerned with the movement of cattle from the pastoralists in the production locations in northern Nigeria to the final consumers who are resident in southern Nigeria. Arbitraging is necessary to enhance the efficient working of cattle markets, which is vitally important in achieving sustainable and profitable agricultural commercialization in the livestock sub-sector in Nigeria (Mafimisebi, 2011). This is because marketing is an economic activity which stimulates further production and if efficiently done, both the producer and consumer get satisfied in the sense that the former gets a sufficiently remunerative price for the product to continue to produce while the latter gets it at an affordable price that stimulates continued consumption.

Nigeria is one of the leading countries in cattle production in sub-Saharan Africa. Cattle production and marketing are notable employment and income-generating livelihood activities for many Nigerians. Cattle and beef trade provides the largest market in Nigeria with millions of Nigerians making their livelihood from various beef related enterprises (Umar et al., 2008). Consequently, the outcome of enhanced production and

marketing of cattle and its products carry the potentials to better the income and nutritional status of households and positively impinge their living standard. Efficient marketing plays an important requirement in the attempt to achieve wider accessibility and affordability of any product to consumers

The livestock industry in Nigeria could be valued at least N50 trillion over the next decade if all the right structures are put in place. The industry is worth at least N30 trillion if the proper infrastructure for value chain development, expansion and sustenance, financing, research and development for new breeds, and capacity development of operators are in place. The current worth of the industry would therefore constitute approximately 20 per cent of Nigeria's Gross Domestic Product, and more than 30 per cent at the rate of the 10-year projected figure against today's GDP.

## **9. Herders-Farmers Conflict (Conflict as absence of wisdom)**

From the author Thomas Crum (author and presenter on conflict resolution and stress management):

*"The quality of our lives depends  
not on whether or not we have conflicts,  
but on how we respond to them"*

Farmer-herder conflicts in Nigeria, which were predominantly in the North-Central region, have spread across the country. The conflicts result in indiscriminate and avoidable loss of thousands of lives of individuals, destruction of large hectares of farmlands and properties, displacement of individuals and communities from their ancestral base, increment in the number of IDP camps, drastic reduction in farming activities, crop yield and food security and promotion of insecurity all over the country to the detriment of our national economy and development.

Attacks have also taken place in the northwest Nigeria against farmers who are mainly Hausa. While the conflict has underlying economic and environmental reasons, it has also acquired religious and ethnic dimensions. Thousands of people have died since these attacks began. Sedentary farming in rural communities is often target of attacks because of their vulnerability. There are fears that this conflict will spread to other West African countries but this has often been downplayed by governments in the region. Attacks on herders have also led them to retaliating by attacking other communities.

## **10. Immediate and Remote Causes of Herders-Farmers Conflicts**

The causes of conflicts between farmers and herders must be well established before any meaningful strategies for prevention/management may be proffered. In this presentation attempt was made to categorize the causes of the conflict into two: immediate and remote causes.

**Immediate causes:** The immediate causes are the ones that can trigger off conflict here and now. They include destruction of crops by cattle, contamination of drinking water sources, and sexual harassment of women by herders and by farmers, harassment of herders by youths, cattle rustling, indiscriminate bush burning and disregard to constituted authority.

*i) Destruction of crops by cattle:* It is a well-known fact that destruction of farmers' crops by cattle will result to conflict. Such destruction of crops can be perpetrated by straying cattle or in the presence of herders and some times in the presence of herders and farmers. Researchers agree that the most frequent cause of conflict is destruction of crops (Tonah, 2006; Ofuoku and Isife, 2009). This kind of conflict is generally of immediate nature because the farmer feels that his or her livelihood is threatened. Recently, conflict of this nature has taken place in Enugu, Benue, Plateau, Oyo, Ekiti, Ondo to mention but a few.

*ii) Contamination of drinking water sources:* It is generally known among farmers and herders that cattle need drinking water just like human beings. However, the bone of contention is usually when cattle destroy

or contaminate the source of drinking water by defecating in such water or when herders allow cattle to overgraze on areas at the source prohibited for entry by the host community. This can trigger off immediate conflict between farmers and herders. In some of the villages, sources of water for domestic purposes have either been destroyed or polluted which informs the reaction of the affected communities to the invasion of the herdsmen. Also, since the herdsmen see water as common resources to which they can lay claim they insist on their right to use it resulting to conflict with its effects on sustainability of environment in terms of socio-political and economic development (Tenuche and Ifatimehin, 2009).

*iii) Sexual harassment of women:* It has been reported of cases of herders harassing women and girls who go to do their farm work and vice versa. Ofuoku and Isife, (2010) report that major source of conflict is rape or sexual harassment. The herders who are singles in a bid to satisfy their thirst for females fall into such temptation. For instance, Falino (2015) report that hundreds of people, mostly women, from Ahaba Imenyi in Isuikwuato local government trooped to Umuahia, the Abia State capital on Friday to protest the invasion of their farmlands by Fulani herdsmen, whom they accused of not only destroying crops but sexually harassing women who go to farms. A woman leader in the distressed community, Mrs. Victoria Ifeanyi chukwu said that the community had been pushed to the wall as women had stopped going to the farms due to the incessant sexual harassments and attempted rape by the herdsmen.

*iv) Harassment of herders by youths:* The youths in host communities are usually the vanguards of local authorities. They are the members of village/town Vigilante group. In the case of destruction of crops or sexual harassment, they are usually sent to go and invite the herders or sometimes they go on a reprisal mission. The herders after wilfully committing an offence prepare themselves for any eventuality which usually results to conflict. Angry youths of Aku community in Igbo-Etiti Local Government Area of Enugu State have carried out a reprisal attack on Fulani herdsmen in the area. The villagers were angry over the destruction of their crops by cows and the continued harassment by the armed herdsmen (Staff-writer, 2016).

*v) Cattle rustling/killing of cattle:* The case of rustling/killing of cattle is mainly as a result of earlier misunderstanding or damage perpetrated in the host community. It is not a common occurrence for people to steal/kill herders' cattle for no just cause. For instance, crop damage may compel farmers to poison crops/grasses so that cattle which graze on them may die. Cattle rustling can also be due to criminality. There are notorious cattle rustlers in communities who invade cattle holdings in other communities and make away with the animals. This again is a call for conflict. As reported earlier in the case of harassment of herders by youth of Aku community in Enugu State, the herdsmen also accused the youths of slaughtering their seven cows and rustling of 100 cows (Staffwriter, 2016).

*vi) Indiscriminate bush burning:* During the dry season, herders find it difficult to feed their cattle. And so, before the onset of rainy season, some of them set bushes on fire, which sometimes escalate into the farm and destroy both harvested and un-harvested crops. Similar incident was reported in Delta State. Nigerian Journal of Rural Sociology Vol. 16, No. 2, 2015 87 According to Ofuoku and Isife (2010), during the dry season, grasses and forages dry up and herdsmen believe that if the dried vegetation is burnt, fresh pasture would regenerate. In the process of burning, the fire spreads into adjoining farms destroying crops in farmers' farm.

*vii) Disregard to constituted authority:* Rural communities in Nigeria have power structures made up of traditional rulers, chiefs, village/town unions etc. These local authorities have rules and regulations as well as means of embarking on rural development projects to better their lives and assist the government in community development. Since community development is for everybody, if cattle herders fail to cooperate with the host community, it can lead to instant conflict. The youth vanguards may slug it out with cattle herders if they fail to cooperate with local authorities. Ofuoku and Isife (2010) report that herdsmen refuse to pay development levies imposed on crop and livestock/poultry farmers by traditional authorities in their host communities. This is usually taken as disregard and insult by the traditional authorities who always want to exert their authority. The youth as the local security outfit are sent to collect such levies when the herdsmen

fail to pay. They always meet stiff resistance from the herdsmen when the youths try to exercise the power given to him.

**Remote causes:** The remote causes are hidden causes which may not be apparent in farmer-cattle herder relationship but yet a potent force that fuels the conflict. They include ethnic and religious inclination, poverty, effects of climate change and rapid population growth.

*i) Ethnic and religious inclination:* Ethnic rivalry is one of the factors indirectly fueling farm-cattle herder conflict in Nigeria. According to Klare (2001), these conflicts often appear to be ethnic - and indeed may have evolved into such - but they risk misinterpretation if scholars ignore their origins in resource disputes. In Nigeria, there is always lack of objectivity in considering issues of resource conflicts even among security agents drafted to quell a rising conflict probably because of ethnic and religious inclination. This scenario breeds a lot of ill feeling and exacerbates the conflict. The herders who belong to major ethnic group (Hausa-Fulani 29% of Nigerian population- Mikailu, 2016) are always bold and daring in issues of farmer-cattle herder conflict. Again, religion is another potent hidden force in escalation of farmer-cattle herder conflict. And so, where such conflict arises in communities dominated by Christians and the cattle herders are mostly Muslims, religious sentiments become the order of the day. In the past, such clashes were confined to Nigeria's central region, with the mainly Christian Berom farming community in Plateau state engaging in tit-for-tat killings with Muslim nomadic herders (Mikailu, 2016).

*ii) Poverty:* The worsening poverty in most African States including Nigeria may be responsible for escalating conflict in the region. In Nigeria, the people directly involved in farmer-cattle herder conflict are mostly rural poor farmers and cattle herders who may not be the real owners of the herds. The farmers see their crops as their last hope for survival while herders' wages are fully tied to proper feeding and protection of the herds. This situation makes conflict inevitable even though it may not be seen as direct cause of the conflict.

*iii) Effects of climate change:* Currently, climate change is threatening the existence of vast areas of natural resources both of plant and animal origin. The effects of climate change is drying up the Chad basin and causing desertification in the North thus forcing herders to move southward in search of water and grasses for the herds. In the south the pressure of development and deforestation is compounding the effects of climate change and less and less land is left for farming and even lesser for grazing purposes. Some water bodies are also drying up. This situation ultimately leads to conflict between farmers and cattle herders. Mikailu (2016) confirms that the problem may get worse in coming years as climate change and desertification push migrant herders farther south. Dawn (nd) reports that pastoralism is being seriously affected by new environmental and social forces exemplified by climate change and government policy restricting movement and other practices. Changing climates have a significant influence on pastoralists who pursue environmentally dependent livelihoods. In harsh hot or cold landscapes the ability to obtain adequate fodder to fatten animals is the endemic challenge. Shifts in weather patterns, seasonality of precipitation and recharge of sub-surface water sources are vital to the viability of herding.

*iv) Rapid population growth:* The world's human population is expected to grow by about three billion people between now and 2050 (rising from 6.2 billion people in 2002 to about 9.3 billion in 2050). Obviously, all of these additional humans will require food, shelter, clothing, energy, and other necessities (Klare, nd). According to the author, the highest levels of population growth are located in areas where the availability of some vital resources is in doubt. This is especially true for two critical materials: water and arable land. Severe scarcities of both have already developed in parts of Africa, Asia, and Latin America where population rates are especially high. This could lead to intense competition for access to these resources in the years ahead. In particular, it could provoke conflict over the distribution of shared water resources in such areas as the Nile and Jordan river basins, where water is already scarce and the combined population is expected to triple over the next 50 years. In Nigeria, Aidi et al. (2016) note that Nigeria population at the

moment according to World Bank is roughly 185million even though the last population census in Nigeria back in 2006 revealed about 140million. According to them, the frightening rate of expansion (in population size) as against the limited available resources makes economic growth difficult to achieve thus formulation of policies to address this problem becomes inevitable. However, Oramah (2006) focuses more on the impact of population growth on non-renewable resource consumption and depletion, land degradation and waste disposal, weather modification, rapid urbanisation and even desertification. Abbass (2005) asserts that as population grows, more land is being cultivated and less is available for pasture; forcing Fulani herdsmen in northern Nigeria to migrate and tramp on crops cultivated by farmers. For example, Nyong (2010) is of the opinion that with the expansion of population, the rate of food production would naturally increase and to meet that increasing demand, it is natural for the farmers to encroach into marginal lands that had been the traditional pasture routes for the cattle. This has therefore heightened struggle between livestock and agricultural production which, more often than not, result in the escalation of conflicts.

## **11. Negative effects of Herder-Farmer Conflicts**

*i) Food Security:* Herder-farmer conflicts do not only have a direct impact on the lives and livelihoods of those involved, but they also disrupt and threaten the sustainability of agricultural and pastoral production and invariably the sustainability of livelihoods of rural communities (Ukamaka *et al.*, 2017). These conflicts reinforce circles of extreme poverty and hunger, and destroy social status, food security and affect mostly the most marginalized groups that including women and children. The livelihood structure, food security and wellbeing of farmers are threatened and compromised which contribute to poverty, food and nutrition insecurity and poor health of farming communities, and further escalation of conflicts. The instability caused by the incessant conflicts will likely lead to food shortages for the communities that depend on subsistence farming.

*ii) Environment and livestock production and sustainability:* Herders-Farmers conflict has led to the wanton destruction of material resources. It has also facilitated land degradation as conflicts often destroy the physical environment. Open grazing especially when there is overindulgence, is a primary contributor to desertification because it converts arable or pasture land into unproductive land. The resultant soil is thus no longer suited for growing food since it loses its essential nutrient source. The loss of productive land directly results in the loss of available crops for consumption. This heightens food supply reduction and if population growth remains unchecked, it causes starvation and other economic challenges. The long-term effect of this is food shortages which can make people die of starvation. Without sufficient pasture for livestock grazing, herds lack the necessary nutrients for survival. The nutrient deficiencies make the animals unable to gain weight appropriate to their productive stage and life which lowers their chances of survival. Human survival levels, well-being, and health are as well affected when there is an inadequate food supply for consumption with the results being acute starvation and death of both people and livestock (Chukwuemeka *et al.*, 2018).

*iii) The Economy:* The conflict between the herders and farmers has prompted a reduction in not just the farmers' outputs but also the income of farmers owing to the destruction of crops. In states like Kaduna, Benue, Kebbi, Taraba, Katsina, Yobe, Jigawa, Plateau, Nasarawa etc, various food crops such as maize, guinea corn, millet, hungry rice, cassava, wheat, yam, rice, potatoes, were either destroyed, looted or burnt down in homes, food stores and markets; farmlands were either seized or food crops destroyed by the herders while cattle were either rustled or killed by the farmers. This is ironic to the Federal government's call to return to agriculture to boost the ailing economy and food production. As a result of the conflict, a lot of farmers have lost their farm produce in the conflicts, which affects earning capacity of both parties bringing about the shortage in the food supply in the nation at large.

## **12. Strategies to mediate and/or mitigate herders-farmers conflict**

The motivation to seek strategies to prevent/manage conflict lies in the fact that the costs of conflicts are much more than the costs of preventing them. The efforts in preventing/managing conflict lie on thorough understanding of causes of the conflict. Strategies to mitigate farmer-cattle herder conflict include:

- i) *Creation of awareness of climate change:* That the land resources are threatened by the effects of climate change is no longer in doubt. According to Adebisi-Adelani and Oyesola (2014), climate change has become a major challenge to agricultural development in Africa and the world at large. It threatens agriculture production through rising temperatures, changes in rainfall patterns or the increase of drought. They emphasize that farmers have to live with the realities of climate change to be able to manage the situation and to maintain their enterprise. And so, there is need to create awareness on climate change to both farmers and cattle herders and teach them the dangers of climate change as well as how they are affected by the scourge. A farmer burning his land after clearing and cattle herders burning the bush for fresh grasses to re-grow are doing themselves more harm because they are aggravating the cause of climate change. For instance, when fertility of the soil is reduced by climate change, farmers tend to increase their hectares to leverage up and this in turn reduces the area used by herdsmen to feed their cattle.
- ii) *Tree planting campaign:* Tree planting campaign should be intensified in different parts of Nigeria to wage a war against increasing desertification and deforestation ravaging the country. Both farmers and herdsmen should be enlightened on how they are affected in the process. The desertification is adversely affecting water resources which are vital for both of them. Again, deforestation exacerbates the cause of climate change. And so, addressing these challenges in timely fashion may prevent herder-farmer conflict in future.
- iii) *Use of improved technology:* The use of improved technology will help farmers and herdsmen increase their yield without necessarily increasing their hectarage. Agricultural extension workers must be empowered to update farmers and herdsmen on the best practices to remain in business. For instance, herdsmen should be trained on how to prepare and use supplementary feeds to augment cattle grazing. This will reduce the distance they cover in grazing their animals.
- iv) *Creation of awareness on control of population:* The world's human population is expected to grow by about three billion people between now and 2050 (rising from 6.2 billion people in 2002 to about 9.3 billion in 2050). Obviously, all of these additional humans will require food, shelter, clothing, energy, and other necessities (Klare, nd). Although, the control of population cannot be done in a day, awareness of the possible links between increase in population and availability of land for farmers and herders should be explained to the stakeholders. Both government and non-governmental organizations must intensify their efforts in encouraging the stakeholders to control their birth rate.
- v) *Symbiotic farm project:* The need for farmers and cattle herders to coexist cannot be overemphasized. The fact remains that both farmers and cattle herders can benefit from one another. Oyama (2014) reports that Hausa farmers and Fulbe herders have established a contract; governing livestock grazing. The herders seek to establish contract with the farmers to camp on their farm land for a few weeks to several months. In the process, the cattle provide excreta while farmers provide substantial meals and pay bonuses after the end of the contract (Shinjo, et.al, 2008). This kind of symbiotic project can also be established in the southern part of Nigeria as one of the means of preventing future conflicts.
- vi) *Establishment of peace-building Committee:* In order to promptly address possible conflict between farmers and cattle herders, peacebuilding committee should be established in host communities and members made up of all stakeholders. The committee should also agree on fixed date for meetings to discuss issues that may later lead to conflicts. Members of the committee should be made up of men or women of integrity. The committee should be able to prepare rules and regulations guiding their corporate existence.

*vii) Establishment of open communication channels:* In most of the recent conflicts between farmers and cattle herders in Nigeria, the issue of unresolved differences have become a recurring decimal. There is overwhelming need to establish open communication channels for all stakeholders to report issues that are hurting them. The peace-building committee should be one of them. There should be hotline established to take care of certain issues that require urgent attention.

*viii) Inter-religious dialogue:* There is no doubt that one of issues escalating farmer-cattle herder conflict is religion. The peace-building committee from time to time should create forum for religious dialogue. Although this is done at national level, it should be replicated at rural community levels.

*ix) Payment of compensation:* The peace-building committee must ensure that adequate compensation is paid to the person whose crop or animal is wilfully destroyed. The guidelines for offences and appropriate compensation must be determined before the offence is committed. Oyama (2014) stresses that the rate compensation must be reviewed in meetings of Hausa and Fulbe chiefs and the elder Hausa village headmen every June before farmers sow seed. This should be tried in all the host communities where the herdsmen are located.

*x) Establishment of grazing land policy/Adoption of Ranching Policy:* It is generally being suggested that one way to ensure sustainable peace and development among herdsmen and farmers in rural communities of Nigeria is to have a designated area set apart by law for grazing of cattle. Already, a bill for an act to establish grazing reserve in each of the states of the federation of Nigeria to improve agriculture yield from livestock farming and curb incessant conflicts between cattle farmers and crop farmers in Nigeria has been enacted by the National Assembly of the Federal Republic of Nigeria. Hon. Sadiq (2016) sponsored a bill titled “NATIONAL GRAZING RESERVE (ESTABLISHMENT) BILL 2016”. The bill when signed by the President of Federal Republic of Nigeria becomes the law guiding grazing of cattle in the country. It is expected that the states and local government areas will comply with provisions of the bill for lasting solution of incessant conflicts between farmers and herdsmen. However, there seems to be strong opposition to the bill especially in the Middle Belt and southern part of Nigeria. For instance, Ekiti State government had already passed a law titled “prohibition of cattle and other ruminants grazing in Ekiti 2016” which criminalizes grazing in some places within the state and outside certain period in the day. The truth remains that animal ranching as against grazing of animals in free range as it is presently practised will go a long way in mitigating farmer-herder conflict in Nigeria. This is currently the global best practice in animal production.

*xi) Early warning mechanism:* Throughout history, human beings have sought to warn and be warned of future calamities. From shrill-voiced soothsayers to cold war military strategists, the objective has always been to accurately predict impending dangers, usually in order to avoid them or, at least, to be better prepared for them (Dorn, 2013, cited in Nwaneri & Uwakwe, 2017). In contemporary conflict prevention and management strategies, early warning mechanism and response has been introduced as an instrument. Indeed, it is gradually becoming a prerequisite for conflict preventive and management actions. Where prevention fails, early warning serves a later purpose. By being aware of the nature and antecedents of an escalation of violence, conflict management practitioners can consciously plan, if not to stop it, then to mitigate its effects and to shorten its duration. Early warning refers to “the communication of information on a crisis area, analysis of that information and the development of a potential, timely, strategic response options to the crisis” (Adelman, 1998). According to Haye (2014), early warning is basically concerned with prevention, mitigation or management of violent conflicts within a geographical landscape. Haye went on to distinguish between early warning system and intelligence system. He argued that early warning is not concerned with a direct threat to the gatherer or analyzer of the information, or those contemplating a response. According to Onuoha et al (2006), Early Warning is a process of reading specific indicators as signals and patterns of signals, and translating those patterns into kind of anticipation of the likelihood of the emergence or escalation of violent conflict. It entails the trends, sparks and triggers of conflict that can provide data for forecasting the emergence of conflict. Providing further insight on the

definition of early warning, Matveeva (2006) posited that early warning include three elements, namely: knowledge and hazard mapping, monitoring and forecasting impending events, processing and dissemination of understandable warnings to political authorities, security agencies and other relevant stakeholders, as well as adoption of appropriate and timely action in response to such alerts.

xii) *Animal Identification and Traceability System:* This refers to keeping records on individual farm animal or group of farm animals so that they can be more easily tracked from their birth through the marketing chain. Historically this system was intended to indicate ownership and prevent thievery. Despite some cons against the system the benefits include enhancement of animal health and surveillance and disease eradication, minimizes the economic impact of an animal disease outbreak, increases domestic marketing opportunities, provides a valuable management tool for producers, addresses food safety and national security concerns, enhances foreign marketing opportunities for animal products, enhances animal welfare in response to natural disasters. The cons claim it constitutes an invasion of privacy, increases cost and technical complexities, rewards vertical integration at the expense of family farms, disadvantages family farms with a lack of market power in price structure, is objectionable on religious grounds (in that marking individual animals is an apocalyptic sign of the world coming to an end and should therefore be avoided), and other potential reasons for producer push-back.

### **13. Understanding the skills reserve of herdsmen and the national skills qualification framework: the NIAS agenda**

A herder is described as a pastoral worker responsible for the care and management of a herd or flock of domestic animals, usually on open pasture. It is particularly associated with nomadic or transhumant management of stock, or with common land grazing.

Today, about 20 million Fulani inhabit West Africa, and are spread across ten countries where the majority are found in Nigeria (7 million), Guinea (4.7 million), Mali (2.8 million), Niger (1.5 million), Cameron (700,000), Chad (138,000) and Sudan (90,000) (Ezeonwuka and Igwe 2016). They have the requisite skills and provide care (management, breeding, healthcare etc), feed and protection for the over 20.7million cattle in Nigeria and over 70million cattle in Africa. They constitute a major component of the labour force with huge benefits to the Nigerian economy (FAO, 2018).

Meanwhile, it is highly unfortunate that over the years not much has been made to improve on their education, knowledge and skills in this trade so as to engender personal development that will culminate into more national and economic development for the nation at large considering the contribution of the livestock sub-sector to the GDP.

This is why the Nigerian Institute of Animal Science resolved to key into the National Skills Qualification Framework (NSQF) of the National Board for Technical Education (NBTE) to provide training and assessment of the competences in skills related to Animal Husbandry where qualifications can be awarded to competent learners empowering such to practice as qualified herdsmen in farms, ranches and livestock established all over Nigeria.

The Institute believes this programme will help sharpen their skills, knowledge base, exposure to innovations and best practices that will ensure efficiency, profitability and improved productivity in their trade, making them employable and probably export labour to other parts of the world where such skills will be relevant. This is one of the reasons for the establishment of the Livestock Innovation Center in Kabo, Kano State which is designed to be the Hub of the NSQF program for Animal Husbandry in Northern Nigeria.

The Institute has done a lot of work in that regard including the development of National Occupation Standards (NOS) for Beef and Dairy production, training of Quality Assurance Assessors (QAA) to provide trainings and assessment of competencies, mobilization of government, industry and private sector

stakeholders required to drive the skills qualification programme, as well as creating awareness on the need for skills qualification for national and economic development.

In mitigating herders-farmers conflict let us recall the word of late Nelson Mandela, for President of the Republic of South Africa, I quote

*"If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language, that goes to his heart"*

## 14. CONCLUSION

### The Role of Research and Development

Except a nation makes deliberate efforts to upscale its research, development will hardly be attained. Our nation has to pay full attention and commitment to research and innovation as twin tools for the development of our livestock. We advocate a Triple Helix Model that loops Research/Innovation with Industry/Development and with Government Policy. Research is needed to drive development along the value chain of the livestock production system, from primary production to market to the overall benefit of our national economy. Research supports the development of animal agriculture in many ways, perhaps the most important being the **enhancement of livestock productivity which leads to a more efficient utilization of available resources**. Strategies should thus embody the following concepts: adequate economic returns to livestock farmers; maintenance of natural resources and productivity; minimal adverse environmental effects through climate smart production practices; optimal production with minimal external inputs; and satisfaction of human food and income needs as well as of rural families' social needs.

i) Farm System Approach: such an approach must: characterize the farming system - identify inputs, outputs, potentials, constraints and interactions of components; develop interventions to resolve constraints and exploit potentials; design alternative systems; evaluate interventions and alternative systems; and elaborate on alternatives that have proven to be technically practical, economically feasible and socially acceptable.

ii) Feed: *Arid Zones*. Low, erratic rainfalls preclude any significant increase in feed production without irrigation. Thus, research priorities concentrate on the more effective utilization and maintenance of natural vegetation for which the requirements include monitoring systems to facilitate early warning and drought relief measures as well as grazing management schemes with an emphasis on social and organizational prerequisites for long-term sustainability.

*Semi-arid and sub-humid Zones*. These zones offer the greatest opportunities for research-based improvements in feed supply. Research should be directed towards forage production on marginal lands; forage legumes and MPTs as rotational and complementary crops; improved utilization of crop residues; strategic protein, energy and mineral supplementation to correct nutrient deficiencies and promote efficiency; and conservation of seasonal surpluses to compensate seasonal feed shortages.

*Highlands*. Since human and livestock populations are nearing the maximum carrying capacity of most African highlands, research should concentrate on more intensive systems that produce higher yields of protein and energy

*Humid Zones*. research efforts to increase and improve feed supply must have full cognizance of such environmental issues. Alley farming with MPTs is an example of a research-based alternative which can enhance crop productivity, protect the resource base and provide high-quality forage for livestock.

iii) **Health:** A greater understanding of the epidemiology and economics of animal health would assist in the appropriate allocation of resources and the delivery of health services

iv) **Genetic improvement:** Global concern about loss of biodiversity applies to domestic as well as wild populations. Genetic resources must be characterized and preserved and their diversity used to improve livestock productivity. Under the harsh production conditions of many developing regions, genetic adaptations to disease and climatic stresses are particularly important.

The need for research ranges from genetic manipulation at the molecular level to the crossing of high-yielding "exotic" breeds with well-adapted indigenous genetic resources. Fortunately, basic research at the molecular level, which is now under way in developed countries, can establish a basis for future applied research in developing regions. In addition, the principles of quantitative genetic theory may be transferred to genetic improvement programmes involving selection, cross-breeding and multiplication for example, multiple ovulation embryo transfer (MOET) and open nucleus breeding schemes. Thus, the identification, characterization and development of indigenous genetic material should take priority in the allocation of the scarce resources available for genetic research. In Africa, these include the unusual, perhaps unique, genotypes of *Bos taurus* cattle in West Africa, African hair sheep, camels and donkeys. Major research initiatives with indigenous populations are being developed by ILCA and FAO. These will be largely implemented under contracts with scientists of national agricultural research systems (NARS) through the collaborative research networks discussed later.

How will research in Animal Husbandry be driven and enhanced?

- a) Establishment of Federal Ministry of Animal Husbandry and State Ministries of Animal Husbandry Services
- b) Establishment of more National Animal Husbandry Research Institutes based on the species. Specifically, those for Beef, Dairy, Pasture and Range, Sheep and Goat, Swine, Poultry, Microlivestock and Dromedary.

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ADDRESS BY HIS EXCELLENCY,  
**DR. ABDULLAHI UMAR GANDUJE**  
Executive Governor of Kano State

**AT THE OPENING CEREMONY OF  
A NATIONAL CONFERENCE ON LIVESTOCK REFORM  
AND MITIGATION OF ASSOCIATED CONFLICTS**

Between Herders and Farmers  
Which Held at NAF Conference Centre and Suite, Abuja  
On Monday, February 13, 2023

**PROTOCOLS**

It is with great pleasure that I welcome you all to this National Conference being hosted by the government of Kano state to provide a platform of restraining the movement of cattle, boost livestock production and control the country's deadly herder-farmer conflicts.

I understand that professionals numbering over 500 in different fields of development that included the academia, development partners, agro industry, livestock management, veterinary, conflict resolution, among others, are invited to this crucial national conference. I believe where experts gather in such great number, there can be no doubt that important deliberations are in the offing.

Let me thank members of the organizing committee of this conference for working tirelessly up to this day. It is really a wonderful job. And I especially commend the Chairman of the Committee, Prof. Attahiru Jega for the leadership he provided in the organization effort. I also want to say a special thank you to all the distinguished members of the committee for accepting to be part of this initiative by the government of Kano state.

This conference, which has the theme: “**Sustainable Livestock Reforms and Mitigation of Associated Conflicts in Nigeria**,” grew out of the need to provide solution to the age-long conflict between herders and farmers and also propose way forward to economic development of the sector.

The theme of the conference is relevant in the current scheme of events, given the appropriateness of the time when Nigeria has been persistently experiencing other security challenges.

For many years in Nigeria, farmers and cattle herders have been in conflict over land rights. But the disputes have reached crisis levels in recent years, killing thousands of people and displacing many thousands more from their homes, left in ruins by attacks.

The livelihoods of farmers and herders have, historically complemented each other. They exchanged produce with one another and when conflicts arose, they were addressed by traditional institutions and existing conflict resolution mechanisms. However, over the past few decades, a wide range of factors have resulted in tensions often ending in deadly violent conflicts between the two groups.

Climate change which resulted in desertification and soil erosion has enraged competition over natural resources, pushing herders to venture into new areas to seek pasture for their herds.

Drifting away from traditional migratory routes and encroaching on farming lands has fueled negative perceptions, contrasting sedentary communities versus nomadic ones, often stigmatizing the latter as cultural and/or religious intruders.

Also, the climate change shrinks the amount of arable land, which is contributing to cycles of violence and

putting additional strain on relationships among farmers and herders, it is our hope that this conference will work out ways to strengthen strategies for peace between them.

While herders have had to change their transhumance routes along which they move cattle from one grazing ground to another on a seasonal basis, farmers, on the other hand, say herders are intruding on their land.

A second element to consider is the weakness of state institutions and lack of infrastructures which has resulted in the inability of governments to effectively control their territory, enforce the law and provide formal avenues for the peaceful resolution of disputes.

The 'politics of transhumance' also highlights the interplay among political elites which can manipulate political tensions between herders and farmers to advance their agendas, expand land ownership and take control of large herds for their economic and political gains, consequently threatening livelihoods of both communities.

Topic selected for discussions during the conference will hopefully bring to light key factors driving the continued crisis, including climate change, inter-cultural communication, cross border and internal migration, value chain development and business productivity as well as synergy among different actors working to improve farmer-herder relations.

Distinguished Ladies and Gentlemen, while the teething problems between herders and farmers that were ignored over the years snowballed into armed bandits ravaging the country, it is still not too late to work out plans and strategies to reduce the conflicts

The Rural Grazing Areas (RUGA) or ranching, which has been deliberately politicized, remains the only option that would go a long way in mitigating existential problems, as pastoralists would have lands to graze without cattle encroaching on people's farmlands. Because, herders need fodder for their cattle and promoting alternative means of producing feedstock, which reduces the need for grazing land.

We have gone far in the establishment of Ruga Settlement in Kano. Already, 25 housing units out of the projected 500, situated on 4, 413 hectares of land at Dansoshiya Forest in Kiru local government have been completed and handed over to the herders. Replica of the houses will be displayed during an exhibition planned as part of this conference.

Modernising the livestock sector is not only key to resolving the herder-farmer conflict, but was envisaged that this economic investment pillar will support and strengthen the development of market-driven ranches for improved livestock production through breed improvement and pasture production.

There is therefore the need for aiding information, education and strategic communication on the development of grazing reserves to mitigate the consequences of these conflicts.

It is also very important that we must also avoid the dangers of allowing these conflicts to harden to religious or ethnic conflicts. This is the responsibility of political, religious and all other parts our leadership elite in Nigeria.

We must also intensify existing collaboration with our neighbours especially border communities, to prevent the movement of small arms, and disarming armed pastoralists and bandits who go through our borders day after day.

Predominantly nomadic pastoralists should be persuaded to move their cattle into established ranches and public grazing reserves, where breeding farms and other mechanized livestock management practices would bolster the sector's productivity.

Hand in hand with this, government should rebuild social capital at the community level to promote mutual trust, confidence building, and consolidate the peace process, while the law and order pillar would support the strengthening of legal frameworks for improving livestock production, peace and harmony.

It is my hope that this conference will produce a working document that would go a long way in mitigating conflicts between herders and farmers in this country.

Once again, I thank the committee for putting together this important national conference and assure you that the government of Kano state will study the document and collaborate with the federal government and other key stakeholders for implementation.

It is on this note that in the name of Allah, I declare this critical national conference open.

Thank you very much for your kind attention.

# **THE BOBI GRAZING RESERVE MODEL IN NIGER STATE: PROSPECTS FOR SETTLEMENT OF HERDSMEN AND REPLICATION**

Presented By  
**AHMED IBRAHIM MATANE**  
Secretary to the Government of Niger State

## **INTRODUCTION:**

### **THE CONCEPT OF GRAZING**

- A grazing reserve is a piece of land that the government acquires, develops and releases to pastoralists to graze their cattle. Ingawa et al (1989) also defined grazing reserves in Nigeria as areas set aside for use by pastoralists and are intended to be the foci of livestock development. Grazing reserves resemble group ranches in that both of them consist of clearly defined areas of range land which provide grazing for determined herds of livestock. Suleiman (1986) also noted that the stated purpose of grazing reserves is the settlement of nomadic pastoralists; they offer security to tenure as an inducement to sedentarization through the provision of land for grazing and permanent water.
- Large parcels of land have been demarcated, some legally sanctioned by order in the official gazette and basic infrastructure such as dams and boreholes have been constructed on these lands. Potential settlers are recruited through the livestock extension services. Controlled grazing which limits the number of animals entering a grazing land, leads to efficient range land management.
- Niger State is the largest state in Nigeria in terms of land mass (about 76,000km<sup>2</sup>) and it has twenty-three (23) designated grazing reserves totaling about 119,797 hectares with varying degrees of encroachment. A total of seven (7) Grazing Reserves have been gazetted so far. they are: Bobi (36,718 ha), Irri (6,000 ha), Ndadokun, Gabi, Sheyi, Garun gabas and Audu Kenchi grazing reserves.
- The State government intends to gazette all the grazing reserves in the State and provide them with the necessary infrastructure in a bid to sedentarize herdsmen and their livestock. of farmers/herdsmen conflict in the State specifically and the country at large.



## **BOBI GRAZING RESERVE DEVELOPMENT**

- Bobi Grazing Reserve covers about 36,718 Hectares. It is situated within latitude 10°12'46.98"n in the north and 10° 0'21.76"n in the south and longitude 5°59'22.52"e in the east and 5°46'1.76"e in the west within Mashegu and Mariga local government areas of Niger State. It has 9 earth dams with about 115 kms of road network criss-crossing it.
- A most recent census revealed there are 3,048 households of farmers and herders with about 12,154 heads of cattle, 8,269 sheep and 11,919 goats. It has 3 enclaves (Uro, Igade and Lufari) of indigenous inhabitants engaged in farming and livestock rearing.



## **Bobi Grazing Reserve - Infrastructure**

Phase one of the development of Bobi grazing involved the provision of the following infrastructure:

- Police outpost, veterinary clinic, primary health care centre and a block of 2 classrooms with an office
- Renovation of one of the schools run by an NGO, 'Schools for Africa'
- 2 solar powered boreholes
- Chain link fencing of about 50 hectares for pasture and planting of about 18 hectares of land with different pastures
- Rehabilitation/construction of farm houses/hay barn and rehabilitation of about 15km of access roads
- On the 21st march, 2019 the then Honourable Minister of Agriculture and Rural Development, Chief Audu Ogbe undertook a guided facility tour of Bobi grazing reserve and inspected all the facilities put in place by the State government.



- The State's primary responsibility is to create a sustainable and easily replicable model to curb the incessant herders and farmers' conflict, by settling the herders in the gazetted grazing reserve and establishing animal husbandry best practices to be led by private sector practitioners for production of beef and dairy products.
- Therefore in collaboration with the Central Bank of Nigeria and investors such as – Friesland Campina Wamco, Chi limited, Irish dairies limited, Neom Holdings limited and Hail Consortium, have been working assiduously over the last two years to harness local and international resources for the development of the dairy cattle value chain at Bobi, leading to improved local production of milk and associated dairy products in the Country.
- In this regard, local improved and international breeds of milk cows, will be managed by herders and investors in a feedlot and restricted grazing system, to produce thousands of tonnes of milk annually, thereby bridging the milk production gap. Upon successful implementation, the model will be replicated across many other grazing reserves in Niger State.
- The CBN is supporting the investors in Bobi with soft loans in a bid to drastically reduce the US \$1.5 billion annual import bill for the provision of milk and associated dairy products, and also bridge the 1.1 million tonnes annual deficit between locally produced and imported milk.
- The Reserve has been surveyed and parceled by a surveying firm Altruinco services limited, to investors as follows:

**Friesland Campina WAMCO (10,000 ha):**

- The company has planted about 1,000 ha of pasture and constructed 12 solar powered boreholes.
- It has built a hydroponics center, and a milk collection center with a 3,000 liters milk collection truck, a training center and a cow shed.



### **Chi Limited (4,000 ha)**

- They have commenced renovation of the dam in its allocated area.
- They have cleared 600 ha for pasture development and have ploughed and planted with assorted pasture like, super napier, sorghum and paradou. 100 ha is under irrigation.
- a 4,200 mt capacity silage pit is under construction.
- The access road to their site has been completed.
- Fencing of 15 ha to cover the critical area where their cows and machineries will be housed is in progress.

### **Neon Holdings (4,000 ha)**

- Started activities at the reserve late, but has so far cleared and planted 100 ha of land with maize.
- In the process of creating a web site for Bobi grazing reserve.

### **HAIL Consortium (5,000 ha)**

- They have conducted a topographical survey of their site.
- They have cleared 550 ha of land and planted 240 ha with super Napier, brycharia and stylo.
- 2 solar-powered boreholes have been constructed and access road to their site is on-going
- Irish Dairy Milk Nigeria Limited (4,000 ha) and Agro Mall (2,000 ha) are yet to commence operations.

## **IMPLEMENTATION FRAMEWORK**

*In order to improve productivity of pastoralists herds, the following were adopted:*

- Each investor is designated to host a number of pastoralists and their herds
- Pasture development involves production of quality pasture using super napier, brycharia, panadou and stylo etc. Pasture production is all year round with support of irrigation facilities. This has motivated pastoralists having observed sudden increase in the productivity of their herds.



- A Cooperative was established to promote the interest of pastoralists and they agreed to purchase pasture with milk at negotiated prices.
- Each investor is expected to build capacity of pastoralists in the areas of modern animal husbandry practices, business plan, book keeping etc.
- A breed improvement programme is to commence using the local breeds and improved breeds that are adaptable to the environment.
- All pastoralists have access to healthcare and veterinary services.
- Similarly, children attend the two primary schools in the Reserve.



*Two major value chains have been the major focus:*

#### Dairy Value Chain

- Involves intensive milk production processing and marketing

#### Beef Value Chain

- Involves beef production, processing and marketing
- There are numerous livelihood activities along the value chains that incorporates, men, women, youths including farmers.

## **CHALLENGES AND OPPORTUNITIES**

#### Challenges

The initial challenges which are largely resolved are:

- Initial encroachment of the reserve by farmers and the difficulty faced in getting them out of the reserve
- Getting the pastoralists to understand and adopt the new concept
- Getting the enclave communities who are farmers to understand and participate in the project
- However, security challenge posed by bandits has remained a major issue which has continued to dampen the enthusiasm of both the pastoralists and investors at the Reserve.

#### Opportunities

- There are unlimited opportunities for creating a livestock development hub in and around Bobi grazing reserve with its proximity to Mariga International Market which records a weekly transaction of over N3billion weekly.
- Employment for youths and women
- Establishment of livestock based cottage industries

## **CONCLUSION**

Undoubtedly, the farmers-herders conflict is inimical to the development of livestock in Nigeria despite the importance of the subsector to our national economy. the development of our grazing reserves especially in the Northern States is considered a strategic option in the medium term. This will promote sedentarization, pilot ranching, improve productivity, create employment opportunities and development of livestock value chains and livelihoods.

## **FUNDING, INFRASTRUCTURE AND INSTITUTIONAL CAPACITY DEVELOPMENT FOR EFFECTIVE DELIVERY OF FUNCTIONAL EXTENSION AND VETERINARY SERVICES**

Lead Paper:  
**Dr. Junaidu Maina DVM, FCVSN**

**D**efinition and Structure Veterinary Service (VS) : According to World Organization for Animal Health (WOAH found as OIE): VS is defined as, services provided under the legislative framework and the auspices of the governmental authority of a given country to implement animal health to assure the health and wellbeing of animals, people and ecosystems. WOAH (Nigeria signatory in 1969) provides guidelines for improvement of animal health and welfare globally based on latest scientific evidence. VS is guided by legislation which is an essential element of the national infrastructure that enables veterinary authorities to carry out their key functions, including surveillance, early detection and control of animal diseases and zoonosis, animal production food safety, extension services and certification of animals and animal products. VS in Nigeria is guided by Animal Diseases (Control) Act 2022 Structure and Institutional Arrangements Statutorily the Veterinary Service (VS) of the Federation is made up of; Federal Department of Veterinary and Pest control Services: under Chief Veterinary Officer Nigeria, Federal Governmental Veterinary Authority and head of the VS and official Delegate to WOAH. Vet & Paraprofessional in all states of the federation. States Departments of Veterinary Services under Directors of veterinary Services (DVSs) who are States Governmental Veterinary Authorities and in charge VS Veterinary Council of Nigeria (VCN) the regulatory board of profession with affiliate College of Veterinary Surgeons Nigeria (CVSN) National Veterinary Research Institution (NVRI) with 3 mandates of Central diagnostic lab, Research on animal disease and manpower training Accredited Veterinary Faculties (currently 11 in number) All registered Veterinarians and Veterinary paraprofessionals Structure for Animal healthcare and Extension Services Delivery In the first Republic, Agriculture including VS were solely regional responsibilities until the creation of Federal Ministry of Agriculture in 1966, and subsequent establishment of the Federal Livestock Department (FLD) in 1972 Under the Federal Structure agriculture is on concurrent legislative list; Federal: Federal Livestock Department (FLD), initially to carry out mainly public health functions relating to animal production food safety, certification of animals and animal products, national livestock movement through international & Interstate States Control Posts etc. However with the international control programme for Rinderpest FLD delved into many other functions. Now 2 Departments (1) of Vet & Pest Control Services and (2) Animal Production and Husbandry Services States. Departments of Livestock: Statutorily responsible for overall Animal healthcare issues including diseases control, surveillance, clinical services, routine vaccination, abattoirs. LGA-jointly with state responsible for overall last mile vet & extension service delivery. Last Mile Veterinary & Extension Service Delivery. States: Department of Veterinary Service; Zonal offices (3-4 LGAs) with Vet Officers and other staff i/c Local Government Areas Clinics manned by; 1. Superintendent 2. Vet/Livestock Assistant 3. Clinic & Lab assistants 4. Livestock Assistant In Training 5. Inoculator 6. Cleaners etc Responsible for extension, clinical & ambulatory services, surveillances agents (in diseases hot spots) for Diseases Early Warning System; actual foot soldiers of Veterinary and Extension Service Delivery System. Collapse of this segment of the Veterinary infrastructure truncated services delivery. And worst hit are rural small-scale producers. Causes of the collapse of Veterinary & Extension Services 1. In 1980s employment opportunities for Veterinarians in Government began to shrink and many had to be self-employed. So private vets soon overtook public

Vets numerically; currently there are 10,348 registered Vets and Public Vets are > 15%. However this is the global trend with public Vets regulating and out sourcing services. Unfortunately this is happening at a very slow pace in Nigeria. 2. The same fate befell Veterinary paraprofessionals and axillary staff. 3. For too long Public Vets held on to the unsustainable provision of free Vet & Extension services until the system fell aground thus depriving rural small-scale producers of these essential services. 4. Some NGOs also aggravated the situation by intermittent and uncoordinated provision of free vet drugs, feeds and other services including artificial insemination (AI). 5. Private Vet & extension services for poultry, urban and peri-urban farmers continue to flourish while non was available to rural small-scale farmers who are the main producers. 6. Government failed to provide enabling environment for private vet & extension service to strive and penetrate rural areas. 7. Although livestock generates a lot of revenue and supports livelihood of many, the abolition of jangali and other associated challenges created apathy towards livestock leading to poor funding of Veterinary services. The collapse constrained the overall absorptive capacity of livestock sector stunting its growth except for poultry. Berenil Grace, 2004-ILRI Around 80% of farmers rely on other health service providers-ILRI Veterinary & Extension services gaps filled by non-professionals Benefits of effective Veterinary and Extension Services is improved productivity National Herd: Cattle 21m, Sheep 47m, Goats 82m, Pigs 8m & Poultry 168m (FMARD 2021) 1. Livestock are critical assets with multiple roles; inflation free cash safe, provide food, draft power, transport, fuel, manure etc 2. Five most valuable global agricultural commodities are animal-sourced foods; beef, milk, poultry, eggs & pork. 3. Nigeria is the largest market in ECOWAS for these products 1. over 50% of cattle and sheep slaughtered in Nigeria from neighbouring countries 2. with increasing demand due to population growth, urbanization, improved income and changing lifestyles, the demand will continue to grow with food security implications 3. Livestock big contributor to States and LGAs IGR (livestock value chains) 4. Preclusion of small-scale producers from high-end markets guided by AH & food safety regulations; poor returns on investment because products are sold in informal markets. 5. Small-scale farmers although aware of economic benefits of Vet & Ext services cannot access them because of the GAP in the last mile delivery system. 6. As currently structured the VS cannot meet all the demands. Innovations to revive and create a sustainable, effective & functional Vet & Extension Services 1. Sanitary mandate is an agreement between State VS with accredited Private Vets. Private Vets under supervision of State to provide AH including treatments, surveillance, outbreaks investigations, vaccinations, meat inspections in agreed LGAs/Zone in accordance with the Animal Diseases (Control) Act. 2. Community-based Animal Health Services: Community Animal Health Workers (CAHWs) selected by community and in collaboration with private/public vets to provide basic vet & extension services. This innovation is accepted in the global South and CAHWs provide basic vet & extension services and disseminate farming techniques and methods in rural areas in order to optimize animal production and diseases surveillance. Already NVRI trained women CAHWs are reported to be vaccinating rural family poultry with a lot of success. CAHWs need proper training and close supervision. 3. Other digital Innovations; several digital Startups exist with many simple technologies on how small-scale producers can cope and adapt to challenges posed by climate change, market barriers, price fluctuation, health risks and record keeping for breeding purpose etc. There are also many technical innovations available for monitoring of livestock grazing activities, for revenue generation and monitoring collection by States and LGAs from up and downstream of livestock value chains. These include licensing private vets and drug outlets, livestock traders, transporters, loading/offloading permits, RFID chips for livestock and products traceability, proof of ownership and even telemedicine etc. All accessible with smart phones and other gadgets Application of these innovations will restore and improve capacity for better services delivery, more revenue generation and mitigate against herder farmer conflicts for better National food security.

# **FUNDING, INFRASTRUCTURE AND INSTITUTIONAL CAPACITY DEVELOPMENT FOR EFFECTIVE DELIVERY OF FUNCTIONAL EXTENSION AND VETERINARY SERVICES**

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## **Introduction**

Violence occasioned by climate-change induced environmental degradation and competition over land has aggravated the long-term tension in the country. It has led to a bloodshed in the transhumance route, necessitating reforms in the livestock sector. During the British colonial era, herders and farmers would agree on a system called *burti*, in which specific migration routes were set up for herders, with mutual agreement from the farmers, herders, and local authorities. However, the *burti* system collapsed around the 1970s when farmers increasingly claimed ownership of lands along cattle migration paths, increasingly leading to conflicts. At this period, herders frequently exchanged milk for cereal grains with farming communities. However, in recent decades, milk is no longer being widely bartered while packaged beverages became more popular in towns.

Modern medicines have also made it possible for herders to move their livestock further south into the "tsetse fly zone" in the south, whereas before, herders could not keep their cattle on a large scale in the south due to tropical diseases in humid climate zones. Starting from those implemented by the British colonial administration, tsetse control programs have reduced the threat of diseases such as trypanosomiasis. Today, herders also have easy access to drugs for trypanosomiasis and dermatophilosis in order to keep their livestock alive. In addition, over the past several decades, herders have cross-bred trypanosome-intolerant zebu cattle with trypanosome-tolerant humpless breeds, thereby increasing the cattle's tolerance of tropical diseases. All of these factors have enabled the widespread migration of Fulani herders into the southernmost areas of Nigeria, where they could easily sell their livestock for higher prices due to strong demand for beef and other meat products in Nigeria's populous southern towns and cities. However, in the south, they would encounter sedentary communities that have not historically had any experience with peacefully negotiating and co-existing with nomadic herders. Increasing ease of access to weapons and religious polarisation among both Christians and Muslims have added to the potential for violence. The conflict has become so rampant and life threatening that it threatens the corporate existence of Nigeria as a nation. All these lead to the urgent need to craft a workable solution to the perennial crises. The federal and state authorities therefore have the responsibility to prioritise securing funds, training of personnel and communicate the coded reforms in the name of National Livestock Transformation Plan for the benefit of farmers and herders in collaboration with donors and investors. It is expedient that the causes of the perennial conflicts are considered.

## **Causes of Herders/Farmers Conflicts**

### ***Land Conflicts***

Conflicts between farmers and herders can be understood as a problem of access to land. The beginning of the 21st century witnessed an expansion of the agriculturist population and its cultivated land at the expense of pasturelands in the Middle Belt. In an already politically unstable region, it has never always been possible to ascertain a legal title to land for every farmer. As a result, transhumance routes of herders were no longer available, especially in a context of global warming.

## Climatic Crisis

Deteriorating environmental conditions, desertification and soil degradation have led Fulani herdsmen from Northern Nigeria to change their transhumance routes. Access to pastureland and watering points in the Middle Belt became essential for herdsmen travelling from the North of the country. It is believed that climate change is the driver of the conflict as climate change has changed the herders' migration pattern. Regions vulnerable to climate change (northern regions) experience less farmer-herder conflict and less intense farmer-herder fighting. It is argued that ethnic conflict between farming and herding groups need to be considered in the explanation of the mechanism of the climate change-farmer-herder conflict nexus.

## Livestock Reforms

Since the fourth Nigerian Republic's founding in 1999, farmer-herder violence has killed more than 19,000 people and displaced hundreds of thousands more. It followed a trend in the increase of farmer-herder conflicts throughout much of the western Sahel, due to an expansion of agriculturist population and cultivated land at the expense of pasturelands; deteriorating environmental conditions, desertification and soil degradation; population growth; breakdown in traditional conflict resolution mechanisms of land and water disputes; and proliferation of small arms and crime in rural areas. Insecurity and violence have led many populations to create self-defence forces and ethnic and tribal militias, which have engaged in further violence. The majority of farmer-herder clashes have occurred between herdsmen and farmers, exacerbating hostilities.

National Livestock Transformation Plan to modernise the livestock sector. Its objectives are to gradually end open grazing and in the process, promote peaceful coexistence between herders and farmers. The Plan, which the National Economic Council adopted in January 2019, has been lauded by authorities in northern and some Middle Belt states.

Several states have already taken steps towards commencing implementation. But these are only preliminary. The main work, which still lies ahead, will be challenging, requiring focused efforts by federal and state authorities, as well as donors and others, if it is to be successful. Its aims are to curb the movement of cattle by encouraging predominantly nomadic herders to switch to sedentary, more mechanised livestock production and thereby minimise conflict between them and crop farmers.

At the Plan's core is an initiative to establish various categories of ranches (large, medium and small) in public grazing reserves and improve services around them including securing water to irrigate pasture and grow fodder, with support from the government, private investors and foreign donors. Although the Plan focuses on cattle herding, the government expects that it will benefit other livestock producers as well as small-scale farmers, whom it will encourage to grow more crops for use as fodder. The Plan assumes that establishing ranches will reduce competition over land and water, boost production of meat and other protein sources, raise incomes and prevent herder-farmer conflict in the future.

The Plan initially identified seven pilot States to develop ranches in public grazing reserves, namely Adamawa, Benue, Kaduna, Nasarawa, Plateau, Taraba and Zamfara. The first guidelines for implementing the plan projected that each of the then-seven pilot States would designate two pilot sites, with four ranches to be established at each location. In addition to the 56 facilities contemplated by the scheme, the initial pilot States were also expected to establish a total of seven breeder ranches and seven semen banks.

However, a meeting of the Northern States Governors' Forum in Kaduna in late 2019 resolved that all the nineteen Northern States be considered as front-line States for the Plan's Pilot Implementation, a resolution later endorsed by the National Economic Council. The Council urged all other States to join in carrying out the Plan nationwide. By 2028, the plan envisions that participating States will build a total of at least 119 ranches, creating over two million new jobs, especially along various value-adding chains.

## **Issues Germane to the Success of the Plan**

**Foreign Transhumant Migrant Herders** - It is necessary for the plan to take into account the many foreign transhumant migrants who move their herds in and out of Nigeria, as seasons change, and may have little interest in settling on ranches and grazing reserves. About 30 per cent of live animals slaughtered in Nigeria are imported from neighbouring countries.

The Plan must be clear as to how authorities are to induce foreign transhumant migrant herders who move in and out of the country, to stay on ranches and grazing reserves. Amid widespread concerns about their involvement in herder-farmer conflict and crime in many states, there are divergent views as to whether the government should keep allowing these pastoralists into Nigeria and, if so, how it should apply the Plan to them. Continued roaming of foreign-owned cattle could create more friction with farmers, defeating a key purpose of the Plan. This calls the need for all large livestock in the country to be tagged.

**Incident of Climate Change** - Nigeria has been feeling the effects of climate change for a half-century, particularly in the form of extreme heat and drought in the far north. Leading forecasts predict that these trends will intensify over the Plan's ten-year timeline, and beyond, with a  $1.56^{\circ}\text{C}$  increase in average temperature in Nigeria by 2040, relative to 1995.

Average annual temperatures rose by  $0.7^{\circ}\text{C}$  from 1970 to 2014, while annual precipitation fell by 8mm from its peak in 1960 to 2014. Nigeria's climate varies across regions, with annual total precipitation in 2014 ranging from 2,000mm in the tropical south to 700mm in the arid northern regions, which have borne the brunt of climate change so far. These climatic changes have already put immense pressure on the agricultural sector by reducing the total amount of cropland as well as grassland. After expanding until 2013, the total area of mixed-use land (used for both farming and herding) has shrunk by about 2 per cent between 2013 and 2018.

On top of the effects of heat and drought, the increasing seasonal variability of rainfall and land productivity is another potentially growing driver of resource competition between herders and farmers. Such variability is especially pronounced in the Middle Belt and northern states, where crops and pasture are highly dependent on rainfall. According to climate forecasts, the seasonal variability of rainfall is likely to increase over the Plan's time frame, potentially further disrupting traditional rhythms of farming and herding and destabilising livelihoods in these regions. While farming and cattle herding can complement each other, with cattle fertilising plots between crop harvests, greater seasonal variability would disrupt pastoral migration cycles, upsetting the delicate symbiosis. There is the need for the plan to address these important issues so that the goals of the plan can be achieved.

## **Steps towards Ensuring Effective take-off and Success of the Livestock Policy**

There is the need for governments at the federal and state levels, working with donors and investors to urgently to shore up support and funding for the Plan. Priorities should include improving public communication and awareness, ensuring proper funding and accountability, building technical expertise, and improving security in and around the reserves where ranches are to be built. Efforts should be focused toward showing visible results to ensure strong donor and investor commitments, and training of the first batch of newly trained livestock management professionals and extension agents should be achieved for the attainment of lasting peace between herders/pastoralists and farmers. The steps are thus:

### **a. Ensuring Effective Political Leadership**

The Federal and state authorities require to demonstrate strong political commitment and better leadership in rallying support for the Plan and driving its implementation. The doubts expressed about the sincerity of the plan should be allayed through effective communication and confidence buying and building among the populace. The Plan's potential benefits should be explained to herders, farmers about its benefit to the overall national economy.

Leaders of various ethnic, regional, religious and other pressure groups sometimes enjoy considerable legitimacy among their supporters. In seeking to boost support for the Plan, therefore, federal and state governments should seek to bring leaders of the most prominent groups on board, prevail on them to eschew hostile rhetoric and enlist their voices in support. Concerted messaging on the Plan, by both government officials and leaders of the diverse groups, would go a long way toward broadening and strengthening citizen support for accelerating and sustaining implementation.

**b. Improving Public Communication**

The federal and state governments need to improve public communication and increase buy-in from stakeholders. A Plan based on making far-reaching changes to livestock management practices – some of which are deeply entrenched in pastoralist culture – needs to be supported by a persuasive campaign explaining how the new livestock production system is designed to work. This campaign should lay particular emphasis on how the Plan's potential benefits would outweigh losses to particular groups and individuals and how these losses may be compensated. In particular, authorities should marshal clear, convincing evidence of the benefits to pastoralists who will be asked to limit their movements to grazing reserves; livestock owners who must now buy fodder to feed their cattle; and farmers who may have to stop cultivating areas earmarked as grazing reserves or shift to producing fodder and other feeds for cattle.

Online platforms should be explored and exploited, and social media tools used in disseminating information about the Plan's provisions as well as progress on its implementation. The government should task the National Orientation Agency, the federal body mandated with raising public awareness about government policies, to mount a nationwide campaign aimed at boosting public knowledge about the Plan and softening opposition. State governments also need to better publicise the Plan, as well as its opportunities for investors and updates on its progress.

There should be engagement with mass media and civil society organisations to explain the Plan, generate debate about its potential benefits and solicit support. Sensitisation programs should be organized for both herders and farmers, taking such programs from state capitals to rural areas. Given the present widespread ignorance about the Plan's potential benefits, such programs should include demonstration events for innovations that it seeks to promote, showcasing new animal husbandry methods to pastoralists and new fodder production systems to farmers in order to persuade the two groups to adopt them.

**c. Ensuring Funding and Accountability**

Federal and state governments must also make deliberate efforts to ensure effective funding. The opportunity of the just approved National Agricultural Development Fund must be explored, in addition to facility utilization tax paid by users of the facilities. The National Agricultural Development Fund was signed into law last year by the President to be funded from derivation from 0.5% of natural development resources fund and 5% of the duty levied on import of rice, wheat, sugar, milk, poultry and fish as a financial intervention institution to support strategic aspects of the agricultural sector's development.

In addition, loans or grants could be sought from donors such as the World Bank, the African Development Bank, the International Fund for Agricultural Development and the International Development Agency. As the federal government has already indicated that its funding would be focused on boosting primary production, state governments should step up engagement with foreign investors and international development partners to scale up the expansion of value chains in such areas as dairy production, meat processing and logistics.

Foreign donors and international development agencies should offer greater financial and technical support to help Nigeria implement the Plan. There are already various indications of support. A five-member Dutch consortium, the Holland Dairy House Group, is already engaged in start-up projects in four states. The Brazil-Nigeria Green Imperative, a four-member Brazilian consortium, is offering Nigeria an investment

package of over \$1 billion, mainly for construction of power plants, training structures and agro-processing factories, that would help scale up agricultural reforms over a ten-year period.

The UN Food and Agriculture Organization, which supported the Plan's formulation, would also provide guidance on implementation to the federal government and several state governments. Donors and development agencies should sustain these engagements, supporting not only governments but also other actors, especially local and international civil society groups that are involved in strengthening the "supporting pillars" of the Plan.

An important condition for attracting donor funding is the guarantee of accountability. Over the years, fraud has crippled too many well-meaning agricultural projects, some of which had already received substantial donor support. To guard against the Plan suffering the same fate, the Program Coordinating Secretariat should prioritise and promote measures that can help ensure that participating states spend donor funds accountably. Independently, state government should establish tight financial controls to prevent misuse of funds. Donors should insist that states show arrangements for ensuring prudence and accountability, as a condition for access to funds pledged for projects under the Plan. One way of doing this might be through arrangements whereby the donor funds would be held in accounts to which donors are joint signatories with state authorities and both parties also agree on arrangements for joint monitoring and evaluation of the funded projects.

#### d. Building the Technical Capacity of Institutions

There is the need for concerted efforts to build capacity for executing the Livestock Plan. A key priority should be to redefine the roles and responsibilities of both levels of government (federal and state) in agricultural extension services and to revitalise these services in all states. The National Assembly has an Agricultural Extension Services Bill under consideration; lawmakers should expedite its approval in order to ensure a stronger legal and funding framework for expansion of training countrywide.

Governments should also commence staff training to deliver better extension services in the livestock sector. The federal government is taking some steps: in January 2021, the minister of agriculture and rural development, Mohammad Sabo Nanono, said the government was already designing protocols for training between 75,000 and 110,000 extension agents; in March, the ministry started training 1,110 agriculture extension agents across all 36 states and the Federal Capital Territory. These steps are welcome but, given the scale and urgency of the needs, such training programs need to be scaled up and accelerated.

State governments should seek staff training opportunities with countries that have well-developed ranching and livestock management programs, such as the Netherlands, Australia and Brazil, through their diplomatic missions in Abuja. They could also partner with private companies that already run successful cattle ranches in Nigeria, such as Shonga Farms Holding Nigeria in Kwara state, Sebore Farms in Adamawa state, Nagari Integrated Dairy Farm in Nasarawa state, Maizube Farms in Niger state and Zaidi Farms in Kaduna state.

As the Plan progresses, the federal government should also devote greater attention to equipping pastoralists' children to take up jobs in the livestock value chain – including production, processing and marketing. The federal government should expand the mandate of the National Commission for Nomadic Education and correspondingly provide more funding to ensure that it delivers on its mandate of providing educational services for herders' children.

#### e. Ensuring Improved Security

There is the need for a vigorous effort to stem the deepening insecurity in many states of the federation. Military and police operations against armed groups should remain a key priority, including measures to reduce the movement of the large number of illicit firearms in circulation and use across the country. Security agencies should forge closer partnerships with community leaders, organising joint patrols on roads that

connect settlements in the grazing reserves, working more closely with traditional rulers, village and district heads, and pastoralists' leaders, as well as women and youth groups, to generate and share intelligence about security-related developments around the ranches and grazing reserves.

**f Enhanced Dialogue**

There should be establishment of effective mechanisms for inclusive and sustained dialogue, especially between herders and farmers; improving the administration of justice to sanction perpetrators of violence, compensate victims and curb impunity; supporting the voluntary and safe return of persons and communities displaced by violence; and providing displaced persons with early recovery and livelihood support as they return to their home settlements. These tasks and responsibilities require engagement by various agencies of the federal and state governments, firmly coordinated by relevant agencies under the presidency.

**g. Establish Structures for Sustainability**

Ensuring that the Plan has a firm legal and institutional basis. Beyond addressing existing challenges, a further priority must be to insulate the Plan from the vagaries of changing administrations and sustain implementation throughout its projected ten-year timeframe. The Senate is deliberating on a bill that seeks to establish a national livestock bureau, but this measure is inadequate, as the proposed bureau's mandate is limited to registering cattle, so as to be able to trace them, as well as preventing rustling and controlling livestock disease. Effort must be made to formalize the tagging of all animals through registration and deployment of software for tracking of all animals that traverse the country. This will ensure that owners of animals that are not properly put to check will receive commensurate sanction while all endeavor to do only what is right and appropriate.

**h. Address Transhumant Pastoralism and Climate Change**

There is the need for the federal government to start reviewing existing legislation and regulations for the management of international transhumant herders. Particularly important is the 1998 Protocol on Transhumance promulgated by the Economic Community of West African States (ECOWAS), to which Nigeria is a signatory, and which provides for international movements of pastoralists within the region. It is expedient that the nation engages with the ECOWAS commission, as well as the governments of ECOWAS countries review existing protocol to reach new agreements on how to better monitor and regulate international transhumant pastoralism.

In the short term, all countries concerned should work out agreements requiring that transhumant pastoralists be properly documented on entry into countries and that they proceed through recognised stock routes, to specific reserves that have sufficient grazing resources to accommodate them, possibly within a limited distance from the international boundary. Such new arrangements should be incorporated into the Plan. In the longer term, the Nigerian government and its ECOWAS counterparts should review the existing Transhumance Protocol in light of the fact that the conditions under which it was drafted have changed considerably, especially given the growth of transnational security threats. Also, the government should ensure that all states participating in the Plan integrate measures to mitigate climate change impact, both in better understanding of where and how climate factors have exacerbated resource competition. It is also important that policy responses are tailored to address future climate projections.

**i. Need for Effective Extension Service and Veterinary Services**

Many of previous agriculture related policies and programmes in Nigeria have neglected the role of agricultural extension in the execution of the programmes. This has reflected in the low level of success in the programme. It is a world known fact that extension is the fulcrum of agricultural development. It is therefore necessary that agricultural extension is effectively involved in the planning, resource mobilization and

implementation of the livestock policy reform to achieve desired success. The deployment of e-extension manned by competent extension personnel will go a long way in achieving markedly improved animal production in the country if livestock extension is given its rightful place in the execution of the reform.

It is also important the effective mobilization of veterinary service is achieved to take care of the health aspect of the reform implementation. The deployment of all of these will ensure that the livestock development policy reform achieves the goals set for it to reduce conflict and achieve improved animal production.

## **Conclusion**

The National Livestock Development Policy has the potential of reducing the incidence of herders/farmers' crises to the barest minimum and improve the productivity of livestock towards achieving food self-sufficiency. To achieve these, it is expedient that the implementation of the policy consider the issues so raised and ensure that implementation is executed with highest level of diligence and professionalism. The incidence of conflict that leads to wanton destruction of life and property will be checked towards achieving a peaceful and egalitarian society.

# **GOVERNANCE, POLICY REFORMS AND ENFORCEMENT OF NATIONAL AND REGIONAL PROVISIONS (LAWS AND/OR LEGISLATIONS) WITH STRATEGIC FRAMEWORKS FOR COORDINATION OF CROSS-BORDER AND INTERNAL MIGRATION OF PASTORALISTS**

**Lead Presenter: Prof. Issac Albert**

## **Strategic Frameworks for Reforms and Coordination of Cross-Border and Internal Migration of Pastoralists**

**Prof. Isaac Olawale Albert**

Department of Peace, Security and Humanitarian Studies  
(formerly Institute for Peace and Strategic Studies),  
University of Ibadan

### **Introduction**

The main aim of this paper is to call attention to some strategic issues in reforming and coordinating cross-border and internal migration of pastoralists in Nigeria with a view to reducing livestock-related conflicts in the country. I need to start by providing some background information about my scholarship on the matter. I had my secondary school education at Tilley Gyado College Makurdi which in the 1970s was located at the outskirt of the town. Fulani herders crisscrossed the forests behind and around the school and we students had interesting interactions with them at our leisure moment, most especially weekends. We witnessed a few conflicts between them and Tiv farmers and how these were peacefully settled. I am now a Professor of African History, Peace and Conflict Studies and the pioneer Dean, Faculty of Multidisciplinary Studies University of Ibadan (UI). I teach herder's conflict to my postgraduate students of "Introduction to Peace and Conflict Studies" (PCS 701) and work in the situation room of the TETFUND Centre of Excellence in Multidisciplinary Studies (UI) where we monitor conflict indicators in Nigeria and the Sahel. Issues relating to pastoralism are monitored under our environmental conflict indicators.

I have also been writing on and managing herder/farmer conflicts in Nigeria since the early 1990s when I started my peace studies and peace practice career<sup>7</sup>. I attended the 2014 National Conference where my committee on Citizenship, Immigration and Related Matters extensively discussed the herders crisis in Nigeria and made some recommendations on how to manage the issues. I will provide more information on this later in the paper. Following my National Conference experience, I also participated in framing and establishing the Farmer/Herder Forum of the Search for Common Ground in Abuja. In other words, whatever I say about the pastoralist crisis in Nigeria comes from the rich background that I have on the matter.

<sup>7</sup> Earnest U. Uwazie, Isaac Olawale Albert, Godwin N. Uzogwe (eds.), *Inter-Ethnic and Religious Conflict Resolution in Nigeria*, Lanham, Maryland: Lexington Books, 1999; Onigu Opite and Isaac Olawale Albert (eds), *Community Conflicts in Nigeria: Management, Resolution and Transformation*, Ibadan: Spectrum Books, 1999; Isaac Olawale Albert, *Introduction to Third Party Intervention in Community Conflicts*, Ibadan: PETRAF/John Archers Books, 2001; Isaac Olawale Albert (ed.), *Building Peace, Advancing Democracy: Third Party Intervention in Nigeria's Conflicts*, Ibadan: PETRAF/John Archers Books, 2001.

## **Policy and Legal Frameworks**

Issues relating to pastoralism were the first to be given attention immediately the British colonialism was established in Northern Nigeria in 1903. The colonial authority needed money and they saw some windows in the booming livestock trade in the region. Hence, they enacted the Northern Nigeria Land Revenue Ordinance of 1904 and the Native Revenue Proclamation of 1906 which revolved largely around the payment of livestock tax (Jangali). The bulk of the revenue for running the colonial administration came from this<sup>8</sup>; groundnut came later. Therefore, there was the need to expand the scale of the business. But this brought the herders on collision paths with farmers. For minimizing such conflicts, expanding opportunities for all and transforming livestock production in Northern Nigeria, the colonial authority attempted to sedentarize transhumant pastoralists in 1942 under the “Fulani Settlement Scheme” which required pastoralist households to own plots of land in Jos Plateau where they were encouraged to practice mixed farming. The scheme proved costly and was easily over-run by tin mining operations<sup>9</sup>.

There was a World Bank-supported study in 1954 on Fulani pastoralism which proposed grazing reserves as a way to provide the Fulani with secure land tenure and modernize the livestock sector, away from traditional practices of pastoralist transhumance. The project also hoped to settle the pastoralists down with a view to reducing the chances of their clashing with farmers. The grazing reserves were to be provided with social and pastoral infrastructure (roads, schools, water resources, veterinary services, markets) all aimed at improving the living conditions of former pastoralists. It paved way for the Grazing Reserve Law N.N (Northern Nigeria), Law No. 4 of 1965 which empowered the Ministry of Animal and Forest Resources to acquire, preserve, control and manage grazing resources. The Act also allowed for the demarcation of stock routes to link the Grazing Reserves with each other. This made the Grazing Reserve concept to become part of Nigeria's national livestock development strategy and was reflected in various National Development Plans (1970–1985).

However, many States could not establish their reserves due to the high levels of land compensation required by the Federal Land Use Act of 1978. The National Agricultural Policy of 1988 tried to solve this problem by providing that at least 10 per cent of Nigeria's land area should be legally be acquired for lease to herders. Not many more States opted to establish grazing reserves. The few available ones soon became overcrowded, with resultant effects on failing infrastructures and mismanagement. The Petroleum Trust Fund's (PTF) Pastoralist Development Programme (PDP) under General Muhammadu Buhari later intervened by rehabilitating the Grazing Reserves and making a few other provisions for enhancing the system. There is still much more to be done.

Climate change and the gradual drying of Lake Chad forced many herders to flee their homelands and in the process of their migration in search of pasture get involved in violent conflicts with local farmers across Nigeria. This and the rustling of their animals most especially in Northern Nigeria forced many of them to start bearing arms; usually brought into the country by their kinsmen across the Sahel. This heightened the complaints of other Nigerians about the herders, particularly the Fulani.

The conflict between Yoruba farmers and Fulani pastoralists escalated in 2000 following Nigeria's transition from military to civil rule in 1999. The problem was at its highest point in the Oke Ogun area

<sup>8</sup> Akanmu G. Adebayo, “Jangali: Fulani Pastoralists and Colonial Taxation in Northern Nigeria”, International Journal of African Historical Studies, Volume 28, 1995 pp. 113–150; Ibrahim M. Jumare, “Colonial Taxation in the Capital Emirate of Northern Nigeria.” African Economic History, no. 26, 1998, pp. 83–97. JSTOR, <https://doi.org/10.2307/3601691>. Accessed 11 Mar. 2023.

<sup>9</sup> International Organization for Migration (IOM), International Centre for Migration Policy Development (ICMPD), and Economic Community for West African States (ECOWAS), Regional Policies and Response to Manage Pastoral Movements within the ECOWAS Region, Abuja: International Organization for Migration, 2019. When the tin mining business in Jos Plateau collapsed, more serious competition for land between the Fulani/Hausa and the local people intensified and this explains the present crisis situation in Plateau state.

of Oyo State. The crisis came to a boiling point in October 20000 when General Muhammadu Buhari (Rtd) led some northern Nigerian leaders to Ibadan to complain about the harassment of Fulani herders. This led to a widely publicized altercation between Buhari and Governor Lam Adesina. The latter felt it was the Fulani herders that were coming to disturb the peace of his people in Oke-Ogun and not the other way round. But as the two of them were exchanging accusations, I was leading a team of peacebuilders trying to reconcile the Yoruba farmers and Fulani herders. The latter were indeed fleeing the Oke-Ogun area towards Ilorin through Igbedi in very large numbers. Some were bottled up in Iseyin as internally displaced persons. We went to the bushes with the then Area Commander of the Nigerian Police stationed in Oyo town, Mr. Haz Iwendi, to stop the mass Fulani emigration. We went round the towns and villages stretching up to Ogbomoso buying bread to feed the Fulani herders and their family members. At the end of it all, a 4-day peace meeting was held in Iseyin involving all Local Government Councils in Oke Ogun area, the leadership of farmer associations and members of the Oodua People's Congress (OPC) to work out a peace agreement between the conflicting parties. We set up Peace committees at each of the local government council headquarters that would respond to any future case of crop damage in the area. Members of the Committees were provided transport allowances anytime they had to meet. The crisis simply died down immediately after but flared once again when the Local Government councils stopped supporting the peace committees.

I was also a Research Associate at the University of Oxford from 2003 to 2007 during which I committed the best of my time doing fieldwork amongst the Yoruba farmers and Fulani herders in the Oke Ogun area once again. This and my earlier works in the area led to a number of academic publications<sup>10</sup>. But the conflict is now ethnic in nature and sometimes given the coloration of a religious problem: most especially in the Middle belt and Southern parts of Nigeria. Unfortunately, not all of these herders are Nigerians. Some of the Yoruba people kidnapped by herders claimed that their abductors wear long hair not typical of the Nigerian Fulani. Some of the abductors only speak French: no Hausa, English and have no animals. They are very brutal with their abductees; most especially those unable to raise the ransoms demanded of them.

I was privileged to be a federal delegate to the 2014 National Conference convened by the regime of President Goodluck Jonathan. Though that was not my initial choice, I was lucky to have been seconded by the Conference to the Committee on Citizenship, Immigrations and Related Matters which sat at the Nicon Luxury Hotel, Abuja for three weeks in April and May 2014 under the leadership of HRH, Dr. Muhammad Zaiyanu Abdullahi, CON, Emir of Yauri. The Deputy Chairman was Dr. Chidinma Uwajumogu. The other members<sup>11</sup> consisted of eminent Nigerians drawn from different vocations and parts of Nigeria. The most difficult issue discussed by the Committee pertained to the herder's crisis in the country. What framework should be put in place for preventing and managing the problems? The members agreed on "Grazing reserves or ranches and new technologies such as the Hydroponic Fodder Solution" to be "promoted by the Government and affected stakeholders" most especially federal and

<sup>10</sup> Isaac Olawale Albert, "Ethnicity and herdsman-farmers' conflicts in Oke-Ogun, Oyo State", in I.O. Albert and Olaniyi Nurudeen Olarinde (eds.), Trends and tensions in managing conflicts, Abuja: Society for Peace Studies and Practice, 2010 pp.95-115 ; Isaac Olawale Albert, "Climate change and conflict management in Nigeria", in Wahab Olasupo Egbewole, Muhtar Adeiza Etudaiye, and Olugbenga Ajani Olatunji (eds.), Law and Climate change in Nigeria, Ilorin: Faculty of Law, University of Ilorin, 2011 pp. 176-193; Isaac Olawale Albert, "Human migration, conflict, security and sustainable development", in Labode Popoola, Olanrewaju and Olawale Olayide (eds.), Building resilience in sustainable development in a changing world, Ibadan: Ibadan University Centre for Sustainable Development, 2012, pp. 65-82; Isaac Olawale Albert, "Contexts of Peace and Conflict in Indigene/Settler Relations in Rural Nigeria: An Oke-Ogun Case Study in Oyo State", Research Report to the Centre for Research on Inequality, Human Security and Ethnicity (CRISE), University of Oxford, July 2005.

<sup>11</sup> The other members of the committee were Hon. Justice Mohammed Uthman, Dr. Atedo Peterside (CON, FMNM), Olasupo Shasore (SAN), Dr. Maryam C. Abdullahi, Mr. Anthony Akika, Dr. Abiola Akiyode-Afolabi, Prof. Olawale Albert, Hajiya Hauwa Bukar, Dr. Bilkisu Magoro, Hajia Maryam Ladi Ibrahim (FCNA), Mr. John Dara, Dr. Chukwuemeka Ezeife (CON, FFPO, Dadmin), Dr. Garba Ibrahim, Hon. Umar Kareto Law, Aminu Mahmud, Chief Dr. (Mrs.) Nkechi Okemini Mba, Chief Isaac Jemide, Barr. Rommy Mom, Abdullahi Ali-Kano, and Yusuf Hamisu Abubakar (OON).

<sup>12</sup> See REPORT OF THE COMMITTEE ON CITIZENSHIP, IMMIGRATION AND RELATED MATTERS | NATIONAL CONFERENCE 2014, 14 May 2014, <http://citizenshiprightsafica.org/wp-content/uploads/2020/08/Nigeria-National-Conference-2014-full-report-of-Citizenship-and-Immigration-Committee.pdf> p.27 (2.1)

state governments<sup>12</sup>. The recommendation of the Committee was unanimously passed at the plenary of the Conference. It is unfortunate that the entire report of the 2014 Conference was not considered by the regime of President Muhammadu Buhari. In the process, Nigeria lost the opportunity of a national consensus on dealing with the pastoralist issues. It was a case of throwing away the baby away with the bath water. The recommendations in the report would have significantly helped the government.

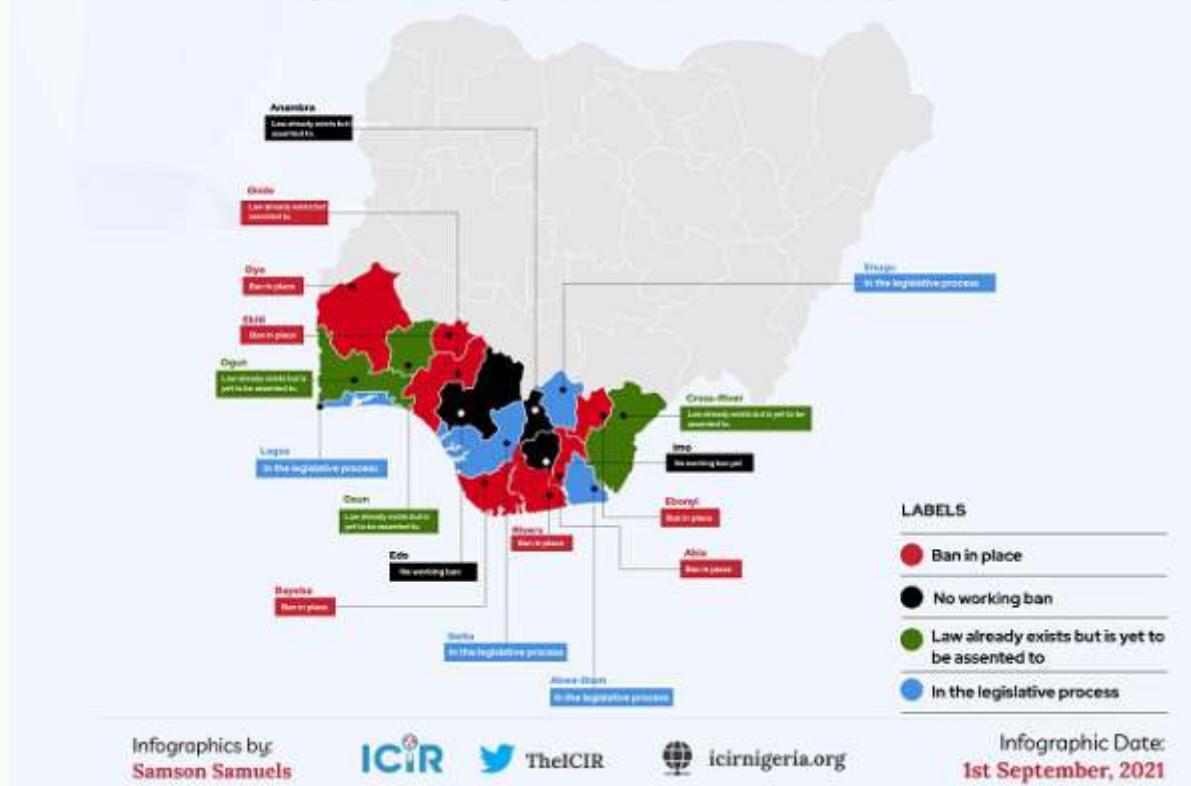
After his election in 2015, President Buhari set up a “Special Committee on Strategic Action Plan for the Development of Grazing Reserves and Stock Routes Nationwide” that was tasked with presenting options to reduce farmer-herder conflicts in the country. The terms of reference of the Committee was a simple rehearse of what the National Conference did in 2014. Unfortunately, not much came out of the efforts. A National Grazing Reserve (Establishment) Bill was presented to the parliament in 2016 for establishing a National Grazing Reserve Commission with the power to identify and acquire land for the establishment of Grazing Reserves. It was fiercely criticized as ethnically biased and was rejected by the Nigerian parliament

Since then, issues relating to pastoralism became weaponised: from farmer/herder crisis to invasion of communities by “killer herders”; cattle rustling leading to “banditry”, and so on. The issues are today politically, ethnically and religious framed and perceived. For most of the time under the Buhari administration, issues relating to herders were discussed and responded to in “We/they” terms: Federal Government: “The Fulani can go anywhere they want; Nigeria is a federation” and some States of the Federation: “Federalism does not license innocent community members to be killed as the herders do. They want to take our land and water. No, we won't allow them”. The conflict situation created rooms for different forms of opportunism. While some agents of the federal government tried to create the image of ambassadors of the Fulani people and insist on the herders having the right to keep roaming their livestock around, some State Governors make up for the governance deficit around them by claiming to be the defenders of their people against “killer herders”. No national conflict gets resolved that way; not in a federal State. This is why the herder issues have become very intractable under the present systems in Nigeria and it could get worse in the future if not sincerely addressed. The Fulani are securitized all over the country. There are several misleading stereotypes about the group all over the country: even in many parts of Northern Nigeria.

As the crisis escalated in some other parts of the country, a number of new initiatives were developed. These include the Agriculture Promotion Policy (2016 –2020) which has strong provisions for livestock production. The others include the National Grazing Reserve (Establishment) Bill, 2016 which was rejected by the National Assembly. There was the failed attempt to introduce Cattle Colonies and Rural Grazing Area (RUGA) policy in 2017 and then the National Livestock Transformation Plan (NLTP) in 2019 providing for ranching. This was further modified into Livestock Intervention Programme (LIP) for wider acceptance. The implementation was slowed down by President Muhammadu Buhari's insistence on the controversial open grazing routes.

Owing to the inability to arrive at any national consensus on how to deal with the issues of pastoralism in Nigeria, a number of States in the country have passed “anti-grazing” laws banning open grazing in their jurisdictions. The following map shows some of the affected States:

## Status of the Anti-grazing ban in Nigeria's Southern states (as of the September 1, 2021 deadline)



The above States are in Southern Nigeria. But a few Northern Nigerian States have also passed their own anti-grazing bills. These are Benue and Taraba States. The Plateau House of Assembly discussed the bills but slowed down its passage probably because of the status of the State Governor, Simon Lalong, as the Chairman of the Northern Governors' Forum. The laws, which stand opposed to open grazing, advocate the adoption of modern ranching. However, none of the anti-grazing laws cared to address the root causes of the rural conflicts. That is considered to be the responsibility of the federal government. Therefore, the laws leave the herders more frustrated and readied for engaging in more violence in defence of their traditional trade, herding livestock. The fullness of this manifests in Benue state where the anti-grazing laws are fully implemented.

There is an ECOWAS Protocol on Transhumance (1998) and supporting Regulation (2003) under which ECOWAS Member States recognized cross-border pastoralist transhumance as a valuable economic activity and defined a regional regulatory framework for cross-border transhumance based on the ECOWAS principle of free movement. The terms are not fully adhered to as the pastoralists coming into Nigeria sometimes complain of harassment at the borders. Nigeria equally accuse these herders of subjecting some border communities to different forms of violence. They are also fingered for bringing illicit arms into Nigeria using their animals as the beasts of burden. In the spirit of addressing these issues, a Regional Summit on Human and Climate Security Challenges and Farmer - Herder Conflict Resolution was held at the Nigeria Airforce Conference Centre, Kado, FCT, Abuja from 12<sup>th</sup> – 13<sup>th</sup> December, 2022 where the participants called on Governments of West African States to:

- i. Mainstream Climate Smart Strategies into all livestock and crop farming sectoral policies and interventions across the region, with specific budget lines to ensure its sustainability.
- ii. Establish Federal and State Ministries of Livestock and Fisheries Development in Nigeria to better coordinate with other West African Countries to attract greater attention that facilitates reaching of the full potentials in the livestock sector.

- iii. Carry out a comprehensive review of traditional systems and models for farmer-herder conflict resolutions in the region, strengthen and up-scale mechanisms that have proven effective.
- iv. Establish, strengthen and fund National, State and Local Government multi-disciplinary, multi-ethnic and multi-religious Conflict Resolution and Peace Building Committees, to pay particular attention to the livestock and crop farming sub-sectors and engender unity and peaceful co-existence.
- v. Review, harmonize and enact, if necessary, existing legislation suitable to the context of countries and localities affected by farmer-herder clashes.
- vi. Promote utilization of Early Warning Systems by National and State Governments in the Region to mitigate the occurrence of conflict.
- vii. Make the Regional Summit a bi-annual event to be hosted among the neighbouring countries (Chad, Niger, Cameroon, Benin and Nigeria) for strong networking and continuous collaboration in promoting regional peace and climate security in the livestock and crop farming sectors.

## **What is the way forward?**

In answering this development relevant question, it is necessary to take another look at the central message in the discussions so far. It is that the economic value of the Fulani and their livestock trade was noted by the British as early as 1904. Substantial taxes were collected from livestock business to sustain the colonial enterprise. Subsequent regimes did/do same thing. Unfortunately, no regime has been able to develop a strategy that would enable the herders do their business peacefully. The conflicts between the herders and other Nigerians have been so badly managed that there is “Fulaphobia” across Nigeria today.

Theoretically, the herders could be considered from two angles: (i) a national asset and (ii) a security liability. For now they are treated a security risk and liability; people fear and avoid them. This is largely because the policy makers handling issues relating to them base the steps they take more on the attainment of immediate political gains rather than protecting the long term interests of the herders which include the creation of sustainable environment for practicing their trade. The point being made here is that Fulani herders benefit too little from the political conflicts about them; they benefit too little from the livestock business in Nigeria than the ordinary Nigerian think. Livestock trade generates a lot of money but this does not necessary end in the pockets of the herders. I realized this from my past study of the business and conflict associated with it. I discovered in the Oke Ogun area of Oyo state that women make millions of Naira from large scale trade in cheese with traders coming from as far as Togo. These women, like the others that engage in livestock transportation and other businesses along the value chains own big houses in many places that the herders do not have. Yet, it is these poor people that bear the burden of the business. My conclusion from this is that the herders are simply being exploited; not many people are solving their problems.

Taking the foregoing into consideration, I did a small survey on what comes to the Fulani herder who everybody complain about. If need be, he sells a cow for N300,000 (i) the owner of the animal who is often not the herder gets about N270,000 (ii) the herder gets N30,000 according to existing contractual agreements if his principal is that generous; (iii) middle men (broadly defined) get about N10,000 from the seller and buyer under different guises (iv) transporter and other service providers get N5,000 (v) restaurants, meat sellers, cheese settlers etc. make about N1,250, 000. Along the value chain, not less than 10 jobs are “quietly” created. The unfortunate thing is that when anybody is to be demonised along the value chain it is the Fulani that got only 30k by driving the animal down from the North on foot for months. That is why the herders don't look good like the others in the livestock value chain. **Livestock trade promises Nigeria a lot; but herders get too little from it!**

## **Grazing Reserves or Ranching**

How then do we get out of the present crises? In an article published in the Guardian newspaper of 16 July 2019 titled “Legal options to end perennial herders, farmers' conflicts”, Professor Yinka Omoregie, the Head, Legal Research Division, National Institute for Legislative and Democratic Studies (National Assembly), Abuja said “the federal government may wish to consider possible legal interventions in forms enforcement of extant law, mandating or directing relevant public bodies to functions as required or pass fresh legislation to deal with the situation in order to achieve lasting solutions”. On fresh legislation she said “Federal government's attempts to intervene have been resisted on several grounds, including grounds of constitutional legislative competence... the National Assembly may wish to take the following legislative steps:

- (i) **Regulation of Inter-state Livestock Commerce...** regulation for the branding of cattle to identify owners involved in such activities; registration of owners involved in such activities with their brand names and all such measures to prevent anonymity of cattle owners and herders, among other regulations. All relevant ministries and departments, as well as security forces should be availed with data generated through this means. Appropriate sanctions should be included in the law to punish those who fail to comply, or supply/share the required data information
- (ii) **Creation of Special Unit of the Nigeria Police Force**
- (iii) **Federal Grant to States:** ... the government of the defunct Northern Region had in the past passed the Grazing Reserve Law of 1964 to provide strategic support which enables herders graze their herds and provide them fresh water in public grazing fields/reserves. This was in furtherance of the vertical constitutional responsibility placed on the regions at the time (now still a part of states' responsibilities) to handle such matters... Unfortunately, most states in the north where this law still exists have not taken enough proactive actions to sustain the initiatives contained in the law. In fact, there are verifiable reports that many of such reserves have since either been abandoned or the land meant for them reallocated to private individuals for private ranches, thereby leaving herders to their own fate. Nevertheless, federal support for such initiative is unavoidable given the urgent national security implications of continuous clashes between herders and farmers. It is in this context that the federal government should consider providing financial support to states by way of conditional grants to enable them to develop the necessary infrastructure for grazing within their various domains. This will reduce further herding activities across states and the clashes resulting from them.

A review of all that have been said so far opposes the continuous movement of animals around the country by the herders. The preponderance of opinion is in the direction of Nigeria combining the policies of grazing reserves and ranching. Different stakeholders would need to decide on what would work best for them. A Nigerian Working Group on Peace Building and Governance consisting of some public policy experts - Ibrahim Gambari, Martin Luther-Agwai, Jibrin Ibrahim, Attahiru Jega, Chris Kwaja, Fatima Balla, Nguyan Fesse, Aisha Muhammed-Oyebode and Y.Z. Ya'u - suggested in January 2018:

- “It is clear that Nigeria and, indeed, Africa have to plan towards the transformation of pastoralism into settled forms of animal husbandry. The establishment of grazing reserves provides the opportunity for practicing a more limited form of pastoralism and is therefore a pathway towards a more settled form of animal husbandry. Nigeria has a total of 417 grazing reserves out of which only about 113 have been gazetted.... there is the need for permanent settlement of pastoralists”.
- “One of the greatest difficulties in addressing and resolving issues surrounding pastoralism is the politicisation of legal regimes and the blockages to the enactment of or implementation of laws that can redress the key challenges posed. In 2016, for example, a legislation was proposed – “A Bill for an Act to establish Grazing Reserve in each of the states of the Federation Nigeria to improve agriculture yield from livestock farming and curb incessant conflicts between cattle farmers and crop farmers in Nigeria” – and thrown out”

- “There is an emerging conflict between the constitutional principle on the free movement of persons and goods and laws emerging in some States restricting movement. Some States have enacted laws or are processing bills to prevent open grazing on their territories. There are four initiatives so far in Benue, Ekiti, Taraba and Edo States. Could such laws be effective in prohibiting pastoralism, which is practiced by millions of Nigerians?”
- “A new policy framework on the farmers-pastoralists crisis should be developed that is both comprehensive and mutually beneficial to both groups. There must be a consultative process that listens to the concerns of all stakeholders in developing the new framework, so that the outcome would have national ownership. The new policy should develop a plan for a transitional period during which new systems would be put in place. The framework should map out the duration, strategy and timelines for the transition plan. Finally, a comprehensive approach to address the growing crisis associated with violence affecting pastoralism and farmers in Nigeria is necessary”.

## **Governor Ganduje's Bold Steps**

These are good suggestions but the position of Governor Abdullahi Umar Ganduje of Kano State on the matter is more courageous and revolutionary. He called for the ban of cattle movement from the North to South. He said<sup>13:</sup>

- “we are building a Ruga settlement in Samsosua Forest, our border with Katsina and we have succeeded in curtailing the effects of banditry in that area.
- “So, we are building many houses, we are constructing a dam; we are establishing a Cattle Artificial Insemination Centre; we are establishing a veterinary clinic and already we have started building houses for herdsmen”
- “My advocacy is that we should abolish the transportation or trekking of herdsmen from the Northern part of Nigeria to the Middle belt and to the Southern part of Nigeria.
- “There should be a law that will ban, otherwise we cannot control the conflicts between herdsmen and farmers and cannot control the cattle rustling which is affecting us greatly.”

And then he said<sup>14:</sup>

- “It is an established fact that modernising the livestock sector is key to resolving the herders/farmers conflict which threatens Nigeria's political stability and food security.”
- “I am a strong proponent of restriction of herders' movements into Nigeria from neighboring countries as part of solution to tackle herder/farmer clashes. However, another issue worth taking into account is the ECOWAS Transhumance Protocol which Nigeria signed in 1998.
- “This guarantees free movement to pastoralists, herders across the sub-region. As signatories to that Protocol, Nigeria is obliged not to restrict the movement of herders and their cattle from other ECOWAS countries. This is an issue to be looked into...This has added a further complication to the problems we already have, besides most foreign herdsmen are exposed to the firearms market and are unknown to the local farming populace”.

It is apt to conclude this paper by saying that GANDUJE LEADS THE WAY, THE REST OF NIGERIA SHOULD FOLLOW ON HOW TO MANAGE THE PASTORALIST CRISES. NIGERIANS SHOULD STOP PLAYING POLITICS WITH THE PROBLEM AND ITS MANAGEMENT.

<sup>13</sup> “Ganduje calls for ban on cattle movement from North to South”, Vanguard, 31 January, 2021

<sup>14</sup> “Modernised livestock sector will address herders/farmers' conflict —Ganduje”, Nigerian Tribune, 24 January 2023

## **MITIGATING FARMERS-PASTORALISTS CONFLICTS IN NIGERIA: REFLECTIONS ON POLICY OPTIONS**

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### **Introduction**

The phenomenon of conflicts between farmers and pastoralists or herders has become so common in Nigeria that its recurrence and the accrued bad consequences no longer send shivers over Nigerians. Incidentally, virtually all these conflicts occur over access to, and utilization of land resource. Indeed, there are innumerable serial conflicts in Nigeria arising from contestations over the use of land resource by groups. In fact, it will not be out place to say that majority of the inter-group violent conflicts in Nigeria are caused by land-related factors. The trend and character of most of these conflicts have remained unchanged despite the longevity of their occurrence.

Unfortunately, the craving to utilize land as a resource for economic benefits by farmers and herders in Nigeria has culminated into a sordid experience in which the two groups have violently pitched against each other. This bloodletting interaction between farmers and herders has engulfed many states in Nigeria. In recent years, farmers-pastoralists violent confrontations have been widespread in Nigeria but the most affected states include Benue, Plateau, Nassarawa, Taraba, Adamawa and Ekiti. Other states such as Kaduna, Kogi, Niger, Zamfara, etc. are not left out. Deductively, farmers-herders conflicts have become a national tragedy in Nigeria and the country is yet to find feasible solutions to the raging social inferno. This brief write-up is a reflection on the problem orchestrated by farmers-pastoralists conflicts in Nigeria, the damage it has caused the nation and a consideration of some policy options available to government and other stakeholders to adopt and implement towards addressing the menace.

### **The Problem**

Right from the beginning of the 21<sup>st</sup> century, there has been an upsurge in fratricidal inter-group relations in Nigeria. This has been demonstrated by the phenomenon of farmers-herders violent clashes across the country. Existing literature is inundated with data on cases of conflicts between farmers and herdsmen in Nigeria (examples, Nwakaudu, 2011; Olayoku, 2014; Akov, 2017; Aluaigba, 2021, etc.). The most disturbing aspect of these constant conflicts is the use of sophisticated weapons by both parties and the high turnover of casualties resulting from them. For instance, the consequences of these conflicts on Benue communities have been terrific. Abdulbarkindo and Alupsen (2017: 23-24) have revealed that from 2014 to 2016 alone, 4,194 people in Benue State were killed, while 2,957 were injured, whereas 195,576 houses were destroyed in 12 Local Government Areas (LGAs). Similar statistics are chunned out from other States where such conflicts have occurred.

Many factors have been adduced for this ugly trend. First, there is the conflict-prone enabling condition provided by the phenomenon of climate change. Studies (examples, Homer-Dixon, 1991; Barnett & Adger,

2007; Heinrigs, 2010; Adigun, 2019, etc.) have established that climate change is responsible for most of the land-related conflicts not only in Nigeria and the Sahel region alone, but also globally as well. This connection is underpinned by the simple logic that as human population keeps growing in the face of transformation in the environment through the depletion of natural resources such as land and water, the resultant scramble for available but meagre resources will inevitable generate inter-group violent conflicts. To worsen the situation, the Northern part of Nigeria is faced with the multiple problems of desertification, escalating levels of poverty, ignorance and inequality. These serve as fertile grounds for the eruption of violent conflicts between farmers and pastoralists.

Second, the unceasing trend of pastoralists-farmers conflicts across Nigeria is tied to the nomadic character of herders on the one hand, and the nature of the farming system in use by farmers on the other hand. For example, in some communities that specialize in yam production in Nigeria, it necessitates the use of shifting cultivation method that implies moving from one farm site to another yearly. As this is done, the farmers move to locations perceived by the ever-mobile Fulani herders as cattle routes. The eruption of violence conflict between the farmers and herders are inevitable in this circumstance whenever the herds wittingly or unwittingly access farmers' crops, eat them up or destroy them.

Other factors responsible for farmers-pastoralists conflicts include among others the increasing general insecurity in Nigeria, degeneration of social norms, the role of the elite and the ineptitude of government. On the one hand, the general state of insecurity experienced in Nigeria beginning from the early 2000s up to 2019 in which decimation of human lives through killings has become a daily and common phenomenon. This has provided miscreants, bandits and insurgents an opportunity to jettison the known African social norms of "being your brother's keeper" or "love for one's neighbors". Thus, inhumanity, disrespect for human worth, indignity, etc. seems to be the guiding words of those who commit atrocities in the name of projecting ethnic or group interest whether as herdsmen or as farmers in the constellation of odious bloody clashes. Moreover, the high rate of Small Arms and Light Weapons (SALW) in circulation in Nigeria is a precipice for the exacerbation of the trending farmers-herders conflicts in Nigeria. Unfortunately, this crisis affects mostly the poor and the marginalized groups such as women, children and people with disabilities. This explains the urgency of finding workable solutions to the menace.

## **The Negative Impact on Society**

Violent conflict of any nature and wherever, does no good to any society. In all cases where conflicts have turned violent, they have left in their trails heinous results. For instance, the case of such violent conflict between herdsmen and farmers in Benue State from 2007 to 2018, has claimed hundreds of lives and rendered over 80,000 persons homeless in the State (Kwaja & Ademola-Adelehin, 2017: 11). This figure is just a single State, when the total national figure of casualties arising from other herdsmen-farmers violent confrontation across Nigeria is put together; it will be frightening. This is counterproductive to Nigeria's quest for unity and peaceful co-existence in the country. In fact, the continual attacks and counter attacks by herdsmen against farmers and vice versa around communities in Nigeria have the tendency to subject the country to any of the following negative developments.

First, the continuous farmers-herdsmen conflict has the predilection to heighten the already frail security and worsening insecurity situation in Nigeria. Insecurity in Nigeria in form of insurgency in the North-East, kidnapping, bandits attacks on communities, armed robbery, etc. has increased in the last few years. This has made Nigeria to be classified as the third most terrorized and insecure country in the world in the 2018 Global Terrorism Index (GTI) trailing behind Iraq and Afghanistan that came first and second respectively (Sahara Reporters, 2018). If the herdsmen-farmers violence is unaddressed, it will add more salt to Nigeria's insecurity wound. Second, unresolved herdsmen-farmers violent transgressions will further escalate the frictions and violent antics between herdsmen and communities in other parts of Nigeria. For example, following the incessant attacks on farmers by cattle breeders in Nigeria's North-Central Zone, the

relationship between Fulani herders and their host communities in States such as Kogi, Enugu, Edo, etc. has turned soured. In Enugu State for instance, 20 people were reportedly killed in April 2016 in Ukpabi Nimbo, Uzo-Uwani Local Government Area of the State by rampaging Fulani herders (Chiedozie, 2016) leading to intense tension between the herders and the locals.

Third, the unending herders-farmers crisis will leave Nigerians to be more divided as ever with ethnic and regional hatred as the bedrock of social life thereby compounding the problem of national unity and integration. For instance, recent tensions were generated in the South-West Zone of Nigeria following incessant herdsmen-farmers related violence in the zone. In January 2018, the Ondo State Police Command confirmed that Fulani herdsmen attacked and set fire on the farm belonging to Olu Falae, the former Secretary to Government of the Federation (Olanipekun, 2018). On July 12, 2019, suspected herdsmen killed Mrs. Funke Olakunrin, the daughter of Pa Rueben Fasoranti, the National Leader of Afenifere, the Pan-Yoruba cultural organization (Akinkuotu, 2019). Following these incidents among many others, key individuals of Yoruba ethnic fraction made resounding and divisive public pronouncements. Former President Olusegun Obasanjo wrote an open letter to the serving President Muhammadu Buhari. In that letter, Obasanjo denounced the government's inability to address herdsmen attacks on farmers around the country and referred to these as the process of the "Fulanization of Nigeria" (Nwachukwu, 2019). By "Fulanization of Nigeria", Obasanjo implied the process that will culminate into the total domination of the Fulani ethnic group over all other ethnic groups in Nigeria, a development that trigger political upheaval inimical to national cohesion in the country.

Fourth, herders-farmers clashes in Nigeria will negatively affect farm productivity because of farmers' inability to cultivate their farmlands. For example, in the third quarter of 2019, after the 2018 widespread herdsmen-farmers clashes in Benue State, majority of the farmers became refugees in concentration camps as IDPs without access to their farms because of the fear of attacks by herders. This development, if allowed to linger, is a recipe for impending hunger and starvation in subsequent year(s). Fifth, as a corollary of the above, low farm produce would ignite the economic backlash in which prices of foods stuff and cows will skyrocket beyond affordable level for ordinary citizens. Moreover, continual herdsmen-farmers conflicts combined with other forms of insecurity in Nigeria will make the country unattractive to foreign investors. The ultimate result of this will be low productivity, low investment, condensed job opportunities, congested labor market due to rising unemployment levels and hence a stunted economy with low prospects for igniting development. The inference from all this is that, the raging herders-farmers conflicts have increased Nigeria's national woes rather than laying a solid foundation for her emergence as a strong economy and united nation.

## **Options for Mitigation**

What should Nigerians and the government do to overcome the problem induced by pastoralists-farmers conflicts? Some suggestions are made here as probable options that, if implemented, will pave the way for a permanent solution to the farmers-herders palaver.

1. **Sacrifices to be made by government, herdsmen and farmers:** On the part of government, the said sacrifice should be in the form of devoting huge finances towards investment in cattle ranching across Nigeria. As for herdsmen, they must recognize that rearing of cattle is a private business just like farming. They should therefore, be ready to embrace modern cattle rearing methods such as ranching. Farmers on the other hand owe a duty to their communities to recognise the need to live in peace with others. It is through these means that harmony can ensue between herdsmen and farmers for the agricultural sector to grow to support the development process in Nigeria.
2. **Sincere commitment by government:** The Federal Government should demonstrate sincere commitment towards addressing the problem of herdsmen-farmers clashes. This high level commitment is imperative because as it presently exists, the government is indifferent to the problem. The enfeebled efforts by the Federal Government to address the problem through the proposals for

Cattle Colony in 2018 and then, Rural Grazing Area (RUGA) in 2019 were all not properly conceived through consultation with all stakeholders. This was why the proposals were both fiercely resisted in most States of Nigeria because they were seen as mere imposition, internal colonization and tools of Fulani domination over other ethnic groups in Nigeria. As a show of commitment, the Federal Government should immediately commence the construction of model ranches across each of the six geo-political zones of Nigeria based on which, state governments and investors will follow in building same in their various States. As a prelude to the above suggestion, there is the urgent need for multi-stakeholders engagement involving Ministries of Agriculture, farmers, herders, security agencies, etc. to discuss the strategies of establishing ranches. Through this, a more collective and acceptable method will be arrived at by all the parties and will have a long-lasting positive effect. This is important because of the urgency to carry along all the stakeholders or parties in crafting a popular policy to solve the problem.

3. ***Review of the Open Grazing Prohibition Laws:*** Some States in Nigeria implementing the Open Grazing Prohibition Laws such as Benue and Ekiti States should take a second look at the laws towards clarifying all grey areas therein in order to allay the fears of herdsmen who might be intending to ranch their cattle in states other than theirs. For example, in reviewing the law, the Benue State House of Assembly could consider incorporating a clause that highlights the assistance the state government will give to herders or investors willing to ranch cattle in Benue State. This will dispel the fears of social and economic barriers towards ranching expressed by Fulani herders at the onset of the implementation of the Open Grazing Law in the state in November 2017.
4. ***Institutionalizing peace-building mechanisms:*** The Federal, States and Local Governments should embark on institutionalizing peace-building mechanisms in their respective spheres to enhance easy and quick resolution and reconciliation of future conflicts among groups. It is evident that the absence of existing mechanisms to quickly tackle embryonic inter-group clashes in communities around Nigeria often lead to the degeneration of such clashes into full fledge violent conflicts. As mentioned earlier, peaceful co-existence among the varied ethnic and religious groups in Nigeria is a possibility. However, this will depend on how the ruling, political and traditional elites in Nigeria are able to navigate the contours of diversity using appropriate inter-group management tools.
5. ***The law should take its course:*** For a long time in Nigeria, the victims of violent conflicts have been abandoned without any form of compensation for the lives and properties they lost in violent conflicts. It is therefore imperative to create special tribunals to investigate, prosecute offenders and compensate victims. This will go a long way in calming those affected and preventing reprisal attacks. The danger in politicizing legal regimes in a country is its inability to resolve simple conflicts among groups because of the seeming reign of nepotism and corrupt tendencies by law enforcement and security agencies. This polarizes society along ethnic and religious lines which retrogressively translates to taunted growth and development.

## **CONCLUSION**

The avowal that violent conflicts are anathema to development is a known fact. It must, therefore, be noted that peace is a sine qua non for development and Nigeria cannot afford to perpetually cohabit violent conflicts amongst her numerous groups, while at the same time prodding to develop. Peace is a prized social asset that any serious society yearning to develop works to acquire it. It does not exist without sacrifices. Thus, the commitment plus the political will that government will demonstrate towards addressing the farmers-pastoralists conflicts are necessary ingredients that will nip this malady in the bud.

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# **Engendering Prosperity, Wellbeing and Peaceful Inter-Communal Coexistence among Farmers, Pastoralists, Youth and Women Strategies to Engender Prosperity, Wellbeing and Peaceful Inter-Communal Coexistence Among Farmers, Pastoralists, Youth and Women**

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## **Abstract**

*This paper interrogates the current state of crisis, one which sets farmers and herders in bitter conflicts over the utilization of land resources and especially suggests the way out of the increasingly worrisome imbroglio that currently pervades between the two sub-segments of the agrarian ecology, as they coalesce into communities of herders and farmers with compatible interests in resource utilisation for the benefit of all concerned. Strategies to encourage the adoption of innovations in livestock production are proffered based on historical evidence of voluntary sedentisation in Nigeria and elsewhere. The paper hopes to raise issues that may show a way forward as to the mitigation of the problems.*

## **Introduction and Protocols**

There is a sense in which Africa can be said to be a continent of farmers and animal herders or pastoralists but there is today little doubt that all is not well with regards to co-existence of the two sub-sectors of the agrarian economies of Africa's various communities, especially those in the sub-Saharan region. All over the sub-Saharan region farmers and herders continue to face protracted problems and challenging times. Basically the problem of conflicts between farmers and herders have their roots, historically, on conflicting claims over access to land and its resources for either grazing or farming, with each category angling for advantage, In the struggle, graziers being mobile or transhumant, are often seen as "aliens", while farmers, being fixed and sedentary often perceived themselves as natives and "owners" who must dictate conditions of access to and utilisation of land resources.

Farming revolves around crop husbandry, i.e. the cultivation of crops, undertaken in fixed open fields. The same cannot be said for traditional animal herders or pastoralists. Pastoralists are those elements of rural economy and society whose livelihoods and means of subsistence derive principally from the management of domesticated animals using ““natural” pasture unimproved by human intervention” (Salzman, 2004, p.1).

Herders have long captured the interests first of anthropologists and later of other social scientists for several reasons. First, within the marginalised agrarian society, pastoral peoples are the least understood and, therefore, the more misrepresented, such that pastoralists have historically suffered, insidious deprivation both from nature and from human structures and processes and as victims of stereotypes, ethnocentrism, racism. Alternatively, they have been subjects of romantic views and analyses. In reality animal herding is not some outdated primitive/uncivilised activity, it is neither atavistic nor esoteric.

As already alluded to, in many ways it can be said that farming systems are easier to understand consequent to which intervention strategies for its transformation are somewhat relatively easier to implement. Efforts to transform pastoral systems on the other hand have to contend with nuances not easily grasped. I will

therefore digress from the central concern of the paper to elucidate on key characteristics of herding systems and to which all efforts at transformation will need to pay attention to.

## A Brief on Characteristics of Pastoral/Herding Systems

In Africa, domesticated animals managed by pastoralists are a variety, the specific types of which are region-dependent. In Eastern, Northern, Southern and Western Africa, cattle predominate but small ruminants like sheep and goats are also significant. Camel, sheep and goats are more predominant in North Africa.

For pastoral people, the imperative for survival has typically entailed the evolution of unique adaptation and evolution of specific cultural arrangements which directly and indirectly relate to the exigencies of animal husbandry within the general context of the ecological environment. What rules the day is constant interaction between herders and the environmental (geographical) niches in which the people live.

It is largely the case that herders occupy some of the world's marginal regions where vegetation growth (and therefore, crop cultivation) is fairly or severely restricted by relief/topography, aridity from the lack, dearth or unreliability and instability of rainfall regimes, to list a few. It is obviously why areas such as deserts and semi-deserts, mountainous terrains, etc., and open grasslands or the savannas harbour herders in their numbers.

The various conditions which allow pastoralism to thrive can be divided into two, the ecological (or geographical) and the social (including economic and political factors.) The ecological includes

- Marginal areas that do not support significant crop production (eg. deserts, semi-deserts, mountain regions);
- Areas of little, sporadic, scanty and unreliable rainfall;
- Areas devoid of human and livestock disease vectors
- Sparsely populated but which have sedentary settlements (towns and villages).
- The social factors include:
  - Areas of social and political congeniality, devoid of violence and social conflicts
  - Areas where grazing watering rights and privileges can be negotiated
  - Areas of communal, as opposed to private, ownership land tenure systems (communal ownership is more ideal).

The conditions above dictate unique animal management practices, the major one of which is **transhumance**, or generic term for the general animal management strategy which entails various types of movement of animal herds within and/or across extensive areas, with or without a homestead, seasonal or otherwise, horizontal or vertical. It has been a major tool used where available water and pasture resources are concentrated but scattered far and wide and/or subject to variability in quantity and quality such that mobility is undertaken to maximize resource utilisation, to avert over-grazing, cause soil damage, environmental degradation or conflict with other populations (pastoral or otherwise). Transhumance is the widely used in herding in Africa, Middle East, Asia and Northern Europe used by nearly pastoral groups.

The transhumant strategy that has continued to catch attention for the right and wrong reasons is **nomadism**, or the movements by pastoralists involving herd and family together, all year-round, with no fixed homestead or base as practiced by Wodaabe Fulbe (in Central Niger Republic), the Somalis in the Horn of Africa, Bedouin Arabs of the Middle East, Baseri of Persia (Iran), to list but a few. Nomadism takes place in ecologically marginal areas such as deserts or where there are shortages of water and pasture resources where land is not privatised or alienated, devoid of insecurity/conflict, to escape state or other forms of political control, for cultural contacts with non-nomadic/non-pastoral peoples. Nomadism is ideally anchored on the foundations of eco-intelligence, a system through which pastoralists gather and process information regarding the quality of ecology of specific areas/rangelands on the one hand and on the other, social and political congeniality. Herd deployment is typically based on knowledge and understanding of the

environment as, for example, to fix pastoral eco-calendar of movement, plan routes to take or avoid, etc. Nomads specifically aim to maximise opportunities for access to water and pasture resources. Other reasons for nomadism include avoiding of human and animal disease, avoiding insecurity and conflict as well as maintaining symbiotic relationships with other pastoral and non-pastoral groups, escape political control, search for markets and avert adverse changes in land tenure practices/laws.

The Alternative to transhumance and, especially, nomadism is **sedentarisation**, a situation where nomadic and semi-nomadic herders opt for permanent settlement and adopting sedentary live-styles, cultures, with or without retaining animal husbandry as major means of livelihood. In the main, sedentarism is usually resorted to:

- Where pasture and water resources are plentiful or adequate in quantity and qualityas Charles Frantz (1980: 62 - 79) has established for herders on the Mambila Plateau.
- Other motivations may exist such as the acquisition of education, adoption of alternative livelihoods.
- The sedentarisation alternative can also be brought about by herd loss (to disease, theft, etc.),
- Population pressure,
- Government policies,
- Conflicts,
- New opportunities,
- Availability of water and grass year-round,
- Changing land tenure laws,
- Acquisition of education and knowledge.

### **Livestock Rearing in Crisis**

In modern times in sub-Saharan Africa, traditional herding practices have come under increasing pressure principally on accounts of conflicts of interests between herders using transhumance against the interests of crop producers and other sedentary users of land resources often resulting in violent conflicts leading to significant numbers of deaths and destruction for both parties. Yet it has also been the case that traditional pastoralism predispose pastoralists to conflicts and engendering acrimonious relationships with predominately sedentary non-pastoralist populations. As explained, the predominant animal management practices employed for the animals demands some significant mobility for herds and/or people. In the process, conflicts of interests become perhaps inevitable.

The problems of livestock production today cannot be separated from its experience during European colonialism, which basically transformed the socio-economic and political milieu in which both farmers and herders eke out living. It was this experience that engendered and sustained crisis in the system to this day as attempts to transform the system continue to defy solutions. In many ways, the crisis seems to become worse due to internal and external factors.

To date, traditional pastoralism has managed to survive, though in battered shape,because of factors inherent in the system itself, a few of which include:

- i. Ability to adapt to merging or new circumstances as hallmark of pastoral systems
- ii. System is characterised by long-term flexibility
- iii. Low Production costs (afforded by transhumance)
- iv. Freedom of movement as a production strategy (resort to transhumance)
- v. Availability of marginal lands unsuitable for crop husbandry
- vi. Availability of supplementary feeds (industrial by-products, crop residues;
- vii. History: system had always survived/recovered from disasters, disease epidemics, droughts, etc.

However, it must be said that the above factors are generally no longer so tenable. The problem has just about reached a crisis point where something has to give. The crisis in question continues to manifest as follows:

- I. Ecological imbalance/environmental degradation/climate change
- ii. Rangeland Degradation resulting from soil erosion, over utilisation and associated practices
- iii. Protracted conflicts, violence, generalised terror, etc., being visited on both herders and farmers alike
- iv. Rigidification of international boundaries, which impedes movements across the artificial borders imposed by colonialism
- v. Population Growth (human & livestock). According to UN estimates, the human population of Nigeria grew at 2.41% and stood at 218.5 million as at 2022,
- vi. Changing land tenure. Nigeria's Land Use Law basically commercialised access to and ownership of land, with conditions that make it all but wholly impossible for most farmers but especially herders to acquire and maintain enough parcels to satisfy production needs.
- vii. Land grab by elites and politically exposed persons. See for example, expose by *Daily Trust* (15<sup>th</sup> December, 2019), of land grab of hundreds of hectares of grazing lands and cattle routes with one PEP grabbing as much as 1,000 hectares; all these in addition to countless encroachment on same grazing reserves and cattle routes by farmers. The same if not worse phenomenon obtains on the Mambila Plateau and indeed elsewhere;
- viii. Administrative bottle necks stemming from state control, especially relating to the imposition of political economic policies of liberalism (subsidy withdrawal, etc.).
- ix. Urbanisation
- x. Lack of modern education among pastoralists (farmers suffer the same burden but not as much as herders)
- xi. The “politisations of transhumance” or “the manipulation of transhumance in political discourse across the whole of West Africa and the vast Sahel region” Alice Nderitu, UN Adviser on the Prevention of Genocide, 2023).

Given the above, there is hardly much ground to expect traditional herding practices to survive. My thinking is this, that transformation to meet the challenges of the times is perhaps the only way out.

## Possible Resolution of the Pastoral Crisis

A plethora of suggestions for the transformation of traditional herding systems exists and it is not feasible to review all here because, as earlier alluded to, the problem is complex and multi-dimensional.

A general solution to the pastoral crisis is deceptively simple and straight forward: provide the pastoralists with the requirements of their animals such as to make transhumance redundant! Nomadism is not a culture: it is a situational necessity. As Salzman (2005) puts it, “Nomads do not live to move, they move to live”.

Sedentarisation with all appeals of its dividends will follow as it had been happening historically. Admittedly, this solution is easier said than done. I will review the options and alternatives below.

In the past few years, there seems to be some populist political romance with the idea of grazing reserves. Grazing reserves may be described as parcels of land set aside and provisioned with facilities such as pasture, fodder, water sources, human and animal clinics, roads, market outlets, dwellings, etc., reserved for exclusive use as grazing fields by livestock rearers. While alluring even to pastoralists, the grazing reserve option has its drawbacks in the context of the political economy and any further progress in implementing the policy must address such concerns. Obviously ethnicising the situation, many are there who opposed this, seeing it as “unduly” favouring graziers, a minority, even as “aliens”, to the detriment of farmers. This is at the political or ethnic level.

Others have also argued that the grazing reserve policy is dead on arrival as it has little chance of succeeding at least for the following:

- i. Demand for land for sedentary activities and specially crop production likely to intensify and fallow land will continue to dwindle; there will be less and less to be “reserved”;
- ii. Grazing reserves are highly capital intensive and in view of dwindling available resources, the state in Nigeria or elsewhere in sub-Saharan Africa is unlikely to continue to provide sustainable funding;
- iii. Indigenous breeds of animals are not commercially viable (e.g. in terms of meat and milk products)
- iv. The modern State has continued to exhibit incapacity to manage, sustainably, the few grazing reserves that have been established anyway. Even the ones established during the colonialism and immediate post-colonial periods have been abandoned, neglected, poorly provisioned, encroached on.;
- v. World over, “reserves” have had little history of success – USA, Australia, Canada, etc., are telling examples where misery, desolation, drug abuse, gambling, unexplained murders, disappearances, disillusionment, etc., now pervade the enclaves or “reserves”; but since the enclaves have been “reserved”, the inhabitants have no where to escape to;
- vi. Under state control, pastoralists may not have ownership, so the “tragedy of the commons” is likely to result whereby, all graziers will seek to use but leave care of the reserves to the State;
- vii. Reserves will be subject to elite capture, under the state's privatisation policy as had been the lot of river basin development projects;
- viii. The problem of corruption in the disbursement of public funds may undermine reserves. In the absence of good governance, the State in post-colonial Africa has literally become the site of primitive private accumulation.
- ix. In view of (i) – (vii), it is not feasible to expect governments to sustain the provision of services that are necessary to support the such that the nurturance needs for animal can be met on 24-hour basis as ought.

What I think is required is sustained well-thought out and carefully articulated short and long term policy programs that will eventually render transhumance redundant. This should be implemented purposefully to entice pastoralist to voluntarily sedentarise.

*Such a public policy drive should seek to:*

- Promote knowledge and awareness of alternative and complementary animal feeds
- Encourage the diffusion of innovations and adoption of same by pastoralists.
- Provide access to land ownership by pastoralists
- Encourage synergy and collaboration between farmers and herders such that together they form into communities of people with mutual and not necessarily of opposing interests in the utilisation of land resources on a sustainable basis;
- Return to host-family arrangements where farmers and herders relate on regular basis by exchanging products (e.g. manure for crop residues);
- Encourage traditional leaders at all levels to commit to promoting sustained dialogue for mutual understanding, tolerance and co-operation among all stakeholders with interests in land resources;

- Focus on the youth as change agents
- Empowering women who remain central in the management of households, milk processing and disposal in pastoral communities.
- Regional, national and international policy co-ordination will be critical to the success of any well-designed and purposeful policy programs for sedentarisation.

Like any crisis, the pastoral crisis is not beyond resolution. What is required is sound understanding of the roots of the crisis which will then provide realistic, carefully calibrated and sustainable solutions.

## **Address Delivered**

**By Prof Stella Odebode, Dean, Faculty of Agriculture,  
University of Ibadan**

### **AT THE NATIONAL CONFERENCE ON LIVESTOCK REFORMS AND MITIGATION OF ASSOCIATED CONFLICTS**

Organised by

Kano Government Committee on Livestock Reforms and Mitigation of Associated Conflicts on Engendering Prosperity, Well-being and Peaceful Inter-communal Co-existence among Farmers, Pastoralists, Youths and Women in Nigeria

#### **PROTOCOLS**

I am extremely excited to be invited here today as a discussant on the topic **ENGENDERING PROSPERITY, WELL-BEING AND PEACEFUL INTER-COMMUNAL CO-EXISTENCE AMONG FARMERS, PASTORALISTS, YOUTHS AND WOMEN IN NIGERIA**

Believe it or not, history is in the making and I am elated to be part of this epoch making event. It is indeed heart-warming to note that at a time like this, this team of experts and eminent practitioners is thinking in the right direction.

The mission of this conference organised by the committee of distinguished experts and eminent practitioners under the chairmanship of our indefatigable Prof. Attahiru Jega. OFR, initiated and supported the endeavours to promote understanding ,peaceful coexistence and lasting peace between herders / pastoralists and farmers on land resource, utilization, encroachment of occupational boundaries, state policies and other governance issues.

The conflicts between farmers and herders have been in existence since the pre-colonial period. These conflicts were well managed and controlled such that their impact was not felt on the internal security and agriculture of Nigeria. There is a well-documented history of herders migrating to the west due to good relationships with sedentary farmers and co-existence and cooperation with shared available resources (Cabot,2017). Adebayo, 1991 opined that the record of pre-colonial farmers and herders' conflicts is scanty and between 12<sup>th</sup> and 13<sup>th</sup> century, there was competition and symbiotic relationship between the two groups.

In recent times the farmer-herder conflicts in Nigeria has become persistent and pervasive with debilitating consequences on human lives and their sources of livelihoods. Policy makers and development workers have been giving attention to issues of conflicts and the trends and dynamics with direct and indirect actors are constantly changing. This constant changing nature has made it difficult to resolve it.

Livestock is generally considered a key asset for rural livelihoods and It offers advantages over other agricultural sectors which is an entry point for promoting gender balance in the rural areas.

*This is because in most societies:*

- All household members have access to livestock and are involved in production;
- Livestock activities are a daily occupation;
- Animal products such as eggs and milk are produced, processed and marketed throughout the year, without seasonal restrictions;
- In all livestock-keeping communities women are responsible for the bulk of the work;
- Livestock production systems offer the potential for introducing a wide range of project activities relating to gender mainstreaming, including improved production methods and redistribution of intra-household tasks and responsibilities.

**For these reasons, it is important to understand**

- the function of livestock for men and women
- the various gender roles played in animal management
- the economic and cultural importance of livestock within the household and in the community

In the rural societies, where local culture and traditions are still very vibrant, responsibilities and tasks are often assigned to women and men on the basis of traditional gender roles. These are those behaviours and responsibilities that a society considers appropriate for men, women, boys and girls. However, these roles change over time. They have different characteristics in every local context and are shaped by ideological, religious, cultural, ethnic and economic factors. They are, therefore, a key determinant of the distribution of resources and responsibilities between men and women (FAO, 2010b).

In many cases, gender roles are biased and favour certain social constituencies at the expense of others. Rural women, for instance, face serious obstacles more regularly than men, since traditional structures and perceptions tend to prevent them from obtaining the necessary tools to reach their full potential in the agricultural sector. **Despite their major involvement in and contribution to livestock management, women tend to have limited access to resources, extension services and less participation in decision-making compared to their male counterparts (FAO, 2011a).**

Recognizing the different roles that women, youths and men play in the agriculture sector is key to identifying the diverse challenges they face and tailoring projects and programmes to their specific needs. Understanding and integrating these diverse roles and specific dynamics into projects and programmes can significantly improve their outcomes and effectiveness (FAO, IFAD, World Bank, 2007; FAO, 2011a)

## **Gender Issues in the Livestock Sector**

Livestock “widens and sustains three major path ways out of poverty:

1. Securing the assets of the poor,
2. Improving smallholder and pastoral productivity and
3. Increasing market participation by the poor” (ILRI, 2007).

In most rural areas, the development of small-scale livestock enterprises is seen as a key element of any effort to eradicate extreme poverty and hunger (FAO 2010b).

Rural women perform a reproductive role, encompassing child bearing, child rearing and housework. At the same time, they also fulfill a productive role, engaging in paid labour activities outside the house and/or being in charge of a number of tasks related to household farming activities, including livestock management. In some developing countries, they make on the average up to 43 percent of the agricultural labour force and contribute significantly to livestock management (FAO, 2011).

In Nigeria, gender plays a critical role in land ownership and women farmers contribute about 70 per cent of food production in the country. However, land rights discrimination, fuelled by social, economic and cultural factors affect their productivity (FAO,) Women make up 43 per cent of the global agricultural labour force,. Few women own, operate and manage valuable plots than men.

## **Gender and Livestock Projects.**

In the past, livestock projects were mainly oriented towards production issues such as breeding, feeding and animal health. More attention is needed to incorporate women farmers into project design to guarantee women's active participation and involvement in the different project phases and activities.

In rural livestock-based economies, rural women comprise two-thirds (approximately 400 million people) of low-income livestock keepers. Activities that are related to small livestock production (poultry, sheep, goats), milking and processing of milk, are carried out mainly by women, youth and children (Okali, 1998; Thornton, 2001; FAO, 2011a).

Women and men experience different challenges when accessing, managing and controlling livestock assets. Despite their significant contribution and role in livestock management, women often face greater constraints than men in accessing natural resources, extension services, marketing opportunities and financial services as well as in exercising their decision-making powers. These constraints often prevent women from reaching their full potentials within the agricultural sector, including livestock, and therefore compromise the achievement of overall household food security and nutrition. Since women usually manage household meals, they have a primary role with regards to the nutritional status of the household, especially the children. Women therefore have the potential to influence and promote a balanced diet. Thus, when rural women access and control the livestock or livestock products they own or manage, household coping strategies may be affected, resulting in a positive impact on overall household well-being and nutrition (IFAD, 1999; FAO, 2012c).

## **Gender roles in Livestock Management**

Women's typical role within a livestock production system is different from region to region. The distribution of ownership of livestock between men and women is strongly related to social, cultural and economic factors. It also depends on the type of animals they raise. In many societies, cattle and larger animals are owned by men, while smaller animals – such as goats, sheep, pigs and backyard poultry kept near the house – are more a woman's domain. When the rearing of small animals becomes a more important source of family income, ownership, management and control are often turned over to the men.

Women play an important role in livestock management, processing and marketing, acting as care providers, feed gatherers, and birth attendants. They are also involved in milk production, identifying and supporting women's roles as livestock owners, processors and users of livestock products while strengthening their decision-making power and capabilities are key aspects in promoting women's economic and social empowerment and enable them to break the cycle of poverty. Women are also responsible for milking ewes, processing and selling milk products, providing feed/fodder and water, caring for newborn lambs/kids and sick animals. Young girls are also involved in the grazing of goats and sheep and married young women are responsible for household activities.

Male tasks include herding, cutting branches for home feeding and administering modern medicines. (Wool Lo Blanco, 2007.) Work on gender and ruminant livestock production is limited, especially gender disaggregated data on shearing, giving traditional vaccines against sheep pox, and castration are exclusively the domain of men. Women decision-making takes place at the household level while men take out animals for grazing and participate in public meetings that relate to animal husbandry. Women negotiate dung prices with farmers while men negotiate wool prices.

Despite their considerable involvement and contribution, women's role in livestock production has often been underestimated. Gender-blindness is the result partly of a paternalistic bias and partly due to the attitudes of the women themselves who may be conditioned by their culture and society to underestimate the value of their work. This has made it very difficult to obtain information on the role of women in livestock production from existing research and project reports.

Despite the roles highlighted above, **insecurity** and **land rights** hamper Nigerian women's farming efforts. This is because a lot of the communities in Nigeria still operate the traditional and family inheritance system of land ownership that gives preference to male children. The North-west is facing a severe security crisis caused by herders and the bandits, 4.7 per cent of women own land compared to 50.1 per cent of men. In the

North-central, the ratio is 7.9 per cent against 41.2 per cent. In the South-east, 10.6 per cent of women own land compared to men's 38.1 per cent; in the South-south, it is 10.9 per cent versus 5.9 per cent. Only the South-west had the women in ownership majority of 28.3 against 22.5 per cent of men

## Distribution of land ownership by geopolitical zone in Nigeria



Chart: Kabir Yusuf • Source: Nigeria Gender Report 2012 • Created with Datawrapper

Source: Nigeria Gender Report 2012 by Kabir Yusuf

### Women in Livestock Production: Major Benefits

- Decision-making and empowerment. Livestock ownership is increasing women's decision-making and economic power within both the household and the community. This can open up access to credit (the sale of small ruminants can provide an emergency source of cash for medical treatment or school fees, while daily milk provides a regular flow of cash income often used to purchase food and household items).
- Household welfare. The management, processing and marketing of livestock products generate more income than most of the activities women tend to be involved in, and bring benefits for the whole family (for instance by increasing food security at the household level: small ruminants provide food products such as milk, butter, cheese and meat, all of which are a source of protein, minerals and vitamins);
- Income generation. Animals provide raw materials such as wool, and bones used by women to make clothes, or fuel for home consumption and for sale. Processing of these materials can be an important source of additional employment and income for poor rural women;
- Self-esteem. Owning, controlling and benefitting from livestock production increases women's self-esteem and strengthens their role as producers and income generators within the household and in the community. Access to credit. Livestock ownership increases the likelihood of gaining access to credit.

### Major Challenges faced by Women and Youth in Livestock Management

- Insecurity of land tenure for women. The security of land tenure can take a variety of forms such as leased public land or user rights to communal property. Limitations on access to or use of land inhibit agricultural productivity and consequently affect their income.
- Lack of access to capital, knowledge and control over assets. The obstacles faced by women in gaining access to basic assets These hinder socio-economic empowerment and overall economic growth and poverty reduction.
- Ownership of different livestock species. Milking, processing and marketing of milk products, does not

necessarily mean that women can control decisions regarding livestock or own it.<sup>5</sup> Niamir-Fuller, 1994. <sup>6</sup> IFAD, World Bank and the Food and Agriculture Organization of the United

## **For Livestock Interventions to be Successful, the Following issues need to be considered:**

- Ownership of land: Security of tenure is an important precondition for women's empowerment. Given the complexity of different tenure systems, project strategies should be tailored to the context of the region and society, with the aim of guaranteeing and expanding women's access to, and control over, land.
- Access to capital and knowledge: Women generally lack collateral, decision-making power in the household and control over loans. Ensuring women's access to extension services, knowledge, credit and technologies is therefore critical. Project experiences show that special credit lines for women are successful if these are made transparent and adapted to the cultural and social reality of the concerned families.
- Ownership of livestock: For women, purchase or receipt of a cow does not necessarily imply ownership. Analysis of the specific conditions of the project area and target households and monitoring of change are important to formulate and achieve realistic project goals.

Production systems and types of animals; crop/livestock linkages; availability and quality of land, availability of inputs; management of natural resources; use of technology; relationship between livestock and other activities; gender disaggregated seasonal occupations and sources of income) should be examined from a gender perspective. Other issues to be considered at the design are as follows:

**Gender Considerations in Livestock Production:** Gender is an important consideration in livestock management. It is a way of looking at how social norms and power structures impact on the lives and opportunities available to different groups of men and women and youth. Livestock management provides employment, income, food, raw materials, and foreign exchange earnings for people. The ability and the inability in playing these roles, in varying degrees, define the poverty status of those engaged in it. Livestock play a major role in sustainable food systems—for example, manure is a critical source of natural fertilizer, while livestock used as draft animals can help boost productivity in regions where there is low mechanization. Livestock are important assets for vulnerable communities

**Women make up a large percentage of the agricultural labor force;** Women are disadvantaged in productive asset ownership (land, livestock), and control of productive inputs (including access to credit, etc.);

The livestock sector is an integral part of agriculture and vital to the socio-economic development of the country, though its productivity currently is very low. It contributes around 1.7 percent to the national GDP and around 9 percent to the agriculture value added.

Gender considerations in livestock keeping ensures an inclusive and sustainable future. Achieving equality between women and men is therefore a precondition for sustainable agricultural production and rural development, achieving food security, and elimination of poverty

Gender influences which crops are grown, which animals are raised, and which technologies are used. It influences how households earn a livelihood and manage risk, what children eat and how they are cared for. In homes, fields, factories, marketplaces, and communities, gender influences how decisions are made. Therefore livestock is an important asset to every gender.

**Women have more limited access to inputs necessary to boost productivity than men in ruminant farming.** Gender roles and access to resources and benefits change with the introduction of new livestock technologies. Ruminant livestock production has a positive effect on children's nutritional status.

There is, therefore, a gender gap in agriculture with female farmers expending extra effort (worldwide, women work more hours per year than men), they **substantially lag behind their male counterparts when it comes to earnings.**

It is, therefore, very obvious that agriculture is under-performing because of women's unequal access to land, fertilizer, technology, extension and credit. These unequal relations often make women a marginalized group and they are more vulnerable to the effects of poverty, land degradation, and climate change. Closing the gender gap in agriculture would generate significant gains for the agriculture sector and the society

If women have the same access to productive resources as men, they could increase yields on their farms . This could raise total agricultural output in developing countries

Gender equality in livestock keeping **ensures an inclusive and sustainable future.** Achieving equality between women, youth and men is a precondition for sustainable agricultural production, rural development, leading to food security, and elimination of poverty.

## HOW?

- Gender influences which crops are grown, which animals are raised, and which technologies are used.
- It influences how households earn a livelihood and manage risk, what children eat and how they are cared for. In homes, fields, factories, marketplaces, and communities, gender influences how decisions are made
- Women are typically responsible for milking and dairy processing; they may or may not sell the milk, and they usually have control over the proceeds in order to feed the family. Men are responsible for herding and selling meat animals
- While men and boys are away tending the herd, pastoralist women are responsible for collecting fodder to supplement the feed of those livestock kept close to the homestead.
- They look after pregnant stock, and then their calves, kids and lambs, and take care of sick animals that cannot keep up with the main herd
- Women are typically responsible for milking and dairy processing
- they may or may not sell the milk, and they usually have control over the proceeds in order to feed the family.
- Men are responsible for herding and selling meat animals
- What were the gender roles in agricultural societies?
- Generally, men do the majority of the fieldwork while women are relegated to child-rearing and household work. Without contributing food (and by association, without control over it), women became second-class citizens
- Men and boys are responsible for hunting as well as looking after and tending to the animals and protecting the tribe members from wild animals.
- Women look after the crops and take care of weeding in the fields.
- They also cook, clean and collect water.
- Men are usually responsible for producing commercial crops, while women are responsible for producing subsistence crops

### *Challenges that Rural Women and Men Face in Livestock Management*

- Access to and control over natural resources
- Despite women's crucial contribution to agriculture and food security and due to traditional and

customary patterns, women's access to and control over water, energy, biodiversity and land remains lower than men's.

- Insecure land tenure limits the land user's ability to develop, manage and upgrade livestock activities, since it often translates into lack of land for grazing and lack of collateral for investment (FAO, 2011a).
- Distribution of roles and responsibilities based on sex and age: Women, men, boys and girls play different roles and carry out different tasks when managing livestock. The gender differences in roles and activities arise mainly from customary rules that tend to view certain tasks or activities as "male" or "female". (Beck, 2001). For the work carried out by children, differentiations need to be done as well, as they also tend to perform different tasks assigned on the basis of their respective sexes and ages (FAO, 2012b).
- Access to technologies, training and extension services Household work continues to be divided according to sex, with women performing both the vast majority of housework and child rearing tasks as well as many of the tasks related to farming activities.. (IFAD, 2003).
- Access to financial services: Difficulties for women in accessing credit may also narrow the scope of a business, by preventing them from hiring needed employees or forcing them to use obsolete technology (IFAD, 1999).
- Access to markets: Despite their major role in the management of livestock assets, women frequently have poorer access to markets than men, and play a limited role in the commercialization of livestock and livestock products. This tendency often arises from poor marketing skills, low levels of literacy and customary practices that prevent women from freely leaving the house premises. (USAID, 2005).
- Participation and decision-making power

## **Women and Conflict**

One of the challenges facing the country today is the issue of conflict and its management r. Recurring conflicts in Nigeria have a matter of great concern to the international community. In Nigeria, regular conflicts have led to many consequences.

It has engendered huge human carnage; internal displacement and refugee crisis; Loss of investments; Strained inter-communal or interethnic relations; threatened internal security and public order;There is high the high level of interethnic and inter-religious vendetta in the country ,to the point that it seems that Nigeria is now exhibiting the symptom of a collapsing state ,whose members are perpetually at war with one another(Imobighe,2003)

### *Consequences of Conflicts*

- Loss of life and properties
- Disunity
- Dissipating development
- Use of resources on conflicts/crises management
- Suspicion that could lead to further crises and
- Stunted economic development
- It hinders growth and development
- It hinders individual and group by denying them their rights to legitimate settlement and livelihood in any part of the nation.
- It portends negatively for sustainable peace and development in Nigeria
- Development cannot be attained and sustained under the atmosphere of crisis

- Attendant security and livelihood crises that threatens the collective subsistence and survival of the affected population.
- Diminution of agricultural productivity and decline in household capital –affecting societal and national sustainability
- It is inimical to human security and national security in Nigeria
- It causes insecurity and demonstrates high potential to exacerbate food crisis in Nigeria due to loss of farmers lives, animals, crops and valuable properties.(Cotula et al.,2004)

#### *Challenges of Pastoralists in Nigeria*

- Erosion of their resource base,
- Changes in their economic relationships within regional contexts, and
- Domination of political relationships by central states
- Neglect and exclusion of pastoralist communities;
- Violence, displacement and militarisation of pastoral livelihood systems;
- Insecure land rights and natural resource management;
- Increasing risk of animal and zoonotic diseases; and
- Climate change and climate variability.
- The pastoral industry also impacts climate change negatively through emissions of GHG, expansion of pastureland through deforestation, erosion and degradation of soil, and air and water quality

#### *Problems Facing Nomadic Pastoralism in Nigeria*

- Extensive drought cause water shortages and lack of pastures leading to death of [livestock](#)
- Wild animals may attack nomads and their livestock
- Lack of proper shelters expose the pastoralists to the hazards of bad [weather](#) such as rainstorm
- Pest and diseases affect the health of animals lowering their productivity or causing death
- Overstocking leads to overgrazing and consequent soil erosion land degradation
- Cattle rustling leads to loss of livestock and endanger the lives of the nomads
- Floods may destroy pastures for nomads.

## **CONCLUSION**

For a peaceful co-existence to be maintained among farmers and herders in Nigeria, the following recommendations are thereby suggested

- Women are major players in agricultural sector; about 50-70 percent of the sector is dominated by women. “Therefore, when women are allowed to own land, they will feel more comfortable to develop their farming businesses including livestock .Hence, they will have peace of mind and ownership to grow more crops and rear animals.
- In Nigeria male farmers execute the tedious tasks such as land clearing and felling of trees, gathering and burning of bush, and making ridges, while the women engage in planting. There is the need to level the field to improve opportunities for women farmers. This will ease farming, and increase prosperity.
- Enlightenment: Women issues on land ownership can be solved if positive changes in cultural activities can be provided through cultural education. This enlightenment should be in different forms through different media such as radio, television, dance drama etc

- Beneficial government interventions should be made available through affirmative programs that provide land resources to women. These interventions can address issues of gender and land rights in Nigeria. Since the majority (71%) of farmers suffer economic losses from farmer-pastoralist conflicts, and 75% of farmers use more of problem-oriented coping strategies while majority of herdsmen (73%) use more of emotion-oriented strategies, enlightenment through education, seminars, trainings etc should be provided at all levels by the government for them to co-exist peacefully for good wellbeing and prosperity. These should include farmers( including women farmers), youth and children at the local, state and national levels.
- Provision of good extension and advisory services are essential for enhancing the adoption and efficiency of improved inputs. Farmers prosperity, wellbeing and peaceful inter-communal co-existence among women farmers, farmers, youth and children will subsequently be enhanced and increased. This will lead to multiple cropping. Multiple cropping is the process of sowing different types of crops in the same year on same field. This is beneficial for the farmers as it increases the crop yield and helps to increase the production of different crops. More production means more benefits and more income hence prosperity.
- Provision of good extension and advisory services will lead to full benefits of pastoral society which include provision of affordable, high-quality proteins and nutrients to meet local demand. This will help to reduce a country's reliance on imports. This is because herders travel with their livestock and work knowledgeably with nature to access water and forage, production inputs are low relative to outputs
- Effective communication with the team including the herders, farmers, youths and children will enable prosperity and increase productivity, wellbeing and peaceful inter-communal co-existence among farmers, pastoralists, youth and women in Nigeria.
- Improving women's access to productive inputs (such as land, chemical fertilizer, improved seeds, and pesticides), reforming land discriminatory laws, and closing women's gaps in technology, agricultural finance, human capital, and extension services may help achieve gender equality in Nigeria.
- Government at all levels should partner with Civil Society Organisations to provide psychological support to victims of conflict especially women and girls
- The Federal and State governments should make available adequate funding for the implementation of State action plans on women's engagements in peace and security, intensification of peace building activities by Kano State Peace Building Agency for peace, reconciliation and reconstruction
- The federal government should prioritise economic and livelihood support for women and other victims of farmer-herder conflicts
- The government should strengthen the role of religious and traditional leaders including the women leaders in the reconciliation process and social cohesion at community and state level.
- Civil Society Organizations should be encouraged to build trust by prioritizing projects that will strengthen intercultural understanding between farmers and herders especial for women, youth and children. They should also provide support to strengthen the role of community women and community-based women groups and associations in the peace building process.
- There should be constant counter negative reportage of farmer-herder conflict through transformative peace and trauma sensitive journalism.

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# **STRENGTHENING THE ADOPTION OF CLIMATE SMART FARMING AND LIVESTOCK PRODUCTION PRACTICES TO MITIGATE IMPACT OF CLIMATE CHANGE**

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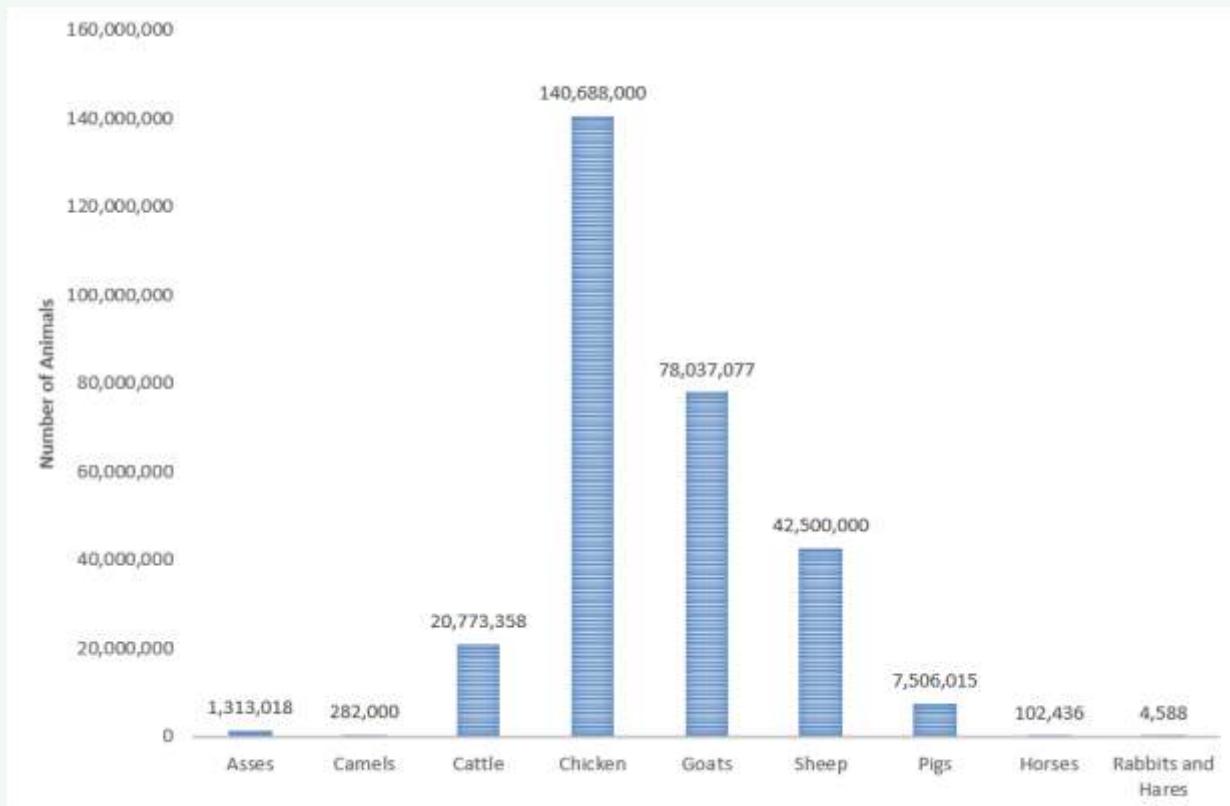
## **INTRODUCTION**

Livestock plays a pivotal role in the socio-economic wellbeing of Nigerians aside for providing the much-needed animal protein in our diets. Sustainable livestock production is the fulcrum of food and human security. The Nigerian livestock sub-sector is currently a multibillion –dollar strong economy. Animal Agriculture plays a key role in the livelihood of people, employment generation and economic development of Nigeria. Every citizen, no matter their class in the society, depends on livestock either for food or as a source of livelihood or both. Driven by population and income growth plus urbanisation, the demand for animal sourced foods is growing rapidly. However, the reality is that much of the livestock potential as a leading economic driver is yet to be fully harnessed. There have been several efforts by government through policies and programmes to address the myriads factors impinging on livestock production in Nigeria with less desired success. To this end, the Kano State Government has patriotically organized a National Conference on Livestock Reforms and Mitigating Associated Conflict in Nigeria. The reforms will hopefully strengthen the livestock subsector and end the avoidable conflict between sedentary crop farmers and itinerant, **transhumant livestock** herd owners among others.

This paper therefore is focused at the impact of climate change as it affects livestock production with the view to strengthening the adoption of Climate Smart Farming and Livestock Production practices to mitigate the attendant impacts.

## **The Nigerian Livestock Sub-sector**

The Nigerian livestock sub-sector is one of the largest in Africa with a very rich biodiversity. The estimated major livestock population stood at 1.3 million asses, 0.28 million camels, 20.8 million cattle, 140.8 million chickens, 78 million goats, 42.5 million sheep, and 7.5 million pigs according to statistics from FAOSTAT (Figure 1). The sub-sector serves as a source of livelihood with 42% of the population owning livestock depending and as a source of food to millions of Nigerians both in the rural and urban areas and accounts for about 9% of the agricultural GDP (FAO 2019). The production system is largely dominated by the extensive or pastoral system which is not commercially oriented. However, the poultry sector seemed to be the most commercially oriented with 21% of the animals raised under intensive system compared to only 1% of cattle under similar system. The net worth of the Nigerian poultry industry is estimated at 1.7 billion USD (FRN 2007) compared to dairy with an annual import bill of 1.3 billion USD (NLTP 2019). This suggests that commercialization is a pathway to self-sufficiency in food production. The country provides a large market for livestock and livestock products because of its huge population. The demand for poultry meat, beef and milk is projected to increase by 253%, 117% and 577%, respectively, by 2050 compared to the 2015 level (FAO GPS 2018).



Source: Author's Based on FAOSTAT, 2019

**Figure 1: Nigeria's Livestock Population, 2017**

These are great opportunities requiring radical transformation in the livestock sub-sector to appropriately respond to these changes. If not, the growing competition round the world will take advantage of the gap as they have done in the past. Annual Nigerian food import ranged from 3-5 billion USD and milk accounts for 26–43% of this (NLTP 2019).

Per capita consumption of animal products is generally low and lagged behind the averages on the continent. For example, per capita consumption per year of milk is 8 litres of milk, 9 kg of meat and 3.5kg or 55 eggs (FAO 2019) (Table 1). This represents 18.2% of the average per capital consumption for milk and 47.3% of meat in Africa. This shows another huge potential for growth in demand for livestock and livestock products in Nigeria.

As Nigeria's population grow at a variable rate with the food production capacity, the likelihood of a looming food crisis remains unavoidable except agricultural productivity is enhanced to match population growth. The projected exponential growth of human population to 402 million people by the year 2050, rapid urbanisation and increased per capita income with the associated boost in the consumption of high-protein animal products such as milk, meat and eggs provide opportunities for the sector's growth and development of the sector's diverse value chains. Heightened and frequent farmer-pastoralists conflicts threaten our national security; similarly, banditry and cattle rustling with the resultant depletion of our national herd creating fear and loss of sources of livelihood for Nigerians who depend on agriculture for their sustenance. There can be no better time than now for actors in the agricultural space to focus on critical thinking to chart the course for National food security and diversification of earnings

## Climate Change and its Impact on Food Security

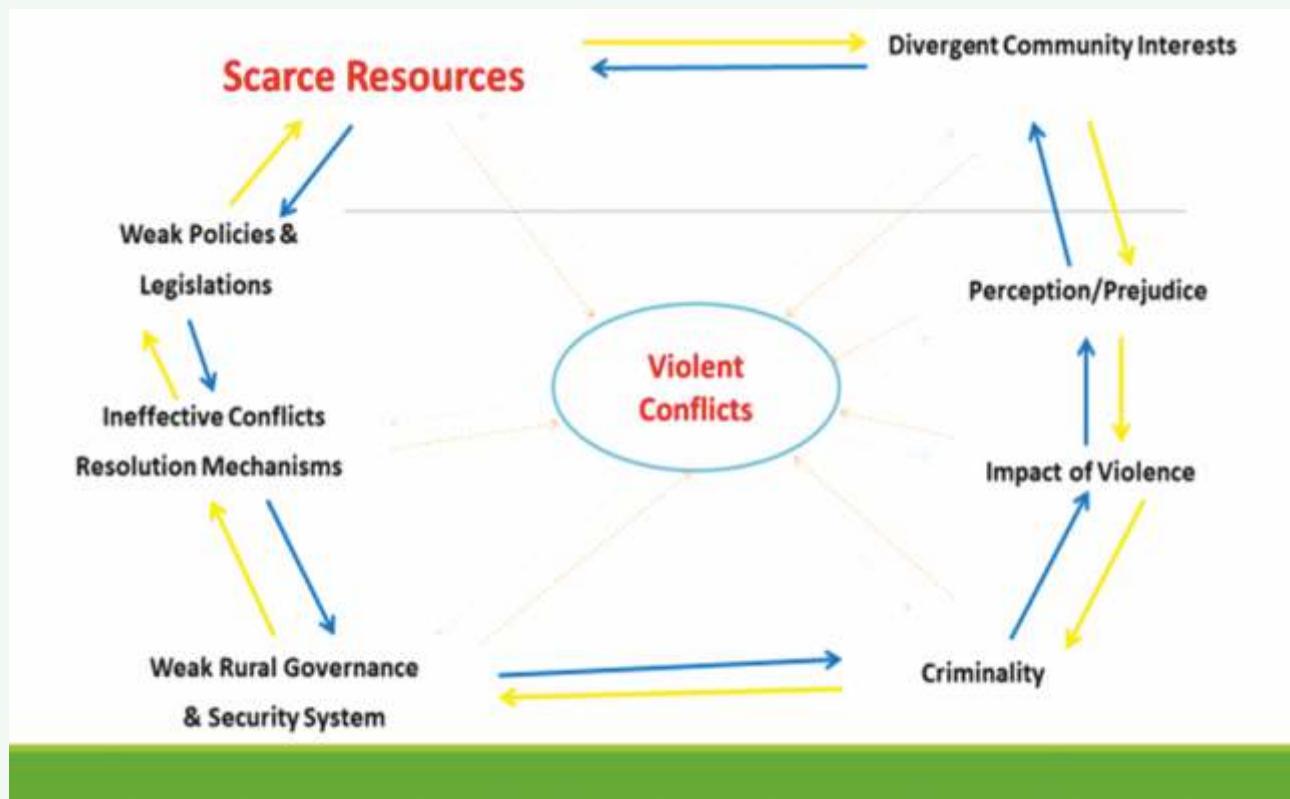
**Climate Change:** Attributed directly or indirectly to human activity that alters the composition of the global atmosphere and results in Land Use Changes (LUC).

**Global Warming:** The warming that is occurring as a result of increased emissions of Greenhouse Gases (GHG) from human activities.

**Greenhouse Gas Emission:** Those gases in the atmosphere which absorb and emit infrared radiation - water vapour, carbon dioxide, nitrous oxide, methane and ozone.

With rapid population growth and increasing demand for animal source foods, extreme weather events such as drought and floods that have resulted in poor crop yields or total crop failure, leading to serious food shortages, hunger and malnutrition. In addition, insecurity and flooding has also severely disrupted food production in several parts of the country. The most vulnerable groups are rural communities, especially women and youths. How has or how should agricultural production respond to this trends ?.

Over the past years, our agricultural productivity is adjudged low due to climate change which impacts negatively of natural resources (Rangeland and Water Resources). Climate change has had huge impacts in the livestock sector upsetting the delicate balance of providing affordable animal protein in a profitable and sustained manner. Growing populations and reduced access to arable land mean that animal production system will either need to intensify and/or produce more from a reducing land and other resource base as depicted in Figure 2. Variable and unpredictable environmental conditions mean that animal production faces numerous challenges. The effects of climate change on livestock combine direct effects on animal productivity and health and on the quantity and quality of pastures and animal feed. Increased variability in precipitation can lead to waterlogged ground and to shortages of drinking water, increasing vulnerability to disease. Higher temperatures cause heat stress and make animals less resistant to pathogens. It translates into reduced feed intake, unhealthy states, lower rates of reproduction and productivity as well as higher mortality rates. In addition to climate, these challenges include increased disease risk, increased nutritional deficiencies, and lack of capital to support diversification. The link between climate change and livestock production requires that measures are taken to reduce the impact of climate change and help farmers to adapt to climate change through a Climate Smart Production System.



The impact of climate change is already affecting all the four dimensions of food security; food availability, food accessibility, food utilisation, and food systems stability (FAO 2009). We must, therefore, aim at sustainable system to feed the growing population and protect the land and water resources.

*Possible Effects of Climate Change on Livestock Production Increasing Ambient Temperature likely to:*

- Depress voluntary feed intake (VFI)
- Depress weight gain
- Depress lactation yield
- Increase disease incidence
- Depress fertility

*While Indirectly Livestock Production will be impacted due to Decreasing Precipitation with Concomitant*

- Decline in pasture yield
- Decline in water availability
- Higher livestock mortalities

## **Climate Smart Agriculture**

Climate-Smart Agriculture (CSA) is an approach that provides a conceptual basis for assessing the effectiveness of agricultural practice change to support food security under climate change.

Activities aimed at increasing rural communities resilience will be necessary to support their capacity to adapt and to respond to new hazards. Identifying changes in agricultural practices especially in livestock production that result in effectively adapting to site specific effects of climate change and their potential barriers to adoption is essential to addressing interlinked challenges of food security and climate change.

Not a specific agricultural technology or practice that can be universally applied. It is an approach that requires site-specific assessments to identify suitable agricultural production technologies and practices. Livestock production systems are considered to be “climate-smart” if they contribute to increasing food security, adaptation and mitigation in a sustainable way.

## **CSA -Livestock Production Systems**

*Any livestock management practice that improves productivity or the efficient use of scarce resources can be considered climate-smart because of the potential benefits with regard to food security, even if no direct measures are taken to counter detrimental climate effects (Ayantunde et al., 2015).*

In a review of mitigation and adaptation needs of livestock, Zhang et al. (2017) stated that in general livestock producers have adapted to climate change by

1. Shifting from cropping to grazing;
2. Adopting mixed crop-livestock systems; and
3. Decreasing stocking rates and/or herd sizes.

However, they concluded by saying that the responses do not necessarily overcome all adverse effects that will be encountered.

There are no universal strategies. Some strategies may have global applicability, others regional, and others at a farm level. Of some concern is that there does not appear to have been any systematic global reviews on how the livestock sector is affected by and adapts to climate change (Escarcha et al., 2018). Constraints to Adaptation a recent review by Escarcha et al. (2018) listed a number of factors which are likely to constrain adaptation strategies. These include a lack of information at the systems level; lack of adequate research especially in developing countries such as Nigeria; the fact that capacity building is highly dependent on government and other institutions; pastoral systems especially communal land tenure systems; limited access to natural, capital, and labour resources; poor market infrastructure and organization. Other areas constraining adaptation are a lack of trust in the science of climate change and the many unknowns regarding how climate change will impact on livestock systems.

## The Goals of CSA

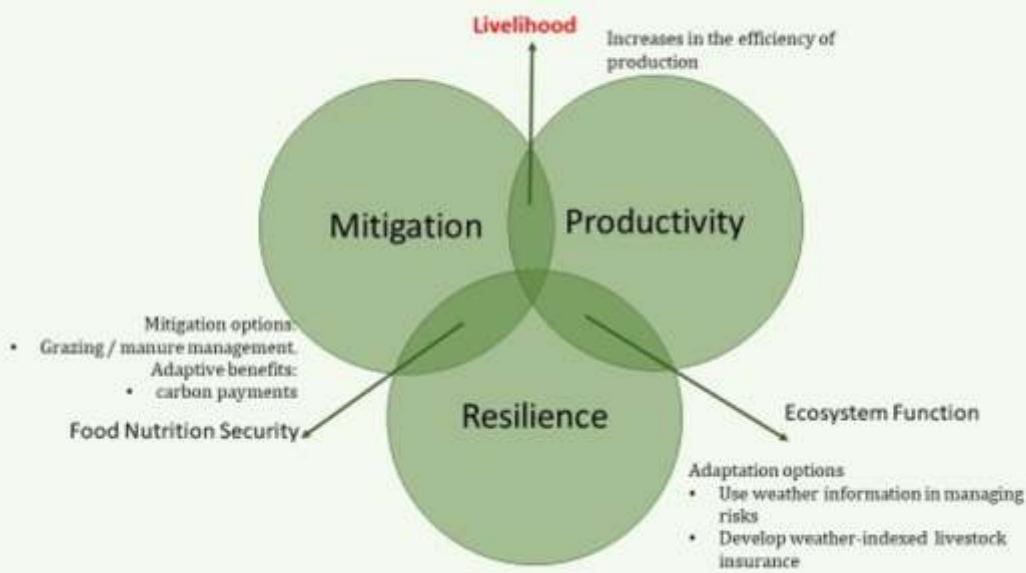
1. Sustainably increasing productivity and income
  2. Reduce climate change vulnerability (enhance adaptation),
  3. Reduce emissions that cause climate change (mitigation),
  4. Protecting the environment against degradation
  5. Enhancing food security and improved livelihood
- 
1. **Increased productivity:** Produce more better food to improve food security and boost incomes, especially of the communities who live in rural areas and mainly rely on agriculture for their livelihoods.
  2. **Enhanced resilience:** CSA will reduce vulnerability to drought, pests, diseases and other climate-related risks and shocks; and improve capacity to adapt and grow in the face of longer-term stresses like shortened seasons and erratic weather patterns
  3. **Reduced emissions:** CSA will achieve lower emissions for each calorie or kilo of food produced, avoid deforestation from agriculture and identify ways to absorb carbon out of the atmosphere

The Forum for Agricultural Research in Africa (FARA, 2022) indicates that the clear antidote to the effect of climate change is adoption of “Climate Smart Agriculture” (CSA). The three pillars of CSA; Adaptation, Mitigation, and Sustainable Productivity, are able to keep agriculture in a sustainable and functional state with the backing of good science. Good science will produce new knowledge, technologies, inventions, and ultimately innovations. To adopt CSA will require technical infrastructure, technology, innovation, and human capacity. Adaptation options include using weather information to assist rural communities in managing the risks associated with rainfall variability and deploying livestock insurance schemes that are weather-indexed. Mitigation options related to livestock include grazing management and manure management. Several of these mitigation options also have adaptive benefits such as growing agroforestry species that can sequester carbon, and can also provide high-quality dietary supplements for cattle. Such payments for carbon sequestration, through carbon trading, could represent a relatively large amount of potential income for resource-poor livestock keepers. In the more intensive systems, progress could be made in mitigating GHG emissions from the livestock sector via increase in the efficiency of production through the use of available technology for the most part and seeking innovations for quantum jump or disruptive technology.

	Examples of possible climate-smart agricultural practices	Expected impact on food security	Possible impact on adaptation	Possible impact on mitigation
Crops	<ul style="list-style-type: none"> <li>• Improved land management practices such as reduced or zero tillage.</li> <li>• Improved agronomic practices.</li> <li>• Soil and water conservation measures.</li> <li>• Integrated nutrient management such as efficient fertilizer application based on crop and site, specific nutrient balance analysis, split application, adaptable timing.</li> <li>• Proper management of organic soils avoiding deep drainage and deep ploughing, row crops and tubers and maintaining a shallower water table.</li> </ul>	<ul style="list-style-type: none"> <li>• Better plant nutrient content, increased water retention capacity and better soil structure generate tangible on-site production benefits in the form of higher crop yields.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased system viability and resilience of crops and livestock.</li> <li>• Reduced vulnerability of farm system.</li> </ul>	<ul style="list-style-type: none"> <li>• Farming practices that restore soil health and fertility can increase biomass and carbon sequestration.</li> <li>• Conservation tillage minimizes soil disturbance and related soil carbon losses.</li> <li>• Integrated nutrient management reduces leaching and volatile losses. Proper management of organic soils reduces N<sub>2</sub>O and CH<sub>4</sub> emissions. Reducing post-harvest food losses contributes to lower emissions per unit of food consumed.</li> </ul>
Livestock	<ul style="list-style-type: none"> <li>• Improved feeding practices such as introducing highly digestible forages.</li> <li>• Improved genetics and reproduction, and animal health control as well as general improvements in animal husbandry.</li> <li>• Improved manure management.</li> <li>• More efficient crop and grazing land management such as rotational grazing.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased animal productivity and production.</li> <li>• Increased nutrient cycling and plant productivity.</li> <li>• Improved fodder production.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased system resilience and reduced vulnerability.</li> </ul>	<ul style="list-style-type: none"> <li>• GHG emissions in livestock sector can be reduced substantially through improvement of feed quality, animal health and husbandry, more efficient energy use and manure management.</li> <li>• Reducing post-harvest food losses reduces emissions per unit of food consumed.</li> </ul>

Examples of possible climate-smart agricultural practices	Expected impact on food security	Possible impact on adaptation	Possible impact on mitigation
<b>Fishery and aquaculture</b> <ul style="list-style-type: none"> <li>• Use of fishing practices that adhere to the principles of the Code of Conduct for Responsible Fisheries.</li> <li>• Adoption of improved aquaculture management approaches such as selection of suitable stock, improved energy efficiency, increasing feeding efficiency, reduce losses from diseases.</li> <li>• Integration of aquaculture with other production systems such as aquaponics.</li> <li>• Improved management of ecosystems such as mangrove systems and seaweed farms.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased fish productivity in a sustainable way.</li> <li>• More nutritional diets.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased aquaculture resilience.</li> <li>• Increased resilience of natural ecosystems, increased biodiversity.</li> </ul>	<ul style="list-style-type: none"> <li>• More efficient energy use such as better use of fuel in capture fishing would reduce GHG emissions.</li> <li>• Increase the efficiency of feed and fertilizers.</li> <li>• Reducing post-harvest food losses reduces emissions per unit of food consumed.</li> </ul>
<b>Agroforestry</b>	<ul style="list-style-type: none"> <li>• Use of trees and shrubs in agricultural farming systems: improved fallows, growing multipurpose trees and shrubs, boundary planting, farm woodlots, plantation/crop combinations, shelterbelts, windbreaks, conservation hedges, fodder banks, live fences, trees on pasture and tree apiculture.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased farm incomes and diversified production with food security benefits.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced erosion, increased soil stabilization and H<sub>2</sub>O infiltration rates, land degradation halts, reduced vulnerability to shocks, increased resilience.</li> <li>• Stores carbon in above and below the ground biomass and progressively increases organic matter and carbon stocks in the soil.</li> <li>• Agroforestry systems tend to sequester much greater quantities of carbon than agricultural systems without trees.</li> <li>• Agroforestry measures increase C storage and also reduce soil C losses stemming from erosion.</li> </ul>

Source :FAO 2018b



*Climate Smart Agriculture (CSA) and its Contribution to the Ecosystem.*

Adapted from FARA, (2022) & Sonaiya, 2022

## Mitigation options

Mitigation refers to efforts to reduce/prevent emission of Greenhouse Gases (GHGs) or to enhance their removal from the atmosphere by sinks

*Reducing Enteric Methane Production. Options:*

- Feed/Nutrient manipulations
- Efficient animal waste management eg bio-gas production and use of crop slurry for crop fertilization
- Breeding for adaptable crop & animals (Development of breeding programmes; drought tolerant, for low-CH<sub>4</sub> and heat-tolerant animals)
- Diversification and raising non conventional livestock (Camels, quails, guinea fowls )

*Specific Climate Smart Feed Technologies*

- Exogenous enzymes
- Grass vs Forage legumes (methanogenesis in legumes is less )
- Administering ionophores like monensin in the diet
- Plant extracts (condensed tannins, saponins, essential oils, etc.)
- Replacing roughages with concentrates results in increased proportion of propionate in the rumen, thus less hydrogen available for CH<sub>4</sub> production
- Supplementing ruminants with lipid sources (fat or oils)- defaunation thus suppresses protozoa associated methanogens and decreases fibre digestion.
- Provision of high-quality molasses blocks significantly improved smallholder large ruminant productivity, and the addition of greenhouse gas reducing agents is likely to achieve impressive

abatement of greenhouse gas emissions due to improved efficiency of rumen fermentation and productivity

#### *Other Mitigation Options*

- Appropriate breeds (tannin tolerant species /breeds) such as bokoloji that are tannin
- Co-grazing camels with other ruminants is reported to
- Planting of multipurpose legumes
- Crop residue management
- Agroforestry and alley cropping
- Irrigation for both crop and pasture
- Water harvesting technologies
- Crop rotation
- Grazing management
- Need for long-term, climate-smart, Research and Development, animal breeding programmes accompanied by long-term, programmes in nutrient ecology of the ruminants and herbivores
- We must work to share knowledge and provide guidance in a manner that is relevant to the need of farmers, investors and environment.(eg Resource efficient Land and Water management)
- Promote financial incentives for livestock producers who reduce GHG emissions in their operations, by providing easier access to climate finance (*grants ,subsidies-fences ..seedlings ..inputs*)
- Develop and sustain access to climate information that helps pastoralists to make comparative decisions among alternative adaptation practices.
- Promote access to credit facilities and to help farmers to strengthen their financial positions and thus they can easily go for new adaptation.

## **RECOMMENDATIONS**

Therefore, sustainability of agricultural activities in general and animal agriculture sector in particular depends on proper utilization of natural resources. The framework of ensuring global food security is to evaluate how climate change and natural resource constraints may impact the ability to meet future global demand for animal products in sustainable production systems. These identified factors may impact the ability of Nigeria to meet demand for animal products. The proposed livestock reforms should take into consideration, issues that mitigate global warming from livestock systems and implement appropriate measures for industry adoption.

Since climate change is of global concern, there is a pressing need to plan and implement urgent interventions immediately to minimize future adverse effects of climate change on sustainable food security. Animal feeds and feed manufacturing must be such that do not impact negatively on the environment.

Feed formulation must minimize phosphorus and nitrogen excretion while manufacturing process must contain dust emissions.

- i. Improving vulnerability assessment to provide early warning on food security.
- ii. Develop climate change financing windows for pastoralist and vulnerable communities
- iii. Enhancing food security and developing community-based storage systems for animal feeds ingredients.
- iv. Improving the integration of crop and livestock production through the use of appropriate technologies.

- iv. Ensure that all agriculture projects and programmes undertaken in the sector have had environmental impact assessments as required by the Environmental Management Policy and Act and the related international instruments.
- v. Strengthen the capacity of all stakeholders on issues of mainstreaming environmental management in the livestock sub sector.

Strengthen Research and Development; Extension, Collaboration, Partnership and Linkages; Aligned with all National Policy and legal frameworks on climate change, strengthening public participation in the management of and use of climate financing ,the country climate change funds.

## Policies

The Nigerian agricultural sector has suffered policy summersaults. It is important that the National Animal Transformation Plan (NLTP) be implemented in order to catalyse the needed growth in the sector. The government should expedite other policies and plans that require to be fine-tuned for approvals by relevant authorities recommendations such as;

MCKinsey (2013) report on beef value chains

**Prof B. Y Abubakar** (2015) led Ministerial Committee on Stock Routes and Ranching (B.Y.A

The National Dairy Policy

National Animal Breeding Policy

National Animal Identification and Traceability Systems

National Feed Policy & Pasture Development Policy.

## Climate Financing

The government must provide a policy frame work that supports the pastoralist and other vulnerable groups to cope with the negative impacts of climate change. Proceeds from Carbon Tax (Tax levied on firms that produce carbon dioxide through their operations.) should be used as incentive to finance climate smart Agricultural Programmes.

## Extension

- Making Climate Smart Livestock Production business/investment more attractive to the youth to create jobs and profitable businesses
- Water harvesting; much water runs off and is wasted, especially during heavy rain. Excess water can cause erosion and flooding. Slowing the flow so the water permeates through the soil and recharges the water table as well as collecting in reservoirs of any type means there is less flooding downstream. Capturing water for later use reduces the risk of dehydrated populations, animals and crops during dry seasons and drought. Also, conserving surface water and recharging soil moisture and the water table means there is reduced need to pump water from an underlying aquifer, a practice that often requires fossil fuelled power.

Despite the potential of integrating CSAPs to improve food security and community wellbeing, adopting a bundle of practices is limited by various factors such as high initial cost and technical know-how.

In order to determine the impact of the livestock sector on climate change, more empirical research is urgently required for complex, heterogeneous, extensive livestock systems where data are currently lacking. It is insufficient to base policy recommendations on animal consumption and production based on default emissions and extrapolated estimates. A climate policy that misses its mark and damages livelihoods is one

that is inappropriate and unjust. Therefore, the livestock reforms should focus on; pro-pastoralist and farmer friendly policies that promote the adoption of multiple agricultural practices to complement each other in mitigating the adverse impacts of climate change, such as crop rotation, alley farming, mix cropping, irrigation

In upscaling the adoption of Climatic Smart Livestock Production, governments and stakeholders should promote extension services and training for improved capacity building among smallholder farmers and pastoralists.

## **Conclusion**

Due to changing demographics, climate change, increasing potential for herder-farmer conflict and so on, adoption of climate smart animal agricultural production is called for. However, this cannot be achieved in a hurry due to socio-economic constraints to avoid social conflict, build mutual trust among various stakeholders and ensure long-term sustainability.

The livestock sector is growing slowly and will do better with increased funding, re-skilling and coordination. All stakeholders in the animal agriculture value chain must agree to get sufficient knowledge of the global challenges and their impact on animal agriculture and learn Climate-Smart Animal Agriculture by following the science for the survival of the human race.

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## SUB-THEME

# CITIZENS ENGAGEMENT, MEDIA SUPPORT AND INTER-CULTURAL COMMUNICATION AS PANACEA FOR FARMERS/HERDERS CONFLICTS MITIGATION IN NIGERIA

## LEAD SPEAKER

### PROF. ANDREW HARUNA, FNAL, FLAN

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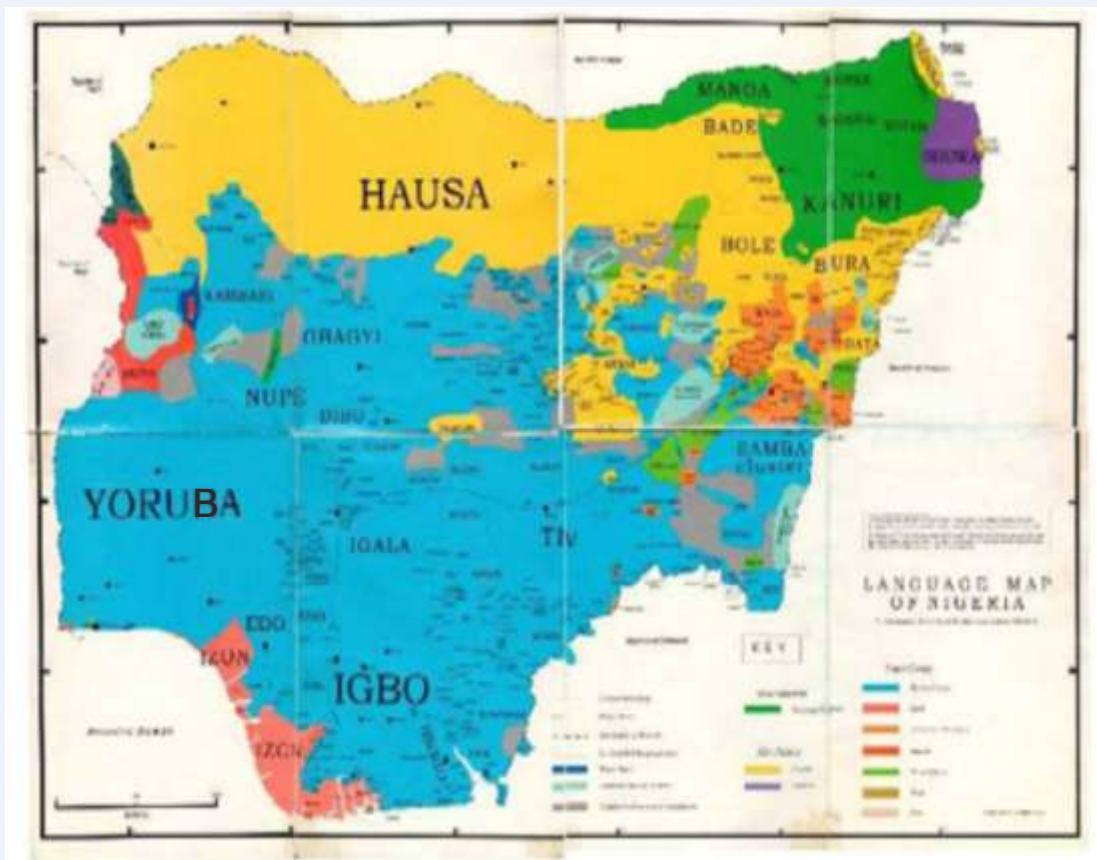
In the multilingual Nigeria of today, language of the media has remained largely a latent tool for ethnopolitical action. While it may not have been comprehensively and coherently handled, its consideration has on some occasions engaged the attention of language experts (Linguists). A profound understanding of the state of affairs is indispensable if the present symbolic actions of protest are not to take on less civil forms.

The interaction between the language used in the media and peaceful co-existence is critical. Honestly speaking, as a Linguist, unless there are already unity-inducing factors in the country, the deliberate use of language as an instrument for forging national unity in a multilingual, multicultural, and multi-ethnic state or country like ours may lead to conflict and disunity. We must, therefore, use some features of language in the media relevant to peaceful co-existence and develop a policy for the use of indigenous languages in media

in reporting conflict. In other words, the media must fight against the use of linguistic differences as a political distraction and lawlessness which hinders state and national integration and development in our society, such as stereotyping, stigmatization, manipulation of linguistic or ethnic differences, and dehumanizing of each other. Certainly there is a curious conspiracy of factors leading to this situation. Because we are a growing society where people are polarized along ethnic, linguistic, religious, and political lines, there is no alternative to the deliberate use of certain unity inducing features of language in the media to forge national integration. A glimpse at the multi-ethnic Nigeria will not be out of place here.

# LANGUAGE MAP OF NIGERIA

**NIGERIA:** A Zone of Ethnic and Linguistic Diversity (Compression)



## *The Structure of the Paper*

- Introduction
  - Pastoral groups across the world
  - What is media
  - The media and peace building
  - The nature of linguistic prejudice in media reporting
  - Language as a social tool
  - The journalist and his socio-linguistic background
  - Farmers/Herders' conflict: the politics of media discourse: Fulanization of Pastoralists
  - Strategies for the promotion of peaceful co-existence using mainstream and social media institutions
  - Types of media interventions for peace building
  - Mechanisms and awareness campaigns for strengthening pastoralist and farmers' associations towards peace building

- What the 21<sup>st</sup> contemporary Nigerian journalist must understand
- How to support cultural diversity through effective intercultural reporting: the role of the journalist
- Activities towards peaceful coexistence: the role of the media
- The media in indigenous languages as a panacea for farmer's/herders' conflict mitigation
- Conclusion

## Introduction

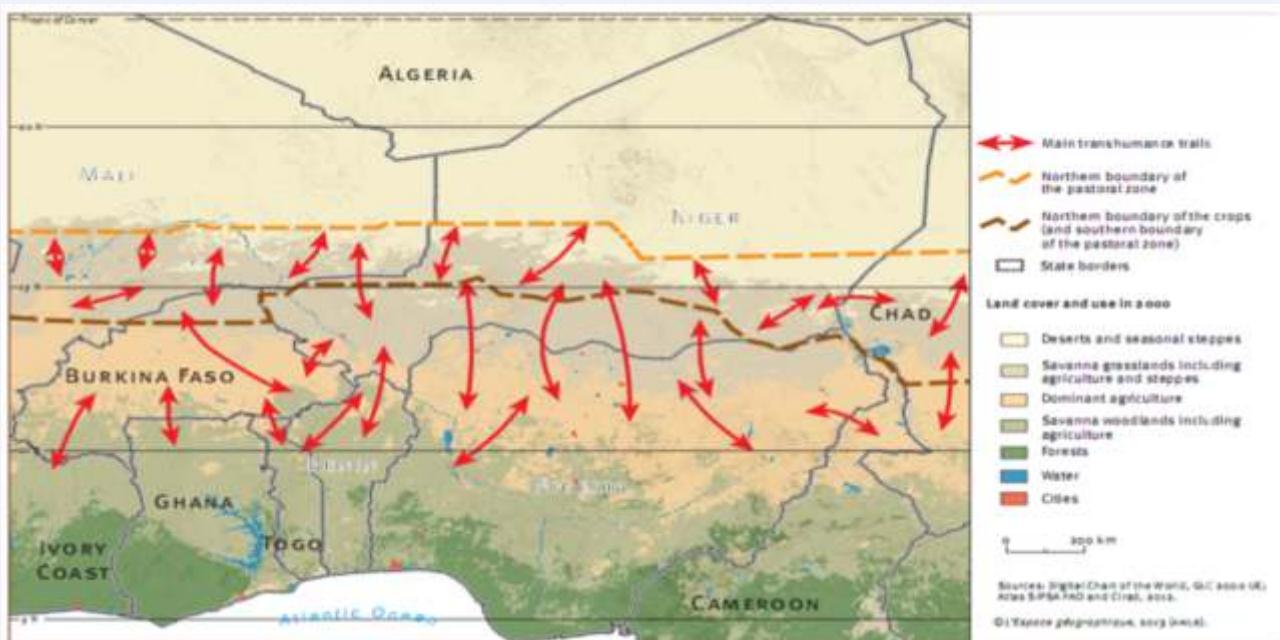
Today, peace requires ever more active investments, enlightened leadership, powerful educational values, extensive research in social innovation, and a progressive media world. For that reason, peace should never be taken for granted. It is an ongoing process, a long-term goal that requires constant engineering, vigilance, and active participation by all individuals. It is a choice to be made in each situation, an everyday life decision to engage in sincere dialogue with other individuals and communities, whether they live close by or not.

Over the years, Nigeria, particularly the northeast, and north-central parts of the country have experienced a rapid influx of new, culturally different ethnic groups across the region. And culture often dictates when individuals speak and how they may speak. Consequently, diverse societies and cultures in the northeastern and north-central states have unpredictable values and norms in interpersonal and intergroup interaction. Where the communication is intercultural, the norms hardly constitute any obstacles, but in intercultural communication (as is the case between crop farmers and herders), the media reporter must understand varying customs could pose serious challenges.

## Pastoral Groups Across the World

Transhumance is a common activity among pastoral groups across the world. The conflict between crop farmers and herders in Nigeria, over land and water resources, is not a new phenomenon and is partly rooted in centuries of migration of herders across West Africa, preceding colonization. Besides, pastoralists are "borderless" people, who largely do not subscribe to such notions of sovereignty and territorial restrictions on their movement across state borders. Moreover, where they have their kinsmen spread across several states, it becomes difficult to restrict their movement across state borders.

*Fig. 1.0: Below shows the trans-border migration patterns of herders in West Africa*



With the rapid peopling of the region and the resultant persistent conflicts between farmers and pastoralists, media experts and professional peace mediators must increasingly pay attention to intercultural communication as an important component both in curtailing conflicts and promoting peaceful coexistence between farmers and herders. Yet the appropriate intercultural communication needed for the aforementioned success is arduous to achieve, though an essential skill needed for language conflict mediation between crop farmers and herders. However, from this point of view, intercultural competence often implied a linguistic, sociolinguistic, and discourse component.

While the media representations of the farmers/herders' conflict can reveal various contestations in the framing of the conflict, in most discussions the discourse of the dispute is most constructed as a security issue that embodies other forms of security viz: *national security, food security, the security of statehood and the unity of the nations that make up the Nigerian state*. Sometimes the report in the media depicts the conflicts in the political and ideological dispositions of the media house and their reporters. For this reason, it can be argued that the link between the newspapers' representation of the conflict and the strategies they proposed for curbing the dispute may not be impartial.

Therefore, in our discussion, we analyze the politics of newspapers' discourse on the farmers/herders' conflict and the increased role of the media in the crisis. We will look at the existing analyses on the role of the media and focus on: *media reportage, framing, and coverage*. The representations of the conflict as reported in the papers will therefore be viewed through a lens to determine five overlapping themes, namely: *causes, victims, consequences, government responses, and resolution strategies to the conflict*.

## What is Media?

Media is the term we use to refer to different types of media that provide us with important information and knowledge. Media has always been part of our society, even when people used paintings and writings to share information.

## What are the Different Types of Media?

**Print Media:** This type of news media used to be one major way of delivering information to the public. For generations, print media was the media of entertainment. People relied on newspapers and magazines to learn everything, from entertainment, and news for important information about the country or the world. Print media includes: *newspapers, magazines, books, banners, billboards, brochures and flyers*.

## Broadcasting Media

Broadcasting Media includes videos, audio, or written content that provides important or entertaining information shared by different methods such as:

**Television:** a system for converting visual images (with sound) into electrical signals, transmitting them by radio or other means, and displaying them electronically on a screen.

**Radio** – It is one of the oldest means of entertainment. It uses radio waves to transmit entertaining, informative, and educative content to the public. Due to its high reach to the audience, radio is widely used for advertising products and services. Radio is very useful in multi-ethnic communities because of its ability to broadcast in local languages that people speak, hear, and understand. It is a medium of choice credibility and popular at the grassroots. It helps people to make informed decisions and ultimately strengthen peaceful co-existence as well as help to deepen democracy and participation.

**Movies** – film, motion picture, screenplay, and moving picture. Movies have worldwide reachability. It is the best type of mass media to promote cultures and spread social awareness. Movies have always played a huge part in the entertainment world.

## **Internet Media**

*Types of Internet Media include:*

Social networks or websites – including Facebook, Instagram, Twitter, YouTube, Tumbler, LinkedIn, Snapchat, Quora, Reddit, Pinterest, Tiktok etc. They are user-friendly and widely used by people around the world. Although we can find any news here, it may be misleading because of the lack of regulations on the content shared. Nowadays, we are relying on the Internet to get the news a lot more often than traditional news sources.

**Online forums** - This is an online place where we can comment, message, or discuss a particular topic. Forums allow us to share knowledge with other people with the same interest. That's why it's regarded as the best platform to seek support and assistance.

**Podcast** – a series of audios focused on a particular topic or theme. We can listen to them on a computer or a mobile phone. It's a platform that allows anyone to share their knowledge and communicate with the world.

We use different types of media to find out news, learn new things, and entertain ourselves. With the advance in technology, we can choose the type of media we want to use, no matter the time or place.

## **Media and Peace-building**

For peace to reign in communities today, the media is an important tool of information dissemination. It serves as a **driver of peace** in diverse ways in:

1. building bridges between people and groups
2. Improving governance
3. Increasing knowledge of complex issues
4. Providing early warning of potential conflicts
5. Serving as an outlet to express emotions and,
6. As a motivator for action to promote peace.

Hence, in any culture of prevention, effective and democratic media are an essential part and indispensable for societies trying to make a transition towards peace and democracy. Yet, the media can also be misused for propaganda purposes, to incite hatred and spread rumors, and therefore artificially create tensions. Despite that, responsible journalism is not just about re-publishing press releases but is truly concerned with a truthful, balanced and fair account of events. In order to achieve this journalists, have to stay clear of judgemental representations and describe reality without embellishment. For that reason, it has become more crucial than ever to promote and disseminate values, attitudes, and behaviors conducive to dialogue, non-violence, and the reconciliation of cultures in line with the principles of the UNESCO Universal declaration on cultural diversity, which states that:

“In our increasingly diverse societies, it is essential to ensure harmonious interaction among people and groups with plural, varied, and dynamic cultural identities as well as their willingness to live together. Policies for the inclusion and participation of all citizens are guarantees of social cohesion, the vitality of civil society and peace.” (Article 2, “From cultural diversity to cultural pluralism”).

## **The Nature of Linguistic Prejudice**

From a linguistic point of view, a conversation is usually conceived as a linguistic system of procedures and methods for the construction of themes, objects, and speakers in other words, a 'shared way of understanding the world otherwise or dominant meaning ascribed to a phenomenon in the process of constructing objects, speakers and themes. Unfortunately, linguistic prejudice against “outsiders” or “strangers” within an ethnic group is an attitude one finds everywhere in media reporting. For that reason, I want to caution that *there is not going to be any modern state that can accommodate prejudice without undermining its own development and progress.*

Therefore, language use in media reporting along ethnic lines can be a source of threat to state building and the project of creating an inclusive society.

### **Language as a Social Tool**

Speech which is the spoken form of a language is perceived by many scholars as fundamentally part of what allows people to live out their collective experience. Through speech, people are able to negotiate the social world in which they and other people live in. This happens not just through the way the people talk or what they say but more fundamentally how the people say it. Through speech, people are able to quickly determine who is like them and who is not; they can also tell through speech what social background someone comes from and whether that social background is similar or different from theirs. And this is also not different from written form of the language of newspaper reporting.

### **The Journalist and his Socio-Linguistic Background**

Language shapes what people believe and their expectations in life subconsciously in the sense that they are not consciously aware of what is going on. This sometimes leads to ethnocentrism which is the tendency to project one's own ethnic group as the centre of (the universe) everything desirable. Often this leads to deep-rooted prejudice where one speaks despairingly about the group he dislikes. It is to this we now turn.

How one internalized language and how effectively he uses it depends on who the person is and the social environment and location they inhabit. A people's identity is inseparably tied to:

- The way relationships are established and how they endure
- The kind of language one speaks shapes and influences how the person perceives the world.
- We're socialized through our experiences into certain habitual behaviors and habitual associations that the language encourages explicitly or implicitly.
- In doing this, language shapes our perspective of the social world that we live in.

There is no limit to the examples of how language interferes with people's relationships. There is plenty of literature on this topic and time and space are not enough for us to look at them.

### **Stunted Growth:**

There is no culture that does not have some prejudice and social injustice built into it. So, if there is something dangerous in the world view, mind and thinking of a journalists speaking or using a particular language, the critical scholar should go deeper beyond the appearance and look at the substance. The issue is whether we as journalists have the courage and commitment to dig deep into our culture and uncover any form of prejudice and injustice that is built into the core of the culture that discriminates against persons within that culture or outside that culture group, and whether such prejudice and injustice are recited every day in language and speech.

### **Farmer-herder Conflict: the Politics of Media Discourse and the Fulanization of Pastoralists**

Ethnic identity became characteristic of the farmers/herders' crisis because most nomadic pastoralists are of Fulani ethnic extraction (Olaniyi, et.al. 2016) surveyed no less than 60,000 national daily circulations from the following selected newspapers, the National Mirror, This Day, Punch, Daily Times, The Nation, Guardian, PM News, Vanguard, The Sun, Nigerian Tribune, Independent, Champion and Daily Trust. Articles on the website of these newspapers were considered. A list of the papers was made, and three were selected randomly (see Table 1). Table 1. Selection of newspapers Newspaper Daily Coverage Remark Punch

apx. 80,000 Selected Guardian apx. 60,000 PM News apx. 60,000 Nigeria Tribune apx. 60,000 The Sun >130,000 Selected This Day apx. 100,000 Daily Times >200,000 Daily Trust apx. 60,000 Selected Source: compiled from (Adelakun, 2014; Shehu, 2017)

DISCOURSE CLUSTER IN SELECTED PAPERS	PUNCH	SUN	DAILY TRUST
Causes of the conflict	Farmers' attempt to stop the destruction of crops and farmlands by Fulani herdsmen's cattle, land scarcity, climate change, the proliferation of arms.	Farmers' attempt to stop the destruction of crops and farmlands by Fulani herdsmen's cattle, environmental deterioration, climate change	Modernisation: herdsmen are ignorant of the values of modern society; farmers misunderstand the herdsmen way of life
Victims and assailants	Fulani herdsmen are killers, but farmers and other local people are victims	Fulani herdsmen are killers, but farmers and other local people are victims	Fulani herdsmen are not killers but victims, tribal militias are killers
Role of the governments	The federal government is, unwilling to curtail the conflict, shielding and aiding the killer Fulani herdsmen	The federal government is shielding and supporting the killer Fulani herdsmen	The government is responsive.
Consequences	The threat to security, food insecurity; a shortage of food crops, a threat to national unity	The threat to security, Food insecurity; a lack of food crops	The threat to security, food insecurity; a deficit in cattle meat, a threat to national unity
Resolutions	Establishing cattle ranches, banning open grazing, mopping up illegally possessed arms and ammunition	Banning open grazing, national dialogue	Cattle ranches

Shehu (2017) investigated how newspapers' reportage of the conflict expansively depicts Fulani people as stubborn and 'conflict mongers'. He further found out how:

- The newspapers' articulation of the Fulani people, including the Fulani herdsmen as conflict mongers also increases the sensitivity of Fulani-phobia and hinders the resolution of the farmers'/herders' conflict,
- The present framing of the conflicts in the newspapers could also worsen the standing ethnic tensions between the two groups,
- What the papers are reporting about the conflict is not necessarily any discourse to find a solution to the conflict but rather –how meanings and identities are ascribed to subjects and objects in the reportage of the conflict.
- Some of the discourses in the media are characterized by political relations of hegemony/power, resentment, and displacement.

- Some argue that the battle is generally represented as a security concern that encapsulates various forms of security threats viz national security, food security, the security of statehood and unity of the nations that make up the Nigerian State.
- When death is involved, the conflict is characterized differently and represented as attempts at ethnic cleansing and terrorism.

To draw the point home, an article in the Sun Newspaper exemplifies such articulation of the causes of the conflict thus: (i). The Fulani herdsmen are nomadic and habitually migratory. (ii). They move from North to South annually, with their cattle in search of grazing fields. (iii). The movement is seasonal. (iv) Now with climate change, the movement pattern has been markedly altered. (v). Due to expansive, desertification, drought and unchecked deforestation in Northern Nigeria, the herdsmen naturally seek greener pasture southward. (vi). As the resultant migration has intensified, so too has violent clashes over grazing lands between local farmers in the South and pastoral herdsmen, whom the former accused of wanton destruction of their crops and forceful appropriation of their lands.

The representation embodies some clear concepts such as migration, drought, desertification, and climate change which are well-established factors of the conflict in the literature. (Udeh, Sun 19 January 2018). To corroborate this, an excerpt from an editorial in Punch 10 January 2018), notes,

'The herdsmen have a habit of sending their cattle to cultivated farmland which destroy crops that are a source of livelihood to the farmers. Any attempt to stop them results in killings, raping and destruction of farmland as well as the sacking of whole communities' (Punch, 10 January 2018).

Also, the Sun Newspaper of 9<sup>th</sup> May 2018 quoted the Governor of Ekiti State, Ayodele Fayose linking the crisis towards attempts at ethnic cleansing and terrorism. The news report in Sun quoted the Governor Ayodele Fayose saying, 'what is happening in Benue and other middle-belt States is more than a strife between herdsmen and local farmers, it has gotten to the level of terrorism and ethnic cleansing' (Fayose, Sun, 9 May 2018).

Also, Azuka Onwuka, a **Columnist** with the **Punch** **Newspaper** **Remarked:** '[They] are not really herdsmen in the true sense of the word, but fighters contracted to attack communities that are viewed as unfriendly to herdsmen. If the government cannot defend the locals from this ethnic cleansing, why stop them from defending themselves?' (Onwuka, Punch 1 May 2018b).

In a study carried out by Onyebuchi, Obayi and Nwagu (2019), they examined the newspapers' coverage of Fulani herdsmen attacks on host communities in the country to find out: (i). the frequency of news coverage, (ii). its level of prominence, (ii) depth of coverage, and (iv) direction of Fulani herdsmen attacks on host communities. The study shows that the coverage is: mostly unfavorable. They argued that newspapers should support the de-escalation of the dispute via the use of soft words and objective coverage and reportage of the conflict bereft of political and ethno-religious sentiments.

**Strategies for the Promotion of Peaceful Co-existence using Mainstream and Social Media Institutions:** UNESCO's key approach to the concept of Media and Information Literacy (MIL) reinforces intercultural dialogue. This is owing to the complexities in contemporary societies as this continues to advance due to the deluge of information capable of causing harm. Because, intercultural dialogue helps confront misunderstandings, inequities, and conflicts while non-dialogue promotes stereotypical perceptions of the other and increases mutual suspicion, tension, and anxiety. Hence, media and Information Literacy is the ability to analyze, critique, and produce information for specific purposes or results

## **Types of media interventions for peace-building**

Types of media/communication interventions for peace-building can be very diverse, including but not limited to

- Media monitoring;
- Media professionalization programmes; peace journalism training; international broadcasting;
- Promotion of an enabling legal and regulatory environment;
- Using media to convey peace-building messages;
- Citizen journalism initiatives; and crowd sourcing initiatives to collect and share information.
- The type of intervention will depend on the context, and in particular on the stage of the 'conflict cycle'.

*Key actors involved in media/communication and peace-building programming include:*

- NGOs, e.g. inter-news, search for common ground and intermedia; international broadcasters, e.g. British Broadcasting Corporation (BBC) World Service, Voice of America (VOA).
- Radio programs allow pastoralists and farmers to be in conversation with each other hence foster understanding and respect for their differences.
- Phone-in radio programs that enhance audience participation. In this way, there is a guarantee of interaction between different cultural backgrounds and linguistic diversity.
- Radio programmes should bring about inclusiveness for the public good, promoting the free flow of information in words or images, reconciliation, and respect.
- Newspapers- to provide news editorials, reviews, and advertorials according to the tastes of their readers, in this way the readers are in touch with the cultures of people.

*SOCIAL MEDIA- allows for group collaborations and dialogue for a large number of people to produce their own content.*

- The internet is more democratic in many ways, than newspapers or TV. It allows for a freer exchange of views for a variety of social groups. It has helped radio to be more contemporary, through podcasts and live-streaming functions
- Social networking sites (Facebook, WhatsApp, YouTube, Myspace, Twitter, Instagram etc.) allow for more networking and make for more active as against passive participation producing more public actors.
- So views and opinions of people of different backgrounds can be exchanged freely because of the democratizing access to the internet.
- People can utilize the internet to tell their own stories using multimedia strategies meaning they can use a community theatre approach online and upload dramatic content, sound, photos, updates, private messages, or songs via YouTube.

Mechanisms and awareness campaigns for strengthening pastoralists and framers associations toward peace-building. Mainstream media and social media should be used to teach against barriers to effective communication across cultures such:

- Misunderstanding,
- Norms and roles,
- Beliefs and values,
- Stereotyping,
- Ethnocentrism, and
- Prejudice.
- Media dialogue should be (on Radio, Television, Internet) in ALL the states and in local languages.
- The concept of peace Journalism can be promoted through community radio for reconciliation and to propagate peaceful coexistence-
- Media centers can be created to facilitate the exchange of information between the different groups and bridge differences

- Media centers should be created to promote and provide fact checks for the verification of information as well as a forum for a public debate between communities.
- Civil organizations can offer training for communities and journalists to encourage investigative journalism, especially for journalists on the side of the conflict to interact and propagate peace, uphold ethical/professional standards and avoid manipulation of information that disrupts the ecosystem
- Government to make access to Freedom of Information (FOI) and enforce its utilization
- Media centers/ and civil organizations can aid in the production of public service announcements, advocacy, etc. to discourage discord and reinforce harmonious coexistence and mobilization
- The focus of journalists while reporting conflicts should premise on the need to liberate people from ignorance and improve their thinking and communicative abilities or capacity so they contribute to respecting diversity, and freedom of expression and in the end promote peace and democracy.

### **What the 21<sup>st</sup> Contemporary Nigerian journalist Must Recognize**

No culture has made or would make progress in the modern world by covering up its failures in the name of pride. Assuming journalists in various ethnic groups in Nigeria stress their ethnic or tribal identity to a point that it overshadows and overwhelms their national identity and they proudly stand for that, on a critical note there are some reasons to be concerned about that. Using Lawrence Kohlberg's theory of moral development, can we not call such kind of identification a kind of stunted growth and evolution of the people's mind i.e., stagnation in the evolutionary cultural process? In other words, one's community is perceived to be the center of the universe., where one's group whether peer group, ethnic group and religious group and ultimately one's nation tells him or her is the moral and ethical thing to do. If the group teaches him or her to dehumanize a person coming from another ethnic or religious group, the person will do it because his or her morality is determined by the group he or she belongs to.

Language fuels our brains frame our thoughts and makes complex communication possible. Speaking more than one language, therefore, makes the journalist more open-minded and helps him/her feel more connected to other cultures and to the world around him/her. It makes for more enriching cultural experiences, and being able to communicate is the best feeling in the world. The limits of the journalist's language mean the limits of his world. If the journalist is monolingual, his world no doubt has clearer limits. In an age of borderless communications and global travel, it seems almost archaic to be limited to one language only – even if the journalist is lucky enough to speak a global language like English or Spanish as his mother tongue.

How to support cultural diversity through effective intercultural reporting: the role of the journalist

#### *The journalist must:*

- Interact with people outside his/her culture to increase his/her social capital (i.e. he/she will enjoy other cultures even more). This will increase flexibility in creative thinking in the journalist.
- Be open-minded to listen and let go of judgment.
- If he/she sees anyone who is being culturally insensitive, he/she should speak out against it.
- Accept that differences are beneficial and not harmful.
- Learn not to force his/her beliefs on people with opposing views.
- Advocate working and living with people who are not within his/her culture.
- Absorb media and art from around the world.
- Learn a new language and communicating in a friend's native language rather than his/her own increases: love towards one another, respect, compassion, innovation, foster peace and understanding at a community level.
- Recognize the value of differences, combating discrimination, and promoting inclusiveness.

- The journalist must build strength of character, confidence, pride, and growth when dealing with other cultures.
- Interacting with people who have diverse practices, beliefs, life experiences, and culture promotes empathy. While one can never fully understand someone's life without being them, one can learn, listen, and understand.

### **Mitigation/Methodology: the Role of Advocacy**

Governments of conflict-ridden States should use the media:

- To treat ALL HUMAN BEINGS with respect.
- Governance must therefore be based on truth, justice, and fairness, not sympathy.
- Communities must maintain an open mind toward dialogue.
- Governments must respect those they govern.
- Governments must show mercy to the weak under their jurisdiction.

### **Activities Towards Peaceful Coexistence: the Role of the Media**

Media Reporters serving as Resource Persons should be selected from tested peace practitioners and specialists in identified thematic areas.

- Production of sustainable Peace Road Map, Information, Education and Communication (IEC) materials on breaking walls, of stereotypes and prejudices.
- Set up Focus Group Discussions (involving all relevant ethnic nationalities) in all the states e.g. Town Hall meetings i.e. Zauren Sulhu.
- Mediation Process across Conflict flash point communities
- Establishment of a Professional Core of Mediators team to be trained on the Alternative Dispute Resolution (ADR) and conflict transformation for journalist for conflict mitigation in the conflicted afflicted areas.
- Media Conferences and Paper Presentations on core values of strength in diversity in a multi-ethnic society at the community, local government state and regional levels,
- Film shows and theatre arts, drama exhibition for societal re-orientation on the culture of non-violence, advocacy visits to government, religious, traditional institutions, diplomatic communities, and other stakeholders, local and international for collaboration in the area of peace-building and conflict transformation.
- Train relevant journalists and media practitioners on conflict management, resolution, on Early Warning (EWER) mechanisms in conflict-ridden local governments, states and geopolitical zones.

### **The Media in Indigenous Languages as a Panacea for Farmers/Herders' Conflict Mitigation**

Media in an indigenous language is an area that is often neglected in achieving peace and, mitigating conflicts. Late Nelson Mandela (of blessed memory) was a great man famously known to have once said: "If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language, that goes to his heart." I consider that statement appropriate to our present theme for this conference. It is on that premise that I hinge on the following discussion on the media in Nigerian languages in achieving peace, and mitigating farmers/herders' conflicts.

It is a well-established fact that individuals in a nation can develop educationally, socially, politically, economically, and culturally through interaction with government agencies that disseminate policies through various indigenous languages, Olaoye (2013). This is envisaged in the language section of our National Policy on Education, the use of a child's mother tongue as a medium for communication help in promoting access to literacy and better understanding. That is why development indices such as internal

cohesion, integration, unity, economic well-being and citizens' participation in governance are promoted through indigenous languages. It is thus logical to presume that farmers/herders conflict cannot be meaningfully solved in Nigeria without recourse to the indigenous languages of the people.

If, as reported by UNICEF (2013), a significant population of Nigerians is not literate (at least in English) the solution to national issues having a bearing on farmers and herders must lie in the accessibility of farmers and herders to participation in such national issues through the opportunity provided by their indigenous languages. Peaceful co-existence and development between farmers and herders are, therefore, tied to how much we can harness our languages as tools for engaging in national and local issues such as conflict mediation.

Reporters and mediators on farmers'/herders' conflict must, first of all, understand the issues causing the conflicts, and for a significant number of the populace. This will be better achieved by transmitting all issues relating to the conflicts to them in their indigenous languages. Once they have understood the concerns, the local communities will be in a good position to promote practices and behaviours that will be conducive to the achievement of these goals.

What was said does not imply abolishing the "globalizing languages" or belittling their role. Since they are foreign languages, they deserve to be put in their proper place in our educational system. Ethnic languages are treasures of wisdom and assets for the promotion of social and sustainable development of the economic status of the family. Foreign languages are bridges to other cultures. For that reason, the role of language is not something marginal, or something that we consider only when there is time or space.

### **In this Modern Era where International Pastoral Migration and Social**

Media seems to be the new order of the day; intercultural communication has become a necessity that cannot be overlooked. Hence, the need for effective, working intercultural communication skills that cannot only assist in eliminating communication issues like conflicts and misunderstandings but also promote a mutually beneficial relationship with parties involved in the process. In a multicultural State like Nigeria, this involves four dimensions: attitude, tolerance for diversity, open-mindedness, knowledge and skill.

Though motivation, attitude, tolerance, love, and open-mindedness are culture-general, knowledge and skill are usually culture-specific, requiring the active acquisition of information and training to reduce discrimination about another culture. It is, therefore, obvious that intercultural communication is a credible tool in the interpersonal relationship among people from different cultural origins as it provides an enabling environment for mutual understanding, cooperation, and peaceful co-existence. The following recommendations are therefore made:

- There is a need to expose media workers such as reporters, news writers, and media practitioners to different beliefs, and practices, together with critical reflection on their attitudes and intercultural behaviours.
- Professional communicators through various media outlets should feature programs on intercultural sensitivity which is necessary for success in peaceful co-existence in society and life generally.
- Non-governmental agencies and stakeholders on community welfare and development should utilize the agency of intercultural communication and the media in their approach to proffer solutions to farmers'/herders' conflict for a peaceful environment.

### **Conclusion**

To manage our diversity well in media reporting in Nigeria, I would like to counsel for the importance of continuously seeking better ways of linking together and finding ways which accommodate our diversity through the right information dissemination. The seminar of today is a great move in the right direction.

John F. Kennedy once said “if we cannot end our differences, at least we can help to make (the Nigerian State) the world safe for diversity” modified by the author (Address to the American University, Washington DC June 19<sup>th</sup>, 1963). Any approach to be adopted must be bottom-up. In other words, it must start with the beneficiary (the conflict-afflicted people/communities) and must end with them. We can achieve this by means of improved relationships with the communities through meaningful engagement in their languages and the media that ensures their active participation, developing a strategy together to improve the security situation, and identifying ways to support people to have safe access to economic opportunities.

Violence mitigation will not be achieved without more trustworthy and effective reporting and security interventions. We must, therefore, prioritize building trust between communities, the journalist, and the security forces. In relatively secure areas, more information should be collected to understand how effective reporting can play a role in de-escalating violence and bringing peace instead of violence.

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**Dr. Danladi Bako, OON (Koguna Sokoto)**

*National Conference on Livestock Reforms and Mitigation of Associated Conflicts.*

## Media as a panacea.

The overriding emcumberances bedeviling peace and harmonious living between farmers and herders as well as the generality of society at large are well documented . The Lead Paper by Prof Andrew Haruna tackles a lot of the primordial and ecological as well as epistemological dimensions involved in this debacle.

## Mitigating factors

The summary of the media inadequacies of this quagmire include the absence of political will to resolve the issue in a legislative approach with proper articulation of the resolutions and between the government, the traditional rulers, farmers and herders. The testimony of a rice farmer, Rotimi Williams, is very instructive.

The National Livestock Plan 2019 provides for solutions premised on the report of so many endless conference reports. This is the ideal take-off point .

The issues primarily, the lack of a finely coordinated media strategy is a major flaw in the conflict resolution process. Despite the close to 820 radio and television stations and 100 print newspapers, the knowledge gap is still very disturbing.

## Strategy Model

The levels of media usage have to take into consideration the levels of print , broadcast and social media involvement in the intervention. The interpersonal communication model between the farmers , land owners and the migrant herders require the consistent and continued engagement of all parties specifying the roles and delineation of every component of the trilogy .

The lack of enough research by the media in educating these components units about the history of such legislation as the 1964 Grazing Reserves Law and its implications for the enforcement of the 1978 Land Use decree.

The Media, as at now, does not seem to be well equipped in the narratives emanating from reportage and analysis of the background to the conflicts. Of significance is the prejudice and profiling of both farmers and herders by the ownership structure of such media houses. In some cases, the hegemony structure of racial , ethnic and tribal slurs often populate such discussion on the media space.

The media seems also to allow "meaning" of issues to obfuscate the national ideals of social harmony and ethnocentrism.

The media's capacity to put national interest on the front burner as a panacea for the resolution. The utilisation of advocacy tools must be embarked upon using market associations , youth associations , community opinion leaders and religious leaders. There must be specific radio and television content programming education both farmers and herders of new trends all over the world and the modernization process in today's world . FM radio in Fulfulde , Hausa and other local tribes like Tiv , idoma and the internet has to be re-tooled , re-structured and better delivered. My experience in the media with Nomadic Education scheme and the NBC's licencing of radio for nomads and agriculture radio as well.

The media powered by the Federal Ministry of Information in a structured and formal strategy premised on national cohesion must embark on a massive reorientation of all the parties involved.

# **FUNDING, INFRASTRUCTURE AND INSTITUTIONAL CAPACITY DEVELOPMENT FOR EFFECTIVE DELIVERY OF FUNCTIONAL EXTENSION SERVICES**

Paper Presented by

**Professor Olutokunbo B. OYESOLA**

Social Safeguard Specialist

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## **Contribution of Livestock to Agricultural Development**

Livestock sub-sector converts under-utilized or non-utilized by-products, grasses and fibrous forage of farms and communal grazing areas into food and other beneficial products. In this regard, existing works on crop-livestock interactions have two pronged approaches. The first approach argues the unavoidable resource rivalry, especially for land, with increasing population pressure and inclining increase, which may in long or short run induce destocking and reduce crop-livestock interaction. The second approach argument focused on complementary between crops and livestock. It is viewed that inputs are most effective when crop and livestock production are combined on the same farm. It is assumed that where crop and livestock are combined on the same land, livestock enterprise will play the following (i) roles of intensification and diversification of production systems and (ii) food and nutrition. But the two approaches are not being played out across Africa and mostly recently in Nigeria. The conflicts between livestock and crop farmers over water and grazing opportunities have been going on for decades, which started before the droughts of the 1970s and 1980s when nomadic Fulani herders moved into communities where they had not grazed their animals previously. The principal driver of conflicts between crop and livestock farmer is economic in nature, with land-related issues at the center, especially issues of accessibility and use of land and water resources. The neglect of livestock development policies implementation by Nigerian government over the years has led to the continuous present conflicts being experienced in the country. Also, P. Sorokin theory of historical approach to social change explains the inter-relatedness between historical, political and economic changes and changes in other social conditions. He concluded the possibilities of some repetition over time, but history cannot repeat itself exactly. The conflicts being witnessed between livestock and crop farmers are repetitions of the past and neglect of functional livestock extension services.

For the development of a sustainable livestock reform and mitigate possible associate conflicts through effective delivery of functional extension services there is need to have adequate knowledge and understanding of the primary stakeholders in the livestock sector of our economy and plan the reforms “with them” and “not for them.” In this present age extension services reforms can only be sustainable when they are identified, planned, implemented and monitored with the end-users. The delivery of a functional and effective extension services can be achieved by understanding the term sustainability and putting into consideration the 4 pillars of sustainability (social, human, economic and environment) as outlined by United Nations.

## **Sustainability of Effective and Functional Livestock Extension Services in Nigeria**

According to United Nations sustainability is '*the development that meets the needs of the present without compromising the ability of future generations to meet their own needs*'. But the key to sustainability is making these improvements in life of our livestock farmers without decreasing their current quality of life.

This can only be achieved when the following four areas called Pillars of Sustainability are put into operation by locality when extension messages are being developed with the end-users. The four pillars are social, human, economic and environment, which I termed as extension and rural sociology perspective social acceptability, human development, economic viability and environmental adaptability of all extension messages.

## **Social Acceptability**

It takes into account a large view of the whole communities in terms of culture which is their norm, value, belief and taboo. It emphasizes preserving future generations and recognizing that our current actions have an impact on others and also on our environment. It is assumed that when societal norms, values, beliefs and taboos of various stakeholders are put into consideration and when extension messages are being prepared, the messages will be functional and effective and sustained through generations. This calls for the need to study an in-depth culture of livestock systems in Nigeria in order to have a socially acceptable messages to be delivered to livestock farmers.

## **Human Development**

This focuses on maintaining and improving human capital within society. It focuses on the importance of the people involved both directly and indirectly in the production of goods or provision of services. Human development consists of the knowledge, skill and health that people invest in and accumulate throughout their lives, enabling them to realize their potential as productive members of the society. The understanding of these parameters from primary stakeholders' perspective will enhance the content of our livestock messages and its sustainability. Indigenous knowledge transfer, required skills development and improved health for both the livestock and keepers/owners of the livestock.

## **Economic Viability**

Economic viability recognizes that our extension messages has to be profitable to the end users in order to survive and refers to the efficient use of assets to maintain profitability over long periods of time. Whilst long term economic growth is crucial the key word of this viability (and the other three too) is sustainability which means that this economic growth needs to be done without negatively impacting social and environmental aspects of the society. That is, the livestock extension messages must be environmental adaptable, socially acceptable and economically viable over a long period of time.

## **Environmental Adaptability**

This aims at improving human lives by preserving the environment and natural capital such as land, water, air, minerals etc. Extension messages can only be defined as environmentally adaptable when they ensure that the needs of the population are met without comprising the long term sustainability of the natural resources (land, water, air, forest, noise, etc) and the needs of future generations. All communities and individuals seeking to act under the environmental sustainability pillar of the UN must interact conscientiously with the environment to avoid destruction or depletion of natural resources. That is, the livestock extension messages must be environmentally adaptable, without negative impact on the environment.

## **Institutional Capacity Development for Functional and Effective Extension Services**

From social safeguard perspective which constitute extension and rural sociology, the following methods are advised to be adopted to improve the institutional capacity for extension delivery.

1. **Community Participation and Community Engagement:** Engaging and participation of communities is an essential task for the success of any intervention. However, it can be quite challenging. Engaging community members effectively and efficiently takes a good understanding of what your stakeholders expect from you and how well you apply that understanding. Participation concerns community members making their voices heard before decision-makers, while engagement is a deliberative process where community influence decisions, and action results (De Lancer Julnes, 2011). Participation is simply taking action, while engagement is making an investment. There is need to build the capacity of extension personnel for functional and effective message delivery.

Community engagement is a way of ensuring that community members have access to valued social settings and activities, feel that they are able to contribute meaningfully to those activities, and develop functional capabilities that enable them to participate fully. While community participation promotes sense of belongingness, better health and well-being, set goals and improve skills, gives purpose and sense of contribution and to adapt and develop new skills.

2. **Use of World Bank Resettlement Review and Social Audit (RRSA) protocols** of all government, public or private lands to be used for the implementation of the livestock reforms. This will assist in mitigating anticipated or associated conflict. Capacity building on this task will deliver the following:

- Clarify the objectives, applicability and procedures for the development and implementation of all donors or borrowing Organizations Safeguard Policies with particular emphasis on the preparation and implementation of Resettlement Action Plans (RAPs) for the selected project sites
- Identify gaps and omissions in previous protocols including:
- Land acquisition process;
- RAPs development and implementation;
- Displacement and resettlement impacts;
- Compensations, entitlements and assistance;
- Consultations, grievance redress and disclosure procedures;
- Livelihoods restoration, vulnerable groups and others

*For previous Activities, the RRSA is Expected to:*

Provide recommendations and guidelines for proper documentation, development and implementation of RAP/ARAPs, consultations, mitigation and compensation measures developed and implemented;

Provide guidelines for the design of mitigation and compensation measures to assist beneficiaries with livelihood restoration.

*For upcoming Activities, this RRSA is expected to:*

Provide recommendations for the design and implementation of RAP/ARAPs for all upcoming activities on the land including the methodology and process for community consultations, the identification of impact and risks and compensation measures, the implementation of mitigation and compensation measures (from a procedural and a substantial perspective).

Recommend capacity building needs for contractors, project officials and community leaders on social safeguards and the development of a safeguard monitoring framework.

3. **Use of FAO Principles of Land Investment in Agriculture (Endorsed 2014) and Guidelines for Sustainable Large Scale Land Deals (2017) in Africa** in preparing locality or state specific Framework for Responsible and Inclusive Land-Intensive Agricultural Investment (FRILIA). Land fragmentation and Climate Change.

According to FAO (2017) and which is true of our country Nigeria, over the last few years, agribusinesses, investment funds and government agencies have demonstrated a growing interest in acquiring large portions of land, mostly in developing countries and particularly in sub-Saharan Africa. In the host countries, investors and government see these acquisitions as opportunities to attract foreign investment that will enhance food and energy security and stimulate socio-economic development. Analyzing a number of these deals in Africa suggests that these objectives are usually not attained and that their sustainability appears to be uncertain. Even though tenants and landlords take into account environmental and social aspects when negotiating land deals, there is a lack of technical measures and tools to guide these negotiations. The aim of this document therefore is to provide technical guidelines to be used as a tool that may foster an enabling environment for sustainability and provide a basis for win-win investments that effectively contribute to the socio-economic development of the host countries; this is feasible when the arrangements benefit both the investors and the majority of the population in the given area. Therefore the need to build the capacity of extension and other relevant personnel in preparation and implementation of FRILIA.

4. Incorporation of the Federal Ministry of Environment National Environmental Guidelines for Agricultural and Rural Management (2018) while preparing the reforms. The Nigerian EIA Act (2004) stipulates that all new development projects, whether public or private sectors of the economy, shall undergo EIA process and receive approval from the Federal Ministry of Environment prior to project commencement. The Agricultural and Rural Management guideline was prepared to assist project proponents in the preparation of an EIA for a proposed project. The acquisition of skills in preparation of all relevant EIA documents and its effective implementation calls for attention.

## **Conclusions**

1. The sustainability of livestock reforms also depends on the delivery of functional and effective livestock messages that are environmentally adaptable, socially acceptable, economically viable and human inclusive for its sustainability.
2. Additional institutional capacity building in the areas of community participation and engagement processes; re-settlement review and social audit of all government or public or private land to be used for piloting the livestock reforms; development of locality/state specific FRILIA and incorporation of Nigeria environmental guidelines for agricultural and rural management will mitigate anticipated and associated conflicts and improve the delivery of functional and effective livestock extension services.



**REPORT  
OF  
NATIONAL  
CONFERENCE  
ON  
LIVESTOCK  
REFORMS AND  
MITIGATION OF  
ASSOCIATED  
CONFLICTS**

## PLENARY SESSION 1

PRODUCTIVITY AND BUSINESS OF VALUE  
CHAIN DEVELOPMENT FOR LIVELIHOOD  
RESTORATION IN FARMERS/HERDERS  
CONFLICT MITIGATION IN NIGERIA

## NATIONAL CONFERENCE

Theme:

*“Livestock Reforms and Mitigation of  
Associated Conflicts in Nigeria”  
13<sup>th</sup> and 14<sup>th</sup> February, 2023  
NAF Conference Centre & Suites, Abuja,  
Nigeria*

### SUB-THEME I:

“PRODUCTIVITY AND BUSINESS OF VALUE  
CHAIN DEVELOPMENT FOR LIVELIHOOD  
RESTORATION IN FARMERS/HERDERS  
CONFLICT MITIGATION IN NIGERIA”

#### KEYWORDS:

##### *(i) Productivity:*

- Low productivity is the bane of traditional low technology Agriculture in Nigeria
- Reversing low productivity through improved breeds, modern production techniques/technology and disease control

##### *(ii) Value Chain development:*

- Characterization and prioritization of Livestock Value Chain Development
- Enhancement of Livestock Value Chain through research, technology and appropriate production inputs and extension services of National herd

Lead paper presentation by:

Prof. Suleimen Elias Bogoro (FNIAS, FASAN,  
FNSAP, FNSA, FAS, D.Sc Hon, OON)

### *(iii) Livelihood:*

Livelihood focused National Livestock Reform Program

#### *(iv) Addressing the avoidable herder/farmer conflict through:*

- Enhanced sub-sectoral funding , input subsidy and single digit livestock business loans
- Government-supported short-term sedenterization of itinerant livestock herds

## **Unbundling The National Livestock Value Chain R & D**

The Transformation and Reforms of the Livestock Sub-sector Value Chain will also necessitate the deployment of appropriate precision and technology-driven solutions that will integrate purposeful and focused R & D at both species and commodity/product levels in, among others, the following:

## **Notable Innovative Reforms and Transformation Paradigms for the**

- (i) Germplasm and genetic material development, collection, preservation and distribution
- (ii) Climate Smart housing/husbandry
- (iii) Product development, value addition and storage
- (iv) Domestication of new species
- (v) Documentation and Data banking

- (i) Poultry
- (ii) Dairy
- (iii) Beef and wildlife
- (iv) Small ruminants
- (v) Micro livestock and pet animals
- (vi) Swine
- (vii) Animal products and Value Addition
- (viii) Aquaculture and Fishery

## Key Recommendations

1. Value Chain driven modernization/Reforms of the existing largely outdated livestock production and husbandry systems

2. Enhanced funding of prioritized livestock value chains through appropriation, Agric Development Fund and Global funding windows

3. Adoption of Immediate, Medium and Long Term Reforms as follows:

(a) Immediate: Provision of immediate special funding to promote sedentarization of livestock herds with provision of N250b annually by the federal government (and to be complimented by State governments) for five years wef from 2023.

(b) Medium Term: Set a target of five years to migrate from itinerant to full sedentarization of the National herd

(c) Long Term: Adoption of modern ranching and related husbandry practices aimed at stoppage of herd migration to avoid conflicts as in other parts of Africa and the rest of the world

(d) Immediate Adoption of Conflict resolution mechanisms between herders and crop farmers, towards ending the recurrent violent conflicts that have worsened insecurity in the country.

(e) Attraction of International Funding basket to reclaim and resuscitate the Lake Chad and its huge resources

(f) Adoption of livelihood-focused livestock development reforms to include the revitalization of moribund grazing reserves with provision of Basic education facilities, Primary Health Centres and clinics/Maternity Centres and access/feeder roads

**Thank you.**

## PLENARY 4

ENGENDERING PROSPERITY, WELLBEING AND  
PEACEFUL INTER-COMMUNAL COEXISTENCE AMONG  
FARMERS, PASTORALISTS, YOUTHS AND WOMEN

## ENGENDERING PROSPERITY, WELLBEING AND PEACEFUL INTER-COMMUNAL COEXISTENCE AMONG FARMERS, PASTORALISTS, YOUTHS AND WOMEN

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NATIONAL CONFERENCE ON HUMAN SECURITY, INTEGRATION AND  
MANAGEMENT OF ASSOCIATED CONFLICTS  
February 12-14, 2021, NAF Centre of Excellence, Abuja, Nigeria



## BACKGROUND & INTRODUCTION

- The conflict between farmers and pastoralists in Nigeria is a long-standing issue.
- The conflict arises from the competition for resources and is exacerbated by factors such as a growing population, pressure on finite resources, and urbanization.
- The conflict also has a deep-rooted historical and cultural dimension.

This paper provides an overview of the herder-farmer conflict in Nigeria, its causes, consequences, and suggest solutions that can engender prosperity, wellbeing, and peaceful inter-communal coexistence.

## BACKGROUND & INTRODUCTION CONT'D

- This paper discusses that it is essential to engage all members of society, including farmers and herders, in the pursuit of sustainable solutions that can promote prosperity, wellbeing, and peaceful inter-communal co-existence.

- By doing so, the paper will contribute to the discourse on Sustainable Development and Social Harmony in Nigeria and beyond.

## PREVALENCE OF HERDER-FARMER CONFLICT IN NIGERIA



- Conflict between herders and farmers in Nigeria is a common and persistent issue.
- The conflict has resulted in loss of lives, property destruction and displacement of people.

- The conflict has been widely studied to understand its consequences and strategies for reduction (Kehinde, 2014; Gouvea, 2016; Idakwo et al., 2018; Df et al., 2019; Nwakanma et al., 2019; Ijoyah, 2020; Popoola et al., 2020).

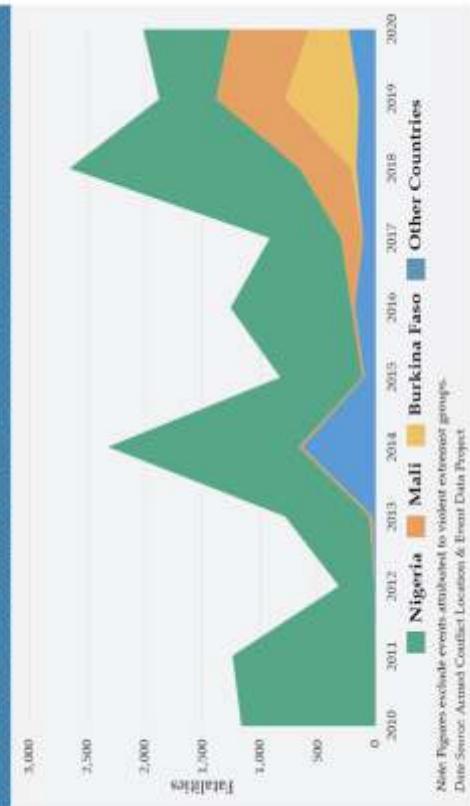
## PREVALENCE OF HERDER-FAMER CONFLICT CONT'D



- The Nigerian government and various non-governmental organizations have attempted to address the issue through the implementation of Conflict Resolution Programs and by promoting the establishment of grazing reserves.

- However, these efforts have had limited success and the conflict continues to be a major challenge in the country.

FIGURE 1. TRENDS IN FARMER-HERDER VIOLENCE IN WEST AND CENTRAL AFRICA



## PREVALENCE OF HERDER-FAMER CONFLICT CONT'D

- The impact of the conflict has been far-reaching, with many affected communities experiencing loss of lives, destruction of property, and displacement of people, which has disrupted their livelihoods and resulted in a decline in food security and safety.

- Hence, a major threat to peaceful coexistence, human and national security, and sustainable national development.

- The Grazing Bill proposed to managing conflict. Other proposals:
  - establishment of irrigated pastures
  - farmland surveillance-alert system using unmanned aerial vehicles to detect cattle presence on farmlands as a solution to the problem

## DRIVERS OF HERDER-FAMER CONFLICT



## DRIVERS OF HERDER-FARMER CONFLICT CONT'D

- The violence has led to the implementation of anti-open grazing laws by several state governments (Cissé, 2020).
- The laws have led to a decrease in conflict events and fatalities in some states, but they also perpetuate a hostile political discourse towards Fulani pastoralists and make conflict de-escalation more difficult.
- The National Livestock Transformation Plan (NLTP) supported by the Government excludes pastoralists and exacerbates intercommunal resentments (Ayandele, 2021).
  - Reduced grazing land may also lead to a cycle of militant violence
  - The presence of extremist groups in forest reserves

## SOCIAL CONSEQUENCES OF THE CONFLICT



- The social consequences of the conflict between farmers and pastoralists in Nigeria are far-reaching and have a profound impact on the lives of local communities.

## POSSIBLE SOLUTIONS TO THE CONFLICT

- Although promoting peace in crisis communities may not be easy, there is nonetheless a growing consensus that violent conflict is not and should not be considered inevitable.
- Lack of political will on the part of national leaders to proactively address the root causes of conflicts, and the failure to seek to diffuse and resolve a situation, that have often led to serious escalation.
- The Carnegie Commission on the Prevention of Deadly Conflict (1999)

## POSSIBLE SOLUTIONS CONT'D...

- Acknowledging and integrating the different understanding, experiences and capabilities of women in peace efforts is essential for the complete resolution of not only the Farmers-Herders' conflict, but all other conflicts in Nigeria.
- The Zanzibar Declaration (1999, Clause 16): "strengthening of African women's capacities to sensilise, mobilise and reconcile the entire continent to the importance of peaceful means of conflict prevention, resolution and transformation".

## POSSIBLE SOLUTIONS CONT'D...

- The Nigerian Economic Study Group/Nextier Security, Peace and Development in their report, *Resolving the Farmer-Herder Conflicts* (2021), identified a number of peace-engendering strategies:
  - Leveraging of mediation and dialogue groups
  - Communicative Engagement Data on conflict patterns and trends
  - Community Peace and Security Architecture

## POSSIBLE SOLUTIONS CONT'D...

- The Nigerian Working Group on Peace Building and Governance (2018) recommended:
  - A national policy framework on free movement and livestock production
  - The programme for the country's transition to modern forms of animal husbandry must be accelerated and funded
  - Commercial ranches should be established in some of the sparsely populated zones in the North East and North West.
  - Modelling best practices of pastoral-farmer relations
  - Development of a media code
  - Advocacy and administrative guidance to return to traditional methods of conflict resolution
  - The creation of positive narratives
  - In summary, to address the conflict between farmers and pastoralists in Nigeria, a multi-faceted approach is needed that takes into account the underlying causes and consequences of the conflict.

## CONCLUSION

- The conflict between farmers and pastoralists in Nigeria is a complex issue with far-reaching consequences for the lives and livelihoods of local communities.
- To engender prosperity, wellbeing and peaceful inter-communal coexistence, a multi-faceted approach is needed that takes into account the underlying causes and consequences of the conflict and utilizes conflict management expertise.
- The government, communities, and relevant stakeholders must work together to find lasting solutions that address the root causes of the conflict, enhance peace and security, and promote social and economic development.

THANK  
YOU!



## PLENARY 6

### STRENGTHENING ADOPTION OF CLIMATE SMART FARMING AND LIVESTOCK PRODUCTION PRACTICES TO MITIGATE IMPACT OF CLIMATE CHANGE.

STRENGTHENING ADOPTION OF CLIMATE SMART FARMING AND LIVESTOCK PRODUCTION PRACTICES TO MITIGATE IMPACT OF CLIMATE CHANGE.

By

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Theme: Sustainable Livestock Reforms and Mitigating Associated Conflicts in Nigeria.  
138.4<sup>th</sup> February 2023.  
Naf Conference Centre and Suites, Abuja

National Conference on Livestock Reforms and Mitigating Associated Conflict in Nigeria

## INTRODUCTION

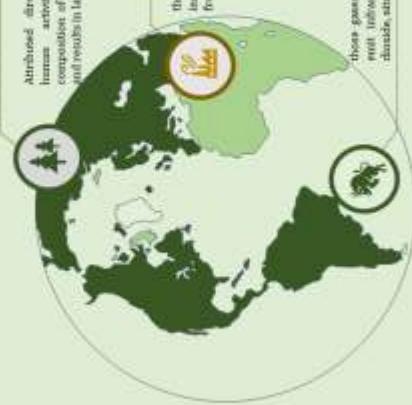


**Population Growth  
Climate Change  
Increasing demand for Animal Source Foods  
How has production responded to this trends ?**

### Definition of Keywords

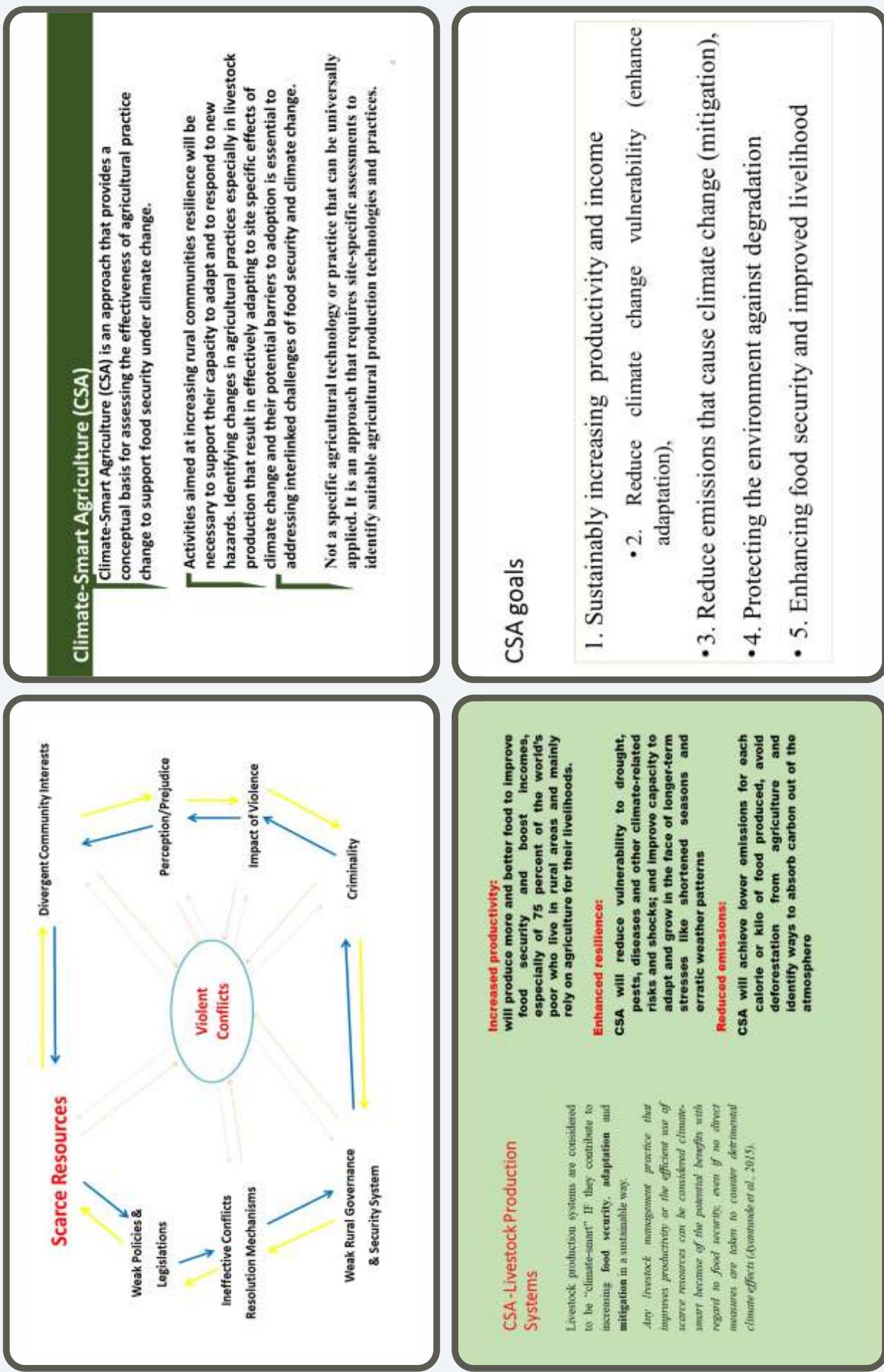
Attributed directly or indirectly to human activity that alters the composition of the global atmosphere and results in land exchanges (LULC).

Global Warming  
the warming that is occurring as a result of increased emissions of greenhouse gases (GHG) from human activities.



Greenhouse Gas Emissions  
those gases in the atmosphere which absorb and emit infrared radiation - water vapour, carbon dioxide, nitrous oxide, methane and ozone

National Conference on Livestock Reforms and Mitigating Associated Conflict in Nigeria



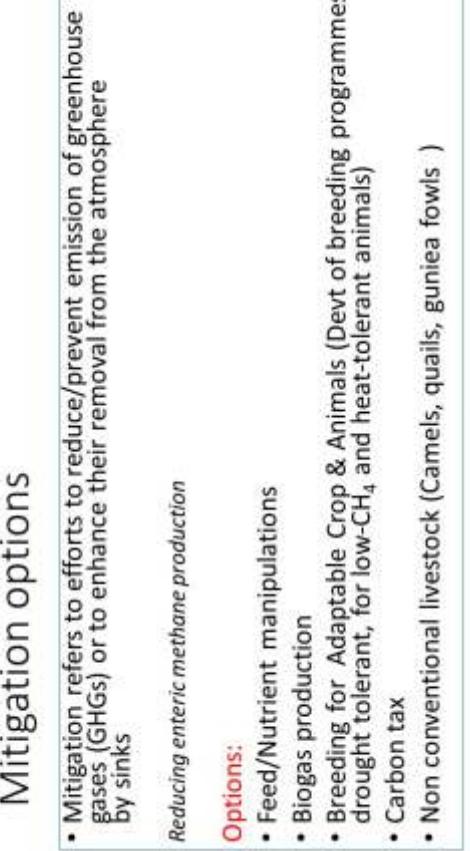
## Mitigation options

- Mitigation refers to efforts to reduce/prevent emission of greenhouse gases (GHGs) or to enhance their removal from the atmosphere by sinks

### Reducing enteric methane production

#### Options:

- Feed/Nutrient manipulations
- Bio-gas production
- Breeding for Adaptable Crop & Animals (Dev't of breeding programmes; drought tolerant, for low-CH<sub>4</sub> and heat-tolerant animals)
- Carbon tax
- Non conventional livestock (Camels, quails, guinea fowls )



## Other mitigation options.....cont

- Appropriate breeds (tannin tolerant spp/breeds)
- Co-grazing
- Multipurpose legumes
- Crop residue management
- Agroforestry
- Irrigation
- Water harvesting technologies

## Feed manipulations

- Exogenous enzymes
- Grass vs Forage legumes (methanogenesis legumes is less )
- Administering ionophores like monensin in the diet (Moss et al., 2000)
- Plant extracts (condensed tannins, saponins, essential oils, etc.)
- Replacing roughages with concentrates results in increased proportion of propionate in the rumen, thus less hydrogen available for CH<sub>4</sub> production
- Supplementing ruminants with lipid sources (fat or oils)- defaunation thus suppresses protozoa associated methanogens and decreases fibre digestion

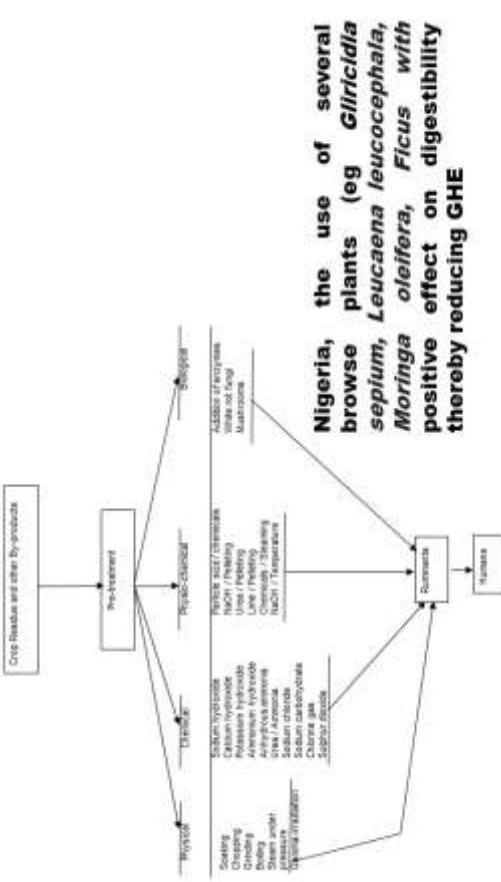
Crop residue management....

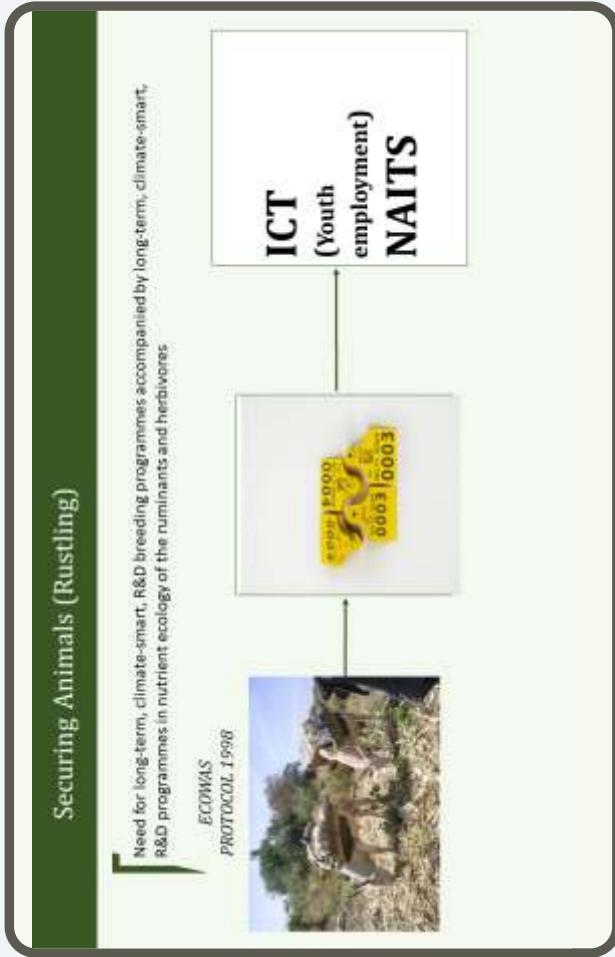
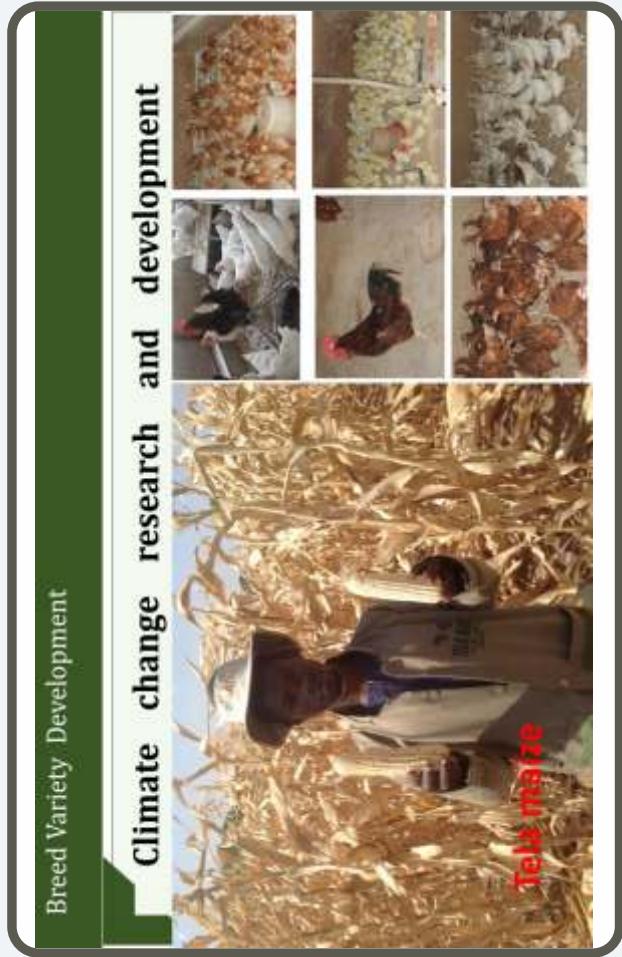
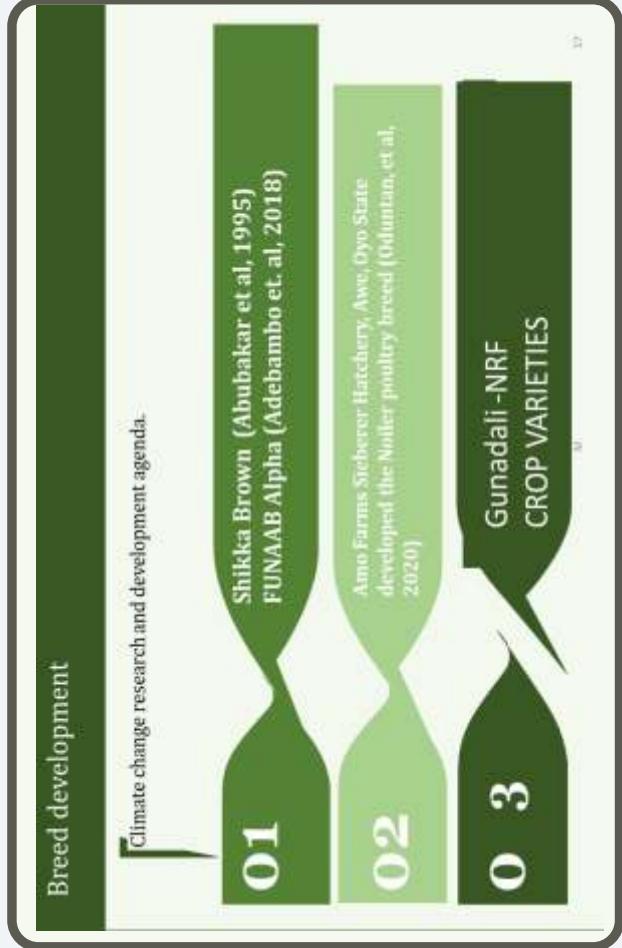


Increase productivity...



National Debt and Migration in Some Asian Countries





- ❖ We must work to share knowledge and provide guidance in a manner that is relevant to the need of farmers, investors and environment.(eg land and water management )
- ❖ Resource efficient ( sustainable planet).
  - ❖ Financial incentives for livestock producers who reduce GHG emissions in their operations, by providing easier access to climate finance (grants ,subsidies- fences ..seedlings ..inputs )



## Policy Intervention

### Finalise and Implement

1 National Beef Policy

2 NAIFS- evaluate and inform & Pilot [Kano, ECOWAS]

3 National Food Policy & Pasture Development Policy

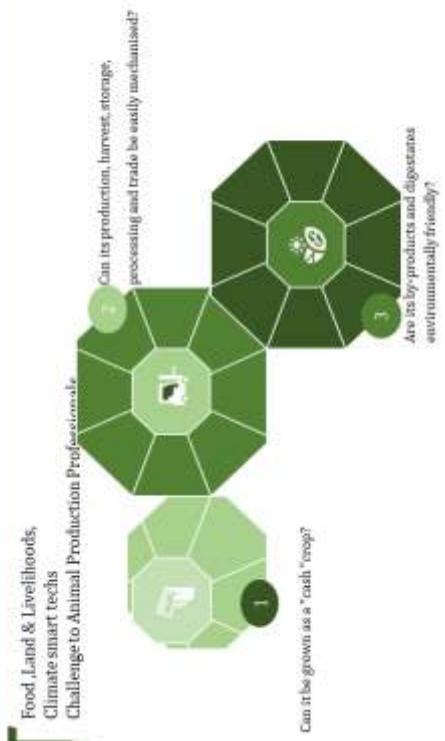
### Other Reports/Commissioned Studies:

1 2015 Ministerial Committee on Stock Rearing and Ranching

2 McKinsey -Beef Value Chains

3 Emphasizing the need to educate and inform

## Setting research Agendas for CSA



## Governments and industry (Research Contracts)

- need to support multidisciplinary research programs that guide climate-smart investments and adoption
- Early warning systems, risk insurance,

## CONCLUSIONS

- Frame work for climate change financing is a *sine quanon* to attaining food security and sustained livelihoods
- We must build knowledge and capacity of our farmers to diversify adopt CSA

Thank You for Listening !



- Platform to Implementation CSA related policies
- Stakeholder engagement
- Upscale good practices
  - Pilot / Demo centres
  - Catch them Young

## Way Forward

CLIMATE SMART AGRICULTURE AS A  
PANACEA FOR MITIGATING CLIMATE  
CHANGE IN THE NORTH-EASTERN  
PART OF NIGERIA

BY

PROF. ABBA GAMBO, FHSN  
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AGRIC ADVISER  
NIGERIA GOVERNORS FORUM  
14<sup>TH</sup> FEBRUARY, 2023

NATIONAL CONFERENCE  
ON LIVESTOCK REFORMS AND MITIGATION OF  
ASSOCIATED CONFLICTS IN NIGERIA

13<sup>TH</sup> – 14<sup>TH</sup> FEBRUARY, 2023

NAF CONFERENCE CENTRE AND SUITES, ABUJA

THE NIGERIAN SCENARIO

- 92.3m ha
- 79.8m ha (Arable)
- 33.4m ha (Actual Cultivation)
- 3.14m ha (Fadama)
- 500,000 ha (Actual)
- 208 million people
- 528 Ethnic groupings
- 87% involved directly or indirectly in Agriculture
- 14 million farming families (less than 10%)

AGROECOLOGY

- Sahel
  - Sudan
  - Guinea
  - Derived Guinea
- Rainforest
  - Rainforest
  - Mangrove Swamp
- Montane
  - Mambilla
  - Jos
  - Obudu
- Diversity
  - All Major Groups
  - Livestock
  - Aquatics

## PRESENT STATUS

- Rudimentary
- Almost Hereditary
- Small Hectarages
- No Modern Technology
- Fertilizer and other inputs (A mirage)
- Low input = Low output
- Harsh Environmental Vagaries
- Low Knowledge
- Poor Access to Credit
- Inadequate and Ineffective Extension
- Insecurity
- CBN Naira Redesign policy

## THE NORTH-EAST REGION

- Highest illiteracy rate
- Highest poverty rate
- Highest maternal mortality
- Dearth of industries
- Lack of good road networks
- Low school enrolment
- Low per capita income
- Lack of processing plants
- Drought
- Desertification
- Flooding
- Insurgency
- Contact with three countries
- Lake Chad

## CLIMATIC CHANGE IN THE NORTH-EAST ZONE OF NIGERIA.

### ► CAUSES

### ► IMPACT

### ► MITIGATION

## What is Drought?

- Drought is a condition of severe reduction in water availability and the deficiency could extend over a significantly long period (Olagunju, 2015).
- Drought is a different concept to define due to its different manifestations.
- United Nation Convention to Combat Desertification (UNCCD) (1994) defined drought as the naturally occurring phenomenon that exists when precipitation has been significantly below normal recorded levels, causing serious hydrological imbalances that adversely affect land resources productive systems.

### Types of Drought

Because drought manifests in different forms, the following categories are identified:

- **Meteorological:** occurs when precipitation level fall below the normal long-term recorded level.
- **Agricultural:** occurs when soil moisture is insufficient to meet the needs of agricultural crops at a particular time.
- **Hydrological:** occurs when there is a deficiency of water supply due to reduction or absence of surface and subsurface water.
- **Socio-economic:** This form of drought occurs when various human activities are impaired due to reduced precipitation or water availability.

### Drought episodes in Nigerian history

- The history of the sudano-sahelian zone of Nigeria is replete with severe and prolonged drought events, some lasting several years. The zone started the 20th century with a prolonged drought of 1903 culminating in that of 1911-1914. Other droughts included those of 1919; 1924; 1935 and 1951-1954.

### What is Desertification?

- This is a more recent concept and refers to sand movement, drying up of land and desert encroachment.
- According to the United Nation Convention to Combat Desertification (UNCCD), the term desertification is land degradation in arid, semi-arid and humid areas resulting from various factors, including climatic variations and human activities (UNCCD, 1997).

Drought Occurrence and Probability in Northern Nigeria 1949 - 2008

Station	Mild Drought probability	Moderate Drought Recurrence interval	Severe Drought Recurrence probability	Recurrence interval
Yelwa	0.08	12.5	0.12	8.3
Potiskum	0.13	7.7	0.05	20.0
Maiduguri	0.10	10.0	0.13	7.7
Kano	0.23	4.3	0.13	7.7
Gusau	0.17	5.9	0.08	12.5
Sokoto	0.15	6.7	0.10	10.0
Nguru	0.07	14.3	0.15	6.7
Katsina	0.08	12.5	0.10	10.0
Mean	0.13	7.7	0.11	9.1

### Desertification cont'd

- Desertification could be seen as a process whereby the productivity of arid or semi-arid land falls by 10% or more (Miller, 1999). Miller (1999) classified desertification into three in relation to soil productivity.
  - Mild desertification is a 10 to 25% drop in productivity.
  - Serious desertification is a 25 to 50% drop in productivity.
  - Severe desertification is a drop of more than 50% in productivity.

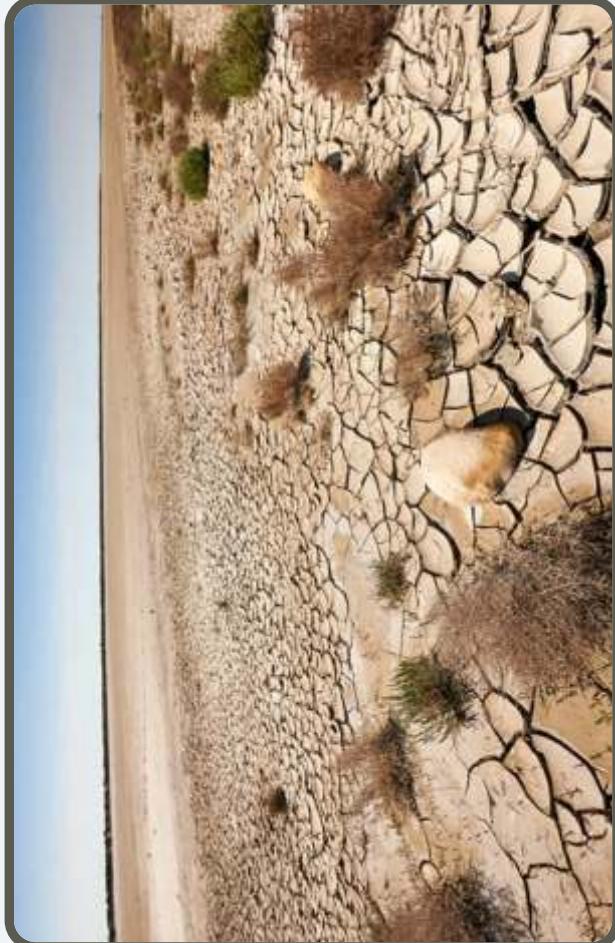
### Main features of desertification

- The following have been identified as the main features of desertification by Olagunju (2015)
  - Impoverishment of vegetative cover
  - Reduced quantity, available and accessible soil moisture
  - Deterioration of the texture, structure, nutrient status of soil
  - Reduced biodiversity and presence of more xeric biota
  - Increased soil erosion

**Desertification Frontline States in Nigeria**

State	Area (sq. km)	Population (2006)	Pop Density	Rate of Desertification
Sokoto	27,825	3,702,676	133	Severe
Zamfara	37,931	3,278,873	86	Severe
Katsina	23,561	5,801,584	246	Severe
Jigawa	23,287	4,361,002	187	Severe
Kano	20,280	9,401,286	464	Moderate
Kebbi	36,985	3,256,541	88	Severe
Kaduna	42,481	6,113,503	144	Moderate
Borno	72,809	4,171,104	57	Severe
Yobe	48,808	2,321,339	50	Severe
Bauchi	41,119	4,653,086	113	Moderate
Gombe	17,100	2,385,040	138	Moderate
Adamawa	38,700	3,178,860	82	Moderate
Taraba	56,282	2,294,800	41	Moderate
Niger	68,925	3,954,772	57	Moderate
Plateau	27,147	3,206,531	118	Moderate

Source: Olagunju (2015)



### Causes of Drought and Desertification

- Climatic variability
- Extensive cultivation
- Overgrazing
- Cultivation of Marginal Lands
  - Bush Burning
  - Fuel Wood Extraction
  - Poor Irrigation Practices
  - Poverty

### What is climate change

- The United Nations Framework Convention on Climate Change (UNFCCC) defines it as a change of climate that is attributed directly or indirectly to human activity, altering the composition of the global atmosphere.
- Human activity includes the pollution that arises from industrial activity and other sources that produce greenhouse gases. These gases, such as carbon dioxide, have the ability to absorb the spectrum of infrared light and contribute to the warming of our atmosphere. Once produced, these gases can remain trapped in the atmosphere for tens or hundreds of years.

### Causes of Climate Change

- **Carbon Dioxide:** Produced primarily through the burning of fossil fuels (oil, natural gas, and coal), solid waste, and trees and wood products. Deforestation and soil degradation add carbon dioxide to the atmosphere, while forest re-growth takes it out of the atmosphere.
- **Methane:** Emitted during the production and transport of oil, coal and natural gas. Methane emissions also result from livestock and agricultural practices and from the anaerobic decay of organic waste in municipal solid waste landfills. It has an average lifetime of 12.4 years in the atmosphere.

### CLIMATE –SMART AGRICULTURE

- CSA is an integrated approach to managing landscapes of Croplands, Livestock, forests and fisheries that address the interlinked challenges of food security and climate change.
- FAO/UN defines CSA as a pathway towards development and food security built on the three pillars:
- Increasing Productivity and Incomes
  - Enhancing resilience of livelihood and ecosystems
  - Reduction and Removal of greenhouse gas emissions from the atmosphere

WAY FORWARD

- Farmers Database
  - Comprehensive Soil Map
  - Comparative Advantages
  - Efficient Water Management Systems
  - Germplasm Development
  - Research and Development
  - Access to Credit
  - Commodity marketing boards
  - Effective and efficient Extension System
  - Improved Gender Consideration
  - Comprehensive Input Delivery
  - Grazing Reserves (Zero Grazing)
  - Human Resource Development (Motivation of youth into Agriculture)
  - Emphasis on Value-Chains
  - Re-orientation towards Exports
  - Investment-Based
  - Commercialization



THANK YOU FOR  
LISTENING

# STRENGTHENING ADOPTION OF CLIMATE SMART FARMING AND LIVESTOCK PRODUCTION PRACTICES TO MITIGATE IMPACT OF CLIMATE CHANGE

DISCUSSANT ON THE SUB-THEME 6:

Professor Daniel Musa Gwary

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## CLIMATE CHANGE

- Increased concentration of greenhouse gases (GHGs) in the atmosphere resulted in warming of the global climate system
- The trends of rise in temperature, heat waves, droughts and floods, and sea level has been shown by the Governmental Panel on Climate Change (IPCC)
- The increasing temperature, deficit in rainfall and occurrence of droughts are evidences of weather aberrations indicating climatic risks
- Agriculture, particularly in Nigeria with nearly 80% rain-fed area, has been a highly risky venture with the interplay of other abiotic and biotic factors.
- Climate change is set to compound the daunting complex challenges already being faced by agriculture in Nigeria.

## CLIMATE CHANGE

- Climate change has exacerbated the degradation of agricultural assets, decreased production and drastically reduce livelihood opportunities in the semi-arid Nigeria.
- Combined with food insecurity and poverty, these impacts contribute to migration.
- Agriculture, particularly in Nigeria with nearly 80% rain-fed area, has been a highly risky venture with the interplay of other abiotic and biotic factors.
- Climate change is set to compound the daunting complex challenges already being faced by agriculture in Nigeria.

## Economic Factors influencing Conflicts and Migration

- Farmers and Herders Conflict
  - Farmer-Herders clash has been known for along time in Nigeria but until now it was on a low scale and managed easily
  - As water and pasture declined as a result of drought and climate change the conflicts became frequent and violent affecting food production
  - The conflicts were initially only localised to few communities and areas but it has now spread throughout the regions
  - Many lives, farms and livestock have been destroyed in the country during the last decade.
  - Many farmer communities especially in Nigeria in particular have fled their communities for safety affecting farming activities resulting in food insecurity and high food prices and migration

## Introducing /Encouraging Climate Smart Agricultural Technologies/Practices

- Climate-smart agriculture (CSA) is an approach for transforming and reorienting agricultural development under the new realities of climate change.
- The Food and Agricultural Organisation (FAO) of the United Nations defines CSA as “agriculture that sustainably increases **Productivity**, enhances **resilience (Adaptation)**, reduces/removes GHGs (**Mitigation**) where possible, and enhances achievement of national food security and sustainable development goals”

## Climate Smart Agriculture (CSA)



## The Three Pillars of CSA

- Productivity
- Adaptation
- Mitigation

All in the context of National Food Security and Development Goals

## Selected CSA Case Studies in Northern Nigeria

**CLIMATE SMART AGRICULTURAL TECHNOLOGIES (BORNO STATE)  
BASED ON CSA STATE PROFILING IN 2018**

## Top Ten CSA Technologies and Practices

CSA TECHNOLOGIES AND PRACTICES	KEY PRODUCTION SYSTEM	TOTAL SMARTNESS SCORE (OVER 10)
1. Conservation tillage practices (zero/minimum)	Cereals	6.9
2. Supplementary irrigation practices (water conservation by using basin, furrow or drip)	Cereals	6.9
3. Terracing	Pulses	7.3
4. Mixed cropping/Crop diversification	Pulses	7.1
5. Use of improved planting materials	Roots and tubers	5.1

## Top Ten CSA Technologies and Practices

CSA TECHNOLOGIES AND PRACTICES	KEY PRODUCTION SYSTEM	TOTAL SMARTNESS SCORE (OVER 10)
6. Conservation tillage (zero/ minimum tillage)	Roots and tubers	5.0
7. Mulching	Horticulture	5.9
8. Supplementary irrigation practices (water conservation by using basin, furrow or drip)	Horticulture	4.0
9. Disease management and prevention	Livestock	9.5
10. Improved housing	Livestock	6.6

## Barriers to Adoption of CSA Practices

The main barriers to the adoption of CSA practices include:

- Agriculture in the Borno state is challenged by poor infrastructure
- Weather variability and Climate change
- Terrorism
- Soil fertility depletion
- Limited agricultural extension services
- Weak manpower development
- Soaring prices of production inputs and low private investment
- Declining agriculture commodity prices

## Top Ten CSA Technologies and Practices

### CSA TECHNOLOGIES AND KEY PRODUCTION SYSTEM PRACTICES

CSA TECHNOLOGIES AND KEY PRODUCTION SYSTEM PRACTICES	TOTAL SMARTNESS SCORE (OVER 10)
1. Pit planting	Cereals 6.3
2. Intercropping	Cereals 7.5
3. Use of hermetic bag storage	Pulses 7.2
4. Integrated pest and disease management	Pulses 6.8
5. Integrated pest and disease management	Roots and tubers 5.9

## CLIMATE SMART AGRICULTURAL TECHNOLOGIES (YODE) BASED ON CSA STATE PROFILING IN 2018

## Top Ten CSA Technologies and Practices

CSA TECHNOLOGIES AND PRACTICES	KEY PRODUCTION SYSTEM	TOTAL SMARTNESS SCORE (OVER 10)
6. Conservation tillage	Roots and tubers	5.0
7. Use of sunken-bed	Horticulture	5.4
8. Conservation tillage	Horticulture	5.5
9 Preparation of Hay/silage	Livestock	6.0
10. Vaccination	Livestock	6.3

## Barriers to Adoption of CSA Practices

### • Growth in population and food demand

- **Drought and soil fertility depletion** are common phenomena in Yobe and regarded as the fundamental biophysical cause for declining per capita food production
- Majority of the Yobe population lives in poverty, despite the wealth in Nigeria. Nigeria's inequality level was 0.45 in 2010 which is relatively high and indicates that income is held in the hands of relatively few
- Agricultural performance in the Yobe state is greatly impaired by the low level of development of social infrastructure. In the rural areas, where majority of the smallholders operate, inadequate infrastructure

## Top Ten CSA Technologies and Practices

### CSA TECHNOLOGIES AND PRACTICES

### KEY PRODUCTION SYSTEM

### TOTAL SMARTNESS SCORE (OVER 10)

1. Conservation tillage practices (zero/minimum)	Cereals	6.3
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## CLIMATE SMART AGRICULTURAL TECHNOLOGIES (ADAMAWA) BASED ON CSA STATE PROFILING IN 2018

## Top Ten CSA Technologies and Practices

CSA TECHNOLOGIES AND PRACTICES	KEY PRODUCTION SYSTEM	TOTAL SMARTNESS SCORE (OVER 10)
6. Indigenous knowledge practices (mounds/heaps for yam)	Roots and tubers	5.1
7. Supplementary irrigation practices (water conservation by using basin, furrow or drip)	Horticulture	6.6
8. Flood recede utilization (Receding irrigation)	Horticulture	6.2
9. Disease management and prevention	Livestock	6.9
10. Improved Housing and Pasture	Livestock	6.3

## Barriers to adoption of CSA Practices

The main barriers to the adoption of CSA practices include:

- Highly variable weather and Climate change
- Poorly developed weather-smart services
- Declining soil fertility
- Low farm input availability and delivery
- Poor financial services
- Limited investment and poor infrastructure
- Underdeveloped markets

## General livestock Climate smart Practices

The main general climate smart livestock production practices across the country include:

- Preparation of hay and silage
- Vaccination
- Fodder bank preparation
- Feed supplementation

## PREPARATION OF HAY AND SILAGE

### Productivity

- Improves overall productivity and increases income.

### Adaptation

- Provides alternative food source increasing adaptive capacity during periods of feed scarcity.

### Mitigation

- Reduces GHG emissions (carbon footprint) by reducing consumption of energy.

## VACCINATION

### Productivity

Improves livestock production and quality, hence potential increases in income.

### Adaptation

Prevents diseases associated with livestock. Increases the potential to overcome climate shocks

### Mitigation

Has no use of synthetic fertilizers and related GHG emissions/carbon footprint.

## FEED SUPPLEMENTATION

### Productivity

Improves overall productivity and increases income.

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### Mitigation

Reduces GHG emissions (carbon footprint) by reducing consumption of energy.

## NEED FOR NATION-WIDE CSA PROFILING

CSA technologies/practices are site/region specific and in view of its importance in agricultural development it is recommended that:

## THANK YOU FOR YOUR ATTENTION

- At least each ecological region climate smart agricultural practices for crop and livestock production systems should be profiled in Nigeria
- For each profiled ecological region, a climate smart agricultural investment plan be prepared to attract both Government and the private sector in sustainable agricultural development
- Identify the barriers for the implementation of CSA technologies/practices

**THEME:** NATIONAL CONFERENCE ON “SUSTAINABLE LIVESTOCK REFORMS AND ASSOCIATED CONFLICTS IN NIGERIA” ANCHORED BY KANO STATE GOVERNMENT **NAF CONFERENCE CENTRE AND SUITES KADO, ABUJA, 13-14 FEBRUARY, 2023**

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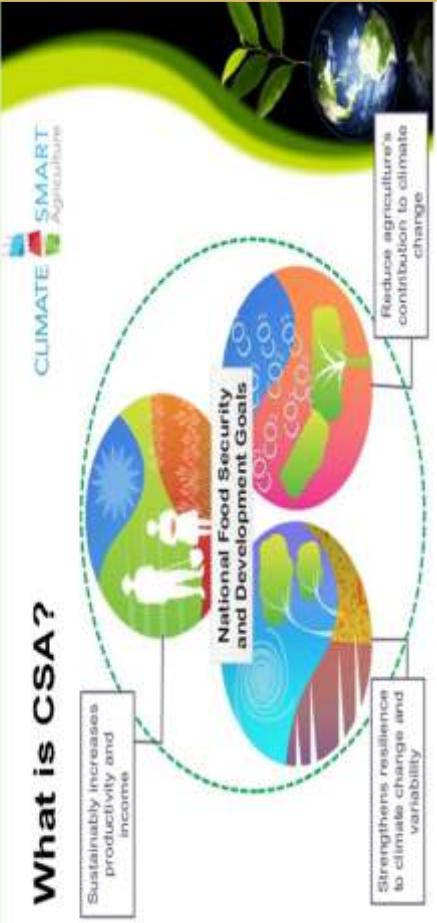
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- At least each ecological region climate smart agricultural practices for crop and livestock production systems should be profiled in Nigeria
- For each profiled ecological region, a climate smart agricultural investment plan be prepared to attract both Government and the private sector in sustainable agricultural development
- Identify the barriers for the implementation of CSA technologies/practices