

NATIONAL LIVESTOCK TRANSFORMATION PLAN

(NLTP) 2019-2028

**STRATEGY
DOCUMENT**

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FOREWORD

The process of transforming any system is often a daunting task. The approach captured in this document derives from wide stakeholder engagement that has enabled us to identify the key drivers of today's escalated conflicts, which are competition for scarce resources of land, water and pasture. In addition, negative impacts of climate change have increased the pressure to support an ever-growing national human and livestock population. This straightforward resource-conflict is complicated by ethnic, religious and political biases. These factors have also created negative perceptions that have sometimes overshadowed the primary causes of resource competition between farmers and herders despite their long history of mutual coexistence.

It was clear to the federal and state governments that new avenues must be sought that offer the nomadic cattle breeders and smallholder crop farmers a peaceful pathway into modernised farming, high quality and cost competitive crop and animal food sources, and a transparent economic activity that enhances household incomes, and contributes to high quality human capital and job growth.

The National Livestock Transformation Plan (NLTP) outlines a new path premised on a three-pronged approach that:

1. Provides a roadmap for modernising livestock production using a mix of nomadic breeding and ranching that would serve a modernised dairy and meat processing industry;
2. Develops a plan for resettling and addressing the dislocated populations in the key conflict zones to enable them become a part of the agriculture modernisation process; and
3. Provides a mechanism for peaceful dialogue and reconciliation in the affected communities towards a harmonious multi-cultural interdependent and mutually beneficial future.

The plan is a partnership between the federal and state governments and there are entry points for all stakeholders. The National Economic Council (NEC) Committee for the Farmer-Herder Crises is committed through its secretariat to coordinate and help drive the implementation of the plan as designed, as well as ensure transparent and accountable use of funds appropriated for this purpose.

The net impact of this plan would be measured in the creation of jobs – direct and indirect; inflow of capital from investors, government, and donors; and the development of an ecosystem that would sustain Nigeria's demand for high quality plant and animal protein. In addition, data related to implementation of the National Livestock Transformation Plan would be tracked and published on a periodic basis to ensure transparency and accountability.

As indicated in this publication, we are open to working with all stakeholders and partners to create a better future. The commitment of the Buhari Administration to the people of Nigeria is absolute and the enormous goodwill demonstrated by Nigerians in response to this plan emboldens our tenacity to build a safe, stable and prosperous livestock ecosystem.

Prof. Yemi Osinbajo, SAN

Vice President, Federal Republic of Nigeria

1. INTRODUCTION

Goal: *The goal of the NLTP is to create a conducive environment for the transformation of the livestock subsector that will lead to economic development, peaceful co-existence and food security for Nigeria's growing population.*

1.1. Rationale for the NLTP Strategy

Nigeria, with its rapid population growth to an expected 250+ million persons by 2030, requires an urgent modernization of key elements of its economy in order to generate jobs, household income, and social stability. That need is present in all 36 states of the federation and FCT in various forms. The purpose of the National Livestock Transformation Plan (NLTP) is to lay out how a focused effort in the agriculture-livestock sub-sector of agriculture can become a catalyst for building national prosperity.

To be clear, while a number of states in the conflict zone will receive high levels of initial attention, the purpose of the NLTP is to catalyze a transformation in livestock production systems across Nigeria. This plan is designed to create the basis for leading agribusiness companies to emerge along the lines of Brazil's JBS, the US's Perdue, or the Sino-American, Smithfield. While these companies have emerged over decades, their journey was aided by focused government policies and incentives. The NLTP is seeking to provide a similar conducive context for both nomadic herders and private enterprises. This will be achieved by bringing together private investors, catalytic government services and capital, and targeted donor support. Using classic value chain building tools, the NLTP is designed to finally deliver for Nigeria the transformation many countries have gone through countries like Paraguay, Brazil, Zambia and Ethiopia.

While the farmer-herder crisis accelerated the timelines of the interventions, the Federal Government of Nigeria has always been committed to improving the resilience of the agricultural economy. This process will continue to require an expansion of the role of private capital and investors at its core. Such a step will accelerate the rate of formation of small and medium sized enterprises, investing in opening lands for investment, and improvements in overall conditions for doing business. Given the pivotal role of agriculture today as an employer of labour and source of national income, a modernization effort anchored on the sector will impact over 30% of the work force.

Existing federal policy has taken some preliminary steps towards diversification. For example, the Economic Recovery and Growth Plan (ERGP, 2017-2020) places agriculture at the center of the government's economic diversification strategy. The agricultural sector is a major contributor to national GDP and it employs about 70 percent of total working population. Under the ERGP, the contribution of agriculture to the country's Gross Domestic Product (GDP) is set to rise from ₦16 trillion in 2015 to ₦21 trillion in 2020 (ERGP, 2017: 14). Similarly, the Nigerian Agriculture Promotion Policy (APP, 2016-2020) highlights the role of the livestock sector in agricultural development and how transforming and modernizing livestock systems can meet growing nutritional demand and help achieve government set targets in the APP and the Sustainable Development Goals (SDGs). A successful implementation of the NLTP and the broader agriculture transformation agenda will move Nigeria substantially toward achieving Goal 1 (Poverty Reduction), Goal 2 (food security), and Goal 8 (dignified work and economic growth) in addition to improving the likelihood of Goal 3 (good health and wellbeing) of the sector.

The NLTP is designed to accelerate the pace and scope of change in Nigeria's agricultural system in general and livestock sub-sector in particular by building a new ecosystem for livestock production. First, that ecosystem appropriately locates and celebrates the fact that nomadic and semi-nomadic

pastoralism have been the main production system in Nigeria over the years, and their primary feature is regulate movement of herds between fixed points to exploit seasonal availability of pasture and water. Second, based on what we know to be the baseline operating model for livestock production, that nomadic based production model is inefficient and cannot meet our requirements today, nor our anticipated population of 2030 or 2050. Finally, the movement of cattle is facing serious challenges associated with rapid population growth and urbanization, the spread of rain-fed and riparian agriculture, climate change and government policy implementation constraint and security.

Today, Nigeria has a twin challenge with respect to its current model of beef and dairy production. The system is inefficient from a design perspective, and its output suffers from low productivity and poor quality. Nomadic livestock production in Nigeria is facing major crises and is at a crossroads due to declining availability of forage and grazing land, overgrazing, livestock disease spread and most importantly, the recurrent and expanding fatal conflicts between pastoralists and crop farmers. The impact on food and nutrition security as well as public safety and national security are significant and far-reaching. The proliferation of small and light weapons has aided criminal elements to capitalize on the conflicts by engaging in cattle rustling, kidnapping, armed robbery, insurgency, rural banditry and ethnic militia. In addition to loss of human lives, it is estimated that Nigeria loses about USD 14 billion (₦5.04 trillion) annually to herdsman-farmers conflicts. This includes destruction of schools, homes, religious houses, primary health centres and community infrastructure, as well as tens of thousands of internally displaced persons(IDPs).

Urgent action is needed to solve this problem both in the immediate, short and long term. Transforming and modernizing the livestock sector over time through the development and promotion of ranching and related value addition enterprises as envisioned in the Green Alternative offers an opportunity to address both the issue of low productivity of the livestock sector as well as the security challenges posed by the expanding conflicts between pastoralists and crop farmers. Investors who can help transform the sector, as has been the case in Zambia and southern Africa, should be actively engaged and guided to move from concept to live production from potential to actual. Pastoralists who manage the national herd should be encouraged and supported with a portfolio of tools to manage their transition from today's business model to more productive and modern business and operating models. Similarly, agriculture and small-scale crop farmers should likewise be supported to become key suppliers to livestock producers, by producing the complex combinations of forage, legumes and other feed supplements needed in formal ranching networks. This symbiotic farmer-rancher partnership can help Nigeria build a livestock ecosystem that is balanced and profitable like Brazil or Argentina's.

The global trend in livestock production is intensification- “more with less”- and Nigeria cannot be an exception but has to key into this global phenomenon.

This Strategy Document and supporting NLTP Implementation Guidelines therefore should be viewed as a focused guide for government at all levels in enhancing livestock productivity and production systems by addressing the direct and broader constraints that prevent the fulfillment of the sector's full potential. The document should also be viewed as framework investment document designed to help create a conducive environment for the acceleration of the private sector investor role in supporting the emergence of a sector that coexists with other sub-sectors of the agribusiness system. The net gain for Nigeria will include the creation of millions of jobs, food security, food systems innovation, and the emergence of a logistics and handling sub-sector. The document will also act as a guide for mobilizing a wide range of partners, capital, technologies, capability and management resources to drive the transformation.

1.2. Overview of the livestock sector

Diversification of the economy away from the oil sector is a top policy priority for Nigeria, and the agricultural sector is central to this agenda. Agriculture was the backbone of Nigeria's economy prior to the discovery of oil and still remains an important source of livelihood for the majority of the population, particularly in the rural areas. The sector has consistently contributed about 40 percent of the GDP, and remains the largest contributor to non-oil growth (World Bank, 2017:2).

The agricultural sector employs about 40 percent of working population (ERGP, 2018:9). Despite the limited investments towards livestock relative to crops, the sector contributes 10 percent to agricultural GDP (PWC, 2017:7). Globally, however, livestock is the fastest growing agricultural sub-sector with highest economic value. It accounts for about 40 percent of global agricultural GDP (Pradère, 2014), and this contribution is often much higher in many other developing countries. Livestock production can be found on two-thirds of global dry lands (Clay, 2004), with extensive pastoralism on over 25 percent of global land area supporting around 200 million pastoral households (Nori et al., 2005).

Recent estimates indicate that Nigeria has a livestock population of 19.8 million cattle, 43.4 million sheep, 76 million goat and 213 million poultry, all mainly under traditional pastoral management system (FMARD 2016). The majority of production is in the hands of small holders and nomadic herders. Formalized private players are relatively limited but are growing more quickly in the poultry sub-sector. These range from farmers such as Chi Group, Amos Sanders and Meat Masters, as well as thousands of small holders. That fragmented ownership structure has been a major challenge to capital mobilization. To reform this will require a constituency that advocates and enables modernization.

Such changes are critical given that the livestock sub-sector makes multiple contributions to the economy and social wellbeing of the people by providing highly nutritious foods, an income stream, assets against which to borrow, the primary source of organic fertilizer, energy for cultivation or transport, and a host of social functions (Moll et al., 2007). Animals are a key asset in mitigating risk, especially in pastoral areas. It has been established that many more people derive indirect benefits from livestock through, for example, trading, input supply, marketing and processing—and their incomes could also rise if the sector were to become more productive, creating additional jobs and business opportunities throughout the sector. Many developing and emerging economies are addressing the role of the livestock sector in economic growth, and view livestock as potent instruments for inclusive, sustainable growth (ILRI, 2016:11).

Currently ranked seventh, Nigeria is projected to become the third most populous country in the world by 2050, with its population rising from just under 200 million in 2018 to more than 300 million. With rising population and income, it has been projected that the demand for animal protein will continue to increase, both nationally and globally. Mainly nomadic herdsman and their families, who travel extensively on foot with their livestock in search of pasture, forage and water characterize the sector. This practice of open grazing is inefficient, untenable and will not suffice given the protein demand patterns that will emerge as Nigeria's population rises to 250+ million persons. Fixing it requires a different production system that boosts the productivity of livestock and eliminates conflicts between pastoralists and crop farmers. With competing demand on land for food crop production, housing, infrastructure development and industrialization to meet the needs of a rising population, coupled with climate change which has affected weather and vegetation patterns, the incidence of fatal clashes

between herdsmen in search of pasture and water and crop farmers has become a national crisis facing Nigeria. This recurring and expanding conflict has become a major security challenge facing the country.

The huge gap between food demand and supply in Nigeria, including food from livestock such as meat, poultry, milk and dairy products, offers tremendous opportunities through the intensification of livestock production and processing. The annual expenditure on food importation amounting to USD 3-5 billion annually is already putting pressure on the national foreign exchange, with milk importation alone amounting to over USD 1.3 billion per year. Furthermore, livestock productivity in Nigeria is among the lowest globally, and this underscores the need for priority breed and pasture improvement programmes, and the development of commercial ranching models. With low national production and very limited value addition targeting both local and international markets, the opportunities for new job creation with living wages remain unattainable. In this vicious cycle of low productivity under archaic production systems and lack of investment in modern technology, infrastructure and smart financing, the opportunities to harness the livestock for national economic transformation continue to remain locked. The NLTP's focused pro-growth interventions will address these constraints.

As part of the Federal Government's efforts to transform the livestock sub-sector to eliminate future conflicts and increase livestock productivity and production in Nigeria, the National Livestock Transform Action Plan (2019-2028) will support the implementation of a programme promoting ranching pilots for beef and dairy projects in gazetted grazing reserves, and other private sector investment initiatives. The rollout plan anticipates a dual track: an initial set of investments in a limited number of pilot states, and second, a more private sector driven track with targeted government support. The dual approach is necessary to tackle the violence in certain key regions without constraining broader private market driven development in states with low levels of conflict. Commercial ranching offers the opportunity to increase productivity through the application of improved technologies and modern livestock farming and processing practices at scale. It also provides the opportunity to support smallholder livestock farmers and agro-pastoralists at scale through access to improved technologies, input services and markets.

1.3. Policy Environment supporting the NLTP

Continental

An assessment of future livestock demand scenarios in Africa indicates that most of the supply is likely to continue to come from smallholder and agro/pastoral production systems for the foreseeable future (Herrero et al., 2014). National and regional policymakers recognize the role of livestock in meeting several SDG targets. The African Union Commission, as part of its Comprehensive Africa Agriculture Development Programme (CAADP), has developed a livestock development strategy to promote investment in the sector (AUC, 2014). The overall goal of CAADP is to “help African countries reach a higher path of economic growth through agriculture - led and process which eliminate hunger, reduces poverty and food insecurity, and enables expansion of exports.”

Regional

Following policy discussions which involved member states of the ECOWAS and other stakeholders including civil society organizations, the ECOWAS Heads of State and Government approved, in January 2005, the ECOWAS Agricultural Policy (ECOWAP) as the instrument for the implementation of the CAADP. At this regional level, two documents were produced: the Regional Agricultural

Investment Plan (RAIP) and the Strategic Action Plan for the Development and Transformation of Livestock Sector in the ECOWAS Region (2011-2020). The action plan is based on the promotion of strategic products for food security and self-sufficiency and the promotion of a globally favourable environment for the development of agriculture in the region. The results expected from the implementation of this strategic action plan are embodied in the four major components of the plan, namely: (a) promotion of the livestock, meat and dairy sector, (b) provision of security for transnational mobility and reduction of conflicts, (c) the structuring of the animal production sector, and (d) the creation of a favourable environment for the development of livestock, meat and dairy products (ECOWAS, 2010: 6).

National

The Federal Government of Nigeria is keen to unlock the commercial, wealth and job creating opportunities available across the 36 states and FCT by reversing a culture of heavy food importation, and export of raw farm produce, thereby losing the opportunity for job creation and industrialization that are associated with domestic agro-processing and value addition. The Economic Recovery and Growth Plan (ERGP, 2017-2020) places agriculture at the center of government's economic diversification strategy. Under the Plan, the contribution of agriculture to the country's GDP was set to rise by 31 percent in five years, from ₦16 trillion in 2015 to ₦21 trillion in 2020 (ERGP, 2017: 14). The livestock sub-sector is an important part of the agricultural industry in Nigeria, providing the major source of protein of animal origin nutrition and livelihood for a large segment of the population. By investing in livestock sub-sector, the Federal Government will be addressing one of the fundamental strategic goals of The Economic Recovery and Growth Plan (ERGP, 2017-2020) – to channel its limited investment resources to areas with high potential and thereby promoting a diversified economy.

The key policy and strategy document relating to the development of livestock production sector in Nigeria is the Agriculture Promotion Policy (2016 – 2020), also known as the Green Alternative. The Agriculture Promotion Policy identified several strategies to enhance the productivity and competitiveness of livestock production in Nigeria, including, among others, the need to:

- ❖ conduct regular, methodology-driven livestock surveys and census in order to drive evidence-based decision making;
- ❖ enhance availability of improved breeds, access to finance and information about improved production methods, markets and prices;
- ❖ enhance breeding for disease resistance ;
- ❖ promote availability of pest and disease control services, and enhance Livestock identification and traceability; zoning and compartmentalization of livestock;
- ❖ disease surveillance system and quarantine services; and
- ❖ incentivize the establishment of modern ranching, abattoirs and processing system.

The national Agriculture Promotion Policy (2016-2020) – the Green Alternative, as well as the National Food Security Programme and the Agricultural Transformation Agenda (ATA) before it, has highlighted the low productivity of the livestock sector in Nigeria and outlined major structural and technological challenges facing the sector, which is dominated by nomadic herdsman. To improve productivity and enhance the contribution of the livestock sector to the overall Agricultural Transformation Agenda of government, the policy specifically recommended incentivizing the set-up of modern ranching, abattoir and processing facilities. The policy document also highlighted the

importance of conducting livestock surveys and research to inform evidence-based policy and practice, and the need to introduce livestock identification and traceability systems as part of an integrated national livestock management system. The establishment of market-oriented ranches will facilitate the implementation of these practices through the “compartmentalization of livestock” in ranches that are easily identifiable, accessible and researchable.

The implementation of the NLTP Strategy is expected to contribute to the realization of the strategic objectives laid out in the Economic Recovery & Growth Plan (ERGP, 2017-2020) and Agriculture Promotion Policy (2016–2020), as well as Vision 2020, and Nigeria's SDG commitments:

- (a) Economic Diversification (ERGP, 2017-2020) through supporting improvement in the quantity and quality of private sector-led, demand-driven livestock production, animal health, feeds, breeding, pasture management, and improving the policy environment;
- (b) Crowding-in private sector investment (APP, 2016-2020) through increasing investments in value-adding infrastructure (including rural roads) so as to significantly improve the links between rural agro-pastoralist producers and rural/urban consumers, small and medium industries; and
- (c) Better water management by working to unlock the potential productivity growth offered by more complete, rational, and effective management and use of local dams (earth dams), especially for ranching.

The programme will also contribute to the achievement of the key performance targets set in the ERGP and APP for the agricultural sector, namely:

- (I) Increase agriculture GDP from N16.0 trillion in 2015 to N21.0 trillion in 2020 at an average annual growth rate of 6.92 per cent (2017-2020);
- (ii) Significantly reduce food imports and become a net exporter of key agricultural products, e.g., rice, tomatoes, vegetable oil, cashew nuts, groundnuts, cassava, poultry, fish, livestock;
- (iii) foster private sector participation through incentive schemes; and
- (v) realize sustainable management of agricultural land.

The proposed implementation of the National Livestock Transformation Plan described in this Strategy Document is a bold and timely move to integrate these strategies into a comprehensive action plan to modernize and transform the livestock sector into an important instrument for rapid economic growth and diversification in Nigeria. Part of the strategy is to utilize this programme to develop a blueprint for sustainable development of ranching in Nigeria, including mechanisms for transitioning a significant portion of nomadic livestock into sedentary market-driven and technology-enabled production systems over a reasonable timeframe. It is a technical and professional technical and professional people

1.4. Economic Rationale for the NLTP

Fundamentally, the NLTP is about creating the conditions to launch the peaceful transformation of Nigeria's livestock ecosystem. If successful, based on internal modeling, the NLTP will deliver an investment return worth at least ₦2 trillion to the Nigerian economy, her investors, and households. These stakeholders will earn a return in various forms e.g. improved tax revenues, new job

opportunities, protection of life and liberty, etc. While precise pathways may vary e.g. via improved business context, or the elimination of violent conflict, the end game is the same.

1.4.1. Economic Impact of Sector Modernization – Preliminary Analysis

The global trend in livestock production is intensification i.e “more with less” and Nigerian cannot be an exception but has to key into the global trend and modernize its diverse production systems

Modernizing Nigeria's livestock economy will generate jobs, upgrades in technology, increases in prosperity, improved household income, as well as social stability. There are several benefits – systemic and otherwise – that will accrue to Nigeria from restructuring and transforming the sub-sector. These benefits will range from a livestock specific productivity gains to a more regional upswing in job growth, household income, and gross domestic product. We summarize below some of the upsides we expect from the sub-sector restructuring:

- ❖ **GDP Growth:** Today, livestock accounts for about ~9% of the size of agriculture in Nigeria's economy or ~₦2.9 trillion in value. The majority of that 9% is domiciled in the target states indicating that the successful execution of the strategy will have material knock on effects. Note that these are production states, while what modernization involves is an overhaul and expansion of the entire value chain from production to processing to distribution to retailing. That broader value means that while a cow may be raised in Taraba eating fodder grown in Benue, a meat procesing/packing plant in Enugu might process it into steaks and sausages, while a wholesale distributor in Benin and Ibadan handles shipments to private buyers like Shoprite and Meat Masters. Thus, the impact of the intended strategy's will likely be across the entire federation. Modernization, including of labour capabilities, business models, technology utilization, and related assets, will result in an average growth rate of about ~7 – 10% per annum in terms of sub-sectoral GDP growth. By 2028, the sub-sector would be worth ~₦8.16 trillion, a 2.56x growth over the next decade.
- ❖ **Job Growth:** Based on current average wage rates and labor force participation rates, a significant level of job growth will emerge from the modernization of the sector. Assuming labour's share of GDP is ~30%, starting from a job base of 1.08M jobs, job growth in the sub-sector will rise to 2.12M by 2028. The mix of jobs to be created will largely be a mix of technical roles (veterinarians, plant operators), unskilled workers (farm hands, feed lot hands), and farm managers. Outside of production, additional job growth will emerge e.g. processing technicians, factory packing roles, transporters from rail to trucks, and warehouse managers. Retail jobs such as supermarket in-house butchers and aisle stocking teams will also be created and present across the federation. Given this anticipated mix, average wages will likely rise ~3% during this period. Wage growth is expected to be sharpest among unskilled workers who will now have round the year work at stable ranches and meat processing plants.
- ❖ **Meat, Dairy and Related Imports:** As of Q4 2017, according to Nigerian Customs data, Nigeria imported over ~\$1.5 billion in meat and other livestock value chain products. On balance, modernization efforts are expected to start materially replacing imports in year 3 of the strategy. By year 9, ~70% of imports will have been replaced, resulting in a sharp decline in foreign currency utilization. Note that spikes in meat sector importations of certain technologies, artificial

insemination capabilities, and genetic material will continue as Nigeria operators work to domesticate the herd further. A different way to view this is that an investment opportunity exists to capture over \$1.5 billion in value, deliver fresher products, and build a direct relationship with consumers, generating valuable commercial insight about consumer purchasing behaviors and preferences, insight that can be fed back into product innovation.

- ❖ Food Security: The modernization of the sector and broader stability to regional malnutrition and stunting levels are also expected to further decline in the region, reducing long term damage to brain function. A decline in stunting rates will improve educational outcomes, reinforcing the possibility of breaking inter-generational poverty bonds. Transforming the livestock industry becomes an important part of the state level school lunch supply chain. Lower cost and more widely available protein sources whether soy beans, beef, chicken or eggs are an important part of raising healthy children. Fixing livestock ecosystem will help improve the capacity of governments to develop more cost competitive school feeding, and therefore, reduce the rates of absenteeism.
- ❖ Reduction in Violence / Increase in Peace: The value of peace can be measured in several ways ranging from improvements in business confidence to higher labour force participation rates. Given our macroeconomic considerations, our hypothesis is that the emergence of peace will boost overall capital formation, labour force participation, and technology investments. Given the systemwide impact, a change in gross domestic product may be the most efficient way to measure this. Broadly speaking, the GDP of the target states is ~N11 trillion out of federation estimate of ₦137 trillion in nominal terms. Based on comparable peace impact e.g. Sri Lanka, we anticipate a 10% - 20% jump in GDP, resulting in a ₦1.1 – ₦2.2 trillion increases in GDP through 2028. To be clear, agriculture will not be the only driver; it will play a key role, but the broader return of stability will shape formation of capital, employment of labour and investment in technology e.g. reconstruction of damaged properties, rebuilding of infrastructure, expansion of professional services. For non-impacted states i.e. the remainder of the federation, we anticipate a knock-on effect that results in a GDP uplift of 4% - 8%. These changes will impact everyone from Ondo State to Akwa Ibom to Edo to Anambra State. The mechanism? Improved logistics, higher levels of inter-state trade of manufactured goods, and higher labour wages for example, reconstruction in Borno or Yobe will require materials from various parts of the federation from limestone to furniture to food processing machinery.

1.4.2. Sector Modernization – Why Success is Possible

How can these gains be achieved? Based on examples of how multiple livestock sub-sectors in Zambia to Brazil, and Australia to Ethiopia have undergone changes in the past 100 years, there is ample evidence to suggest that Nigeria can also go through such a shift. A brief review of Ethiopia's experience may be a useful proxy.

Ethiopia's 57 – 60M cattle herd is the largest in Africa. Due to old practices, the herd has historically been underutilized for cash generation. Prior to the 2015 transformation effort, the productivity of the herd was limited due to a diet primary based on forage and crop residue (86%), low levels of vaccination (only 30m of 57m), and a highly mobile ranching approach. As a result, the productivity of milk and beef remained below acceptable standards. First, Ethiopian cattle produced low volumes of

milk - 1.34 liters/cow/day, compared to more than 30 liters/cow/day in the USA. Of the volume produced, only a very small proportion of the 3.1 billion liters of milk produced each year reaches commercial markets (about 150M liters/annum) due to a poor supply chain. Second, Ethiopian beef was of relatively low quality by USDA or global market standards due to the fact that Ethiopia tends to only process cows that are old by global standards (3-10 years old). That low volume was not helped by the fact that there were few modern abattoirs focused on beef exports.

To change this picture, investors and the Government of Ethiopia (via its 2015 Livestock Master Plan) intensified efforts to modernize practices across the cattle value chain by improving cross breeding to genetically raise the potential for higher dairy yields, increasing vaccination rates to broaden the herd's survivability and market potential, and shifting feed and ranching patterns to produce a different type of beef suitable for exports as processed beef.

At the core of this initiative has been a new wave of private sector investors in the sector. One of such private investors, Verde Beef, was founded in 2014 with initial land holdings from the Ethiopian Government, which provided initial land grant in 2014 totaling 100 hectares for 35 years. In April 2015, an additional 1,000 hectares of land was granted by Government of Ethiopia. In its operations, it uses feed produced in-house; 60% grown nearby and 40% is purchased (maize, grain, oil cake, sulphur, lime and pre-mix). To process its cattle, it uses another company, Allana Group and Organic Export Abattoir to slaughter, de-bone and vacuum pack, transport using cold chain infrastructure i.e. refrigerated truck to airport, cold room at airport, and then flown out. In 2014, Verde processed 1,400 heads of cattle; by 2018, it is processing an estimated 18,000 head/annum. This example demonstrates both the prospects of catalytic national investments into the livestock transformation process, and the potential to merge small-scale agriculture into the livestock value chain, leveraging on multiple private sector partners.

Today, Nigeria's livestock economy is relatively immature from a business process, technology content, and productivity perspective. It is a mirror image of Ethiopia's sector in the early 2000s. In practical terms that means Nigeria's cows produce less meat and milk per unit of effort compared to global peers e.g. New Zealand, Argentina, Brazil and the United States. While elements of this is due to genetic endowment, the bulk of the sub-optimal outcome is due to poor management practices in the form of poor feeding, excessive physical stress on cattle from continuous movement and lack of water, and inefficient processes.

These are relatively easy to fix challenges. By investing in improved feed, watering and processing systems, productivity can rise sharply. For example, a typical U.S. beef cow is bred on a ranch and is not permitted to trek hundreds of miles. Upon reaching a weight of 850kg - 950kg and above, the cow is slaughtered for processing. The meat produced is appropriately tender, reflecting a balanced mix of fat and muscle. By comparison, a Nigerian cow and by extension the value chain for livestock, suffers some of the following disadvantages:

- ❖ **Productivity:** Cattle go to market for slaughter at an average weight of 250kg at 2-3 years, resulting in more expensive beef per kg versus imported peers. Nigerian beef today is among the most expensive in the world at ~\$6/kg versus \$4/kg in the Netherlands and \$2.5/kg in India. Restructuring the meat production ecosystem will result in improved access to meat-based proteins at more competitive price points for Nigerians;

- ❖ **Processing:** Low quality processing of slaughtered cattle reduces the potential realizable value of cattle; it is estimated that an improvement in facilities, including modern meat processing, will boost realized values by 25% - 40% due to a boost in value added products;
- ❖ **Supply Chain:** Reduction in the number of middle men by shortening the distance between ranchers and meat processors will boost the profitability of cattle farmers and ranchers. This Strategy Document estimates margin improvements of ~30% – 40% assuming 100% realization of the value savings by ranchers. Such a step will also improve traceability in the event of a need to meat recall or sanitary weaknesses.

Solving these issues will result in a boost for the broader economy. There are several steps that can be taken. For example, one model of change involves building a modernized livestock supply chain with more proximately situated slaughter houses. These processing plants will be co-located with feedlots where cattle are fattened to boost income and job growth in a few ways. This is illustrated below:

CATEGORY	DESCRIPTION
Key Context & Assumption	<ul style="list-style-type: none"> ❖ Ranchers, small holder herders and investors bring their cattle to a fattening ranch site ❖ Cattle are fed high quality feeds and provided water for 90-120 days to boost average weight from 200 – 250 kg to 450 – 500kg ❖ Fattened cattle are sold to co-located or proximately located slaughter houses
Financing	<ul style="list-style-type: none"> ❖ Funding provided to cover cost of fattening; once cattle are enrolled into the program, asset owner signs agreement with lender to allow for all cattle to be sold at specified weight range ❖ Upon sale, lender deducts cost of fattening from realized value, and cattle owner keeps remainder of profit, minimizing risk and upfront investment
High Level Option	<ul style="list-style-type: none"> ❖ ~3,000 heads of cattle per feedlot per cycle with 2 cycles per annum ❖ Weight gain of high 1kg per day with additional enhanced nutrition and vitamins (subject to cattle breed) ❖ Slaughter weight: 400 – 450kg ❖ Sale price per kg live weight: \$2.5kg (N900/kg) ❖ Fattening Period: 150 days ❖ Initial Value of Cattle: ₦100,000 – ₦150,000 ❖ Estimated Sale Price: ₦300,000 – ₦350,000
Advantages	<ul style="list-style-type: none"> ❖ Eliminates need for cattle to be transported across corridors, reducing risk of conflict and disease and boosting incomes for cattle owners ❖ Develops high quality feed lot system, and modern, sanitary meat processing and packing industry which in turn supports job growth ❖ Boosts volume of meat production at more competitive per unit price point, creating options for Nigerian households

The role of government is to help catalyze action and fast track certain regulatory and infrastructure investments to facilitate this transformation. Private companies in Nigeria must be the key drivers in this process. An example of success in such an endeavor is Zambia, where Zambeef processes over 60,000 cattles per annum, produces almost 10 million liters of milk, and uses over 120 million tons of feed each year. The economic system represented by its production of cattle, chickens and their derivative products is vast - Zambeef generated US\$280M in revenues with gross profits of US\$97M and operating profits of US\$11M. This strategy anticipates that at equilibrium, Nigeria will play host to an ecosystem of multiple Zambeefs across the federation.

1.4.3. Key Principles of the Strategy

In order to begin to lay the foundation for such a process, this strategy document has been premised on some key principles which will guide the selection of methodology, data input, and decision criteria utilized in its implementation. It is foreseen that these principles will create a conducive environment for the transformative process to initiate, consolidate and grow over the course of the strategy's duration. The key principles are as follows:

- ❖ **Duration:** Investment planning will occur over a 10-year return horizon given that secular direct impact is likely to start evolving after that time.
- ❖ **Sources of Capital:** The cost of investment will be shared by various parties, with the Federal and State governments providing catalytic capital to support a range of public goods even if elements of the benefits are captured privately. The remainder of capital will come from the private sector and donors.
- ❖ **Uses of Capital:** Improvements in labour capacity, purchases of relevant equipment, purchase of intellectual property (e.g. genetic strains), ability to generate direct income, and access to tools / enablers for generating such income e.g. safe streets, agricultural infrastructure, etc. will be prioritized.
- ❖ **Measurement:** Process will seek to financialize all the interventions, and create a consistent matrix for evaluating across initiatives e.g. household income in Naira as the constant unit.
- ❖ **Flexibility:** The funding model and supporting services will reflect the structural flexibility built into the NLTP strategy i.e. the lead actor can be a combination of private sector, public sector, or hybrid entities.
- ❖ **Coordination:** A dual track approach will be taken to coordination i.e. bottom up engagement with communities and project sponsors, and top down catalytic guidance from government MDAs, to ensure alignment on key actions, accountabilities and metrics.
- ❖ **Analytical Proxies:** Where appropriate, proxy metrics will be used from other comparable conflict zones to establish a plausible range of outcomes for the region e.g. the impact of community cash transfers in Colombia's former rebel-controlled territories.

1.5. Historical sector interventions

The main cattle production system currently in Nigeria and other parts of Sub-Saharan Africa (SSA) is the pastoral nomadic/semi-nomadic. However, several attempts to introduce European type of intensive cattle production systems such as ranching, feedlots and dairy farming were made during the colonial and post-independence era. These attempts were in form of importation of purebred dairy cattle to establish dairy farms at Agege (1940) and Vom (1947), and the establishment of Livestock Improvement and Breeding Centres (LIBCs) in many States for cross-breeding using exotic bulls and artificial insemination (AI) for increased milk production. There was also the introduction of semi-intensive managed feedlots using imported trypanotolerant bulls and steers in South West Nigeria in the 1960s. In the 1970s, many Northern States established ranches for production of genetically improved weaners for small producers. Of note is the establishment of Mokwa Cattle Ranch (1972) in present day Niger State through German bilateral assistance. A similar ranch was also established in Manchok in present day Kaduna State. The defunct National Livestock Production Company (NLPC) first managed by the Nigerian Livestock and Meat Authority (NLMA) (1971-1976) and later in 1979 managed these ranches.

In addition, the World Bank and other development agencies have financed livestock projects. There were two World Bank assisted projects: the First Livestock Development Project (FLDP-1974-1983) and Second Livestock Development Project (SLDP 1986-1995). The First Livestock Development Project (FLDP) promoted ranching (parastatal and private) with imported trypanotolerant Ndama cattle to establish Western Livestock Company in Fashola, Oyo State. The project also provided credit for smallholder fattening schemes and supported research, training and marketing. The Second Livestock Development Project (SLDP 1986-1995) continued the successful smallholder-fattening scheme, expanded ranching by establishing another Ndama cattle ranch in Adada in Enugu State and restocking the Fashola Ranch. Newly introduced components were development of grazing reserves and settling of nomadic pastoralists, pilot cooperative dairy development and livestock systems research.

While the FLDP recorded success only in smallholder credit scheme, SLDP was assessed successful in increasing livestock production and the income of over 60,000 smallholder livestock producers directly, thus shifting the emphasis of public support to small traditional producers and contributing to poverty reduction in rural Nigeria (ICR No. 15769 -June 21, 1996). Under the Ndama ranches programme, 1,341 in-calf heifers were imported and distributed to two ranches in Adada, Enugu State and Fashola, Oyo State. On completion of the SLDP, each of the 116 beneficiaries in the South East and South West of Nigeria, respectively, received 681 in-calf heifers in the form of a credit package of 4 heifers and a bull. To sustain the programme, the beneficiaries agreed to participate in an open-nucleus breeding network. However, while the open-nucleus breeding programme collapsed after loan closure in 1995, Ndama cattle and their crosses continued to exist and expand in these States and other places in Nigeria. Another positive contribution of this programme was that many beneficiaries entrusted their animals to settled pastoralists in their neighborhood, thereby creating a strong bond between pastoralists and their hosts in these States. Another, success story was a pilot cooperative dairy in Kaduna State. Under the Pilot Dairy Development Programme, about 1,190 farmers in the State were organized into ten registered cooperative societies with one apex cooperative federation – the Milk Producers Cooperative Association Limited (MILCOPAL).

The development of grazing reserves and settling of nomadic pastoralists was only partially successful due to poor management of common properties. At the close of the SLDP, 12 grazing reserves were gazetted and developed out of the 20 proposed; a total of 951 km fire tracings were done; 74 dams were constructed; and 715 transhumant families were settled in seven grazing reserves. Other lessons learned through the projects provide further rationale for the current programme (see Section 3). FLDP and SLDP received a funding of \$150m and remain the only FGN/World Bank intervention that accrued specifically to the livestock sector to date.

1.6. Challenges

Although there are policies and strategic intentions at both national and state government levels to improve livestock production and agropastoral practices, these efforts have been hampered by many obstacles. The identified obstacles include: limited knowledge of Nigeria's livestock assets by size and location; conflicts with nomadic pastoral/transhumance system due to feed, water and land insecurity; low productive breeds of livestock; income loss and adverse effects on human health due to pest and disease; and low income to farmers due to limited access to lucrative markets due, which is affected by the poor quality of produce, lack of standards and poor transport infrastructure (Agricultural Promotion Policy, 2016: 19).

In the same vein, inadequate institutional arrangements for policy and programme coordination have often led to duplication of effort and general inefficiency in resource use among agencies and ministries of the same government, between federal and state agencies and between states. Inadequate monitoring and evaluation arrangements for policy implementation has also led to situations in which policies and programs tended to lose sight of their focus and original goals without corrective measures being taken (Ayuba, 2011).

Similarly, private investors (both local and international) have not made full use of the comparative advantage and the opportunities in the livestock sector largely because of inadequate infrastructure, such as roads, energy, water and, an unfavorable business environment, among others (World Bank, 2014:5).

Many attempts were made in the past to establish ranches in different areas of Nigeria; however, these have been mostly characterized by failure and not sustained. The key lessons learned from these failures include: (a) Land – lack of land titles was a major disincentive to pastoralists to develop land; (b) Limited use of specialized cattle breed – resulting in poor milk yield and low weight gains of animals due to poor genetic makeup of indigenous breeds (For example, average milk yield of Holstein Friesian is 35-40 L/day compared with 1-2 L/day for Bunaji cattle, and average weight gain of Brahman cattle is 2.5 kg per day versus 0.5kg for Sokoto Gudali cattle); and (c) Lack of organized structured market for finished live animals and commodities (certified abattoirs and processing plants, standardization of animals and commodities for correct pricing regime, etc). Other lessons include poor transportation and logistics system for live animals (animal welfare) and cold chains for products; absence of reliable and quality animal feeds; and lack of industrial by-product supply chain for feedlots and dairy farms. There is also the lack of skilled manpower in areas of range management and farm management.

2. NLTP STRATEGIC APPROACH

Based on feedback from the state-level and national consultations, strategic intervention areas are proposed that support improved performance and sustainability of livestock production and value addition, underpinned by productive infrastructure and technological interventions along the livestock value chain. Strategic interventions are aimed at modernizing livestock production through the establishment of ranches, mitigating the escalating crisis between pastoralists and farmers, and improving the broader supporting architecture around these issues.

2.1. Economic Investment in Livestock Ranching, Fodder production and Value Chains

Though the establishment of grazing reserves in the 1960s was meant to address the clash between farmers and pastoralists, many of them were taken over due to population expansion and urbanization. In the middle belt states today, the pivot for successful ranching and other forms of intensive livestock production systems is access to land, water and pasture or feedstocks/fodder as part of an integrated system that promotes mutually beneficial economic coexistence between farmers and herders. It is, therefore, paramount to give it the priority it deserves in the design of, and location of the proposed ranching models and other supportive transformational interventions.

Commercial pasture (forage) and fodder producers need to be promoted and supported as part of the ranching program. This is to ensure availability of feed and water to encourage nomadic and transhumance pastoralism to modernize. Entrepreneurs and producer cooperatives can also be supported to develop pasture on communal land, grazing reserves or privately-owned land to expand the forage production base.

Infrastructure and support services are vital to the establishment and growth of the industry across the different value chains. The development and provision of infrastructure and deployment of services such as extension, improved breeding schemes, skills, disease control and management, capacity building as well as Livestock Institutions reforms among others will be necessary for the successful implementation of the NLTP.

The major crucial issues that need to be addressed through investment for the development and modernization of the livestock industry have thus been identified as access to land, ability to grow adequate forage or purchase feed, provision of adequate water, formation of producers into clusters to create viable ranch models, productive alliance and cooperatives with access to inputs, finance and markets, supportive policies, breed improvement as well as improved infrastructure and support services.

The major thrust of this pillar is to support and strengthen the development of market-driven ranches in the livestock ecosystem for improved livestock productivity through breed (genetic) improvement and pasture production, in addition to efficient land and water productivity. It will address the issues of access to land and water, the establishment and management of quality livestock, and provision of feed, infrastructure, markets, veterinary and other support services which are required to establish and operate profitable and sustainable ranch business.

This section uses a value chain analytical framework to map out the opportunities for investment along the whole livestock improvement value chain. This analysis allows an understanding of the livestock

production systems (including marketing and input supply) and the decisions stakeholders make within the livestock production system. At the heart of this is cattle and its production, including the associated processes, and the prospects for ranching.

Value chains are the linked groups of people and processes by which a specific commodity is supplied to the final consumer. These chains have inputs that are used to produce and transport a commodity towards a consumer; this is the supply chain. The value chain encompasses more than the production process; value chain as a term implies a flow of information and incentives between the people involved. Money is sent from the consumer to the different people in the chains to complete the value chain.

Fig. 1 Cattle production value chain

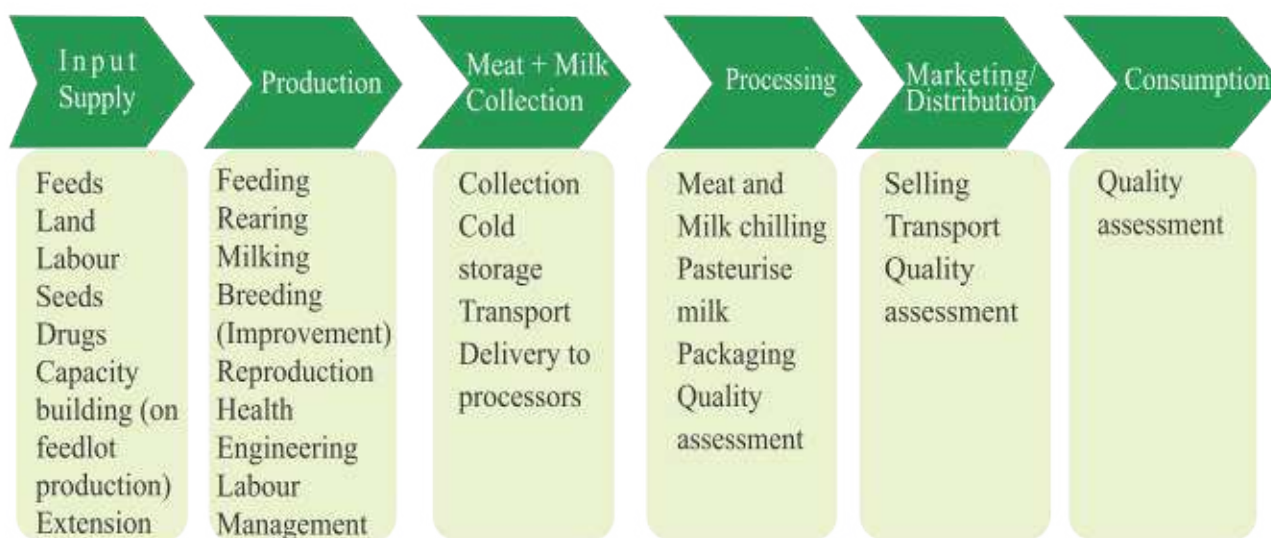


Figure 1 above describes a typical livestock value chain, and provides a broad characterization of the main areas for investment opportunities, that can lead to a modernization along the value chain. The application of a value chain approach to this pillar considers the various steps in the livestock business, from supply of quality inputs to livestock farming, postharvest handling and agro-processing. The goal is to consistently deliver high quality, nutritious and safe meat, dairy and other value-added animal products to local, regional and international markets. The incorporation of downstream value-addition creates further job opportunities and access to nutritious food in the local communities. For example, management of the relative costs from an early stage to slaughter ready calves is a key driver of profitability. For example, land development costs on a per hectare basis matters, as does the cost of acquiring pregnant heifers, or young calves, and of course the cost of fattening to production values.

2.2. Investment Areas

2.2.1. Input supply

The success of any livestock enterprise depends on adequate supply of good quality inputs. Pastures supply the cheapest source of feed for ruminant livestock. This plan proposes the adoption and integration of sown pastures into the livestock sector, as a strategy that will ameliorate most of the conflicts being experienced and make livestock production more profitable and more attractive. In addition to pasture, which can be grazed or cut for hay or both, silage (made from maize mixed with legumes) will be necessary for the dairy component of this programme, because silage is one way that fresh vegetative material can be conserved for use during the dry season in environment like Nigeria. This helps to reduce the cost of supplementary feed for milking animals while increasing their milk production.

Access to land will be provided in gazetted grazing reserves already earmarked by the frontline States, as well as privately purchased or leased land assets. Accompanying access to land, would be infrastructure access/upgrades, which would include the provision of roads, power, water, information and communication technologies, drainage, fencing, etc. Water supply will include rainwater harvesting, storage and distribution, dams and boreholes. States will play a critical role in accelerating the formation of livestock value chains if they negotiate investment agreements that bifurcate the role of the state and private investors accordingly; that would enable each party to do what it does best to accelerate the creation of jobs, capital assets and trained personnel.

Another core input will be the provision of special credit packages, concessionary access to specialized inputs like veterinary drugs, vaccines, equipment, etc. as well as logistic and common infrastructure to support their operations within the reserves. A sanitary mandate program that carves out specific areas for private animal health service providers will ensure competitiveness, growth and sustainability of animal health delivery within and outside the grazing reserves. Given the scale up in the sector, it would be useful to consider alternate operating models for assets such as the Vom Laboratory given the sheer volumes of vaccines and related medicines that need to be produced.

Labour would include human resources in the form of administration personnel and technical staff, in the case of ranch operations. Other inputs will include veterinary services such as diagnostic laboratory; insurance, banking, schools and other social services extension.

2.2.2. Production

The livestock production and management system will be anchored on the selection of suitable breeds, facilities for artificial insemination, and establishment of livestock management system including traceability. It will also include the establishment and management of pasture and fodder production, harvesting, conservation, storage and utilization. Areas will be set aside for crop production only (such as maize) as source of food for humans and supplementary feed to support livestock production.

Equipment and machinery for land clearing, land preparation for pasture and crop production, irrigation, application of agrichemicals, harvesting, baling, storage (hay barns) and transport. A workshop will be built and operated to service and repair machinery and equipment.

A robust disease control and surveillance programme for cattle and other ruminants will form part of the production value chain in order to mitigate the risk of disease and pest occurrence in clustered

settings within and outside the grazing reserves. The provision of a comprehensive animal health package to improve productivity in the selected states will be carried out primarily as a public good. This will enhance food safety to protect humans and facilitate (international) trade. The private sector will therefore be enabled to play a major role in delivery of veterinary services.

A comprehensive livestock identification and traceability system (LITS) will be established and operated in the designated areas and nationally by using unique identifiers and registration systems to identify animals individually and/or collectively. This will support livestock movement control, disease surveillance, public health interventions with specific emphasis on zoonoses and food safety as well as trade and security of livestock.

2.2.3. Product collection, handling and processing.

At the level of crop production, this will include provision of equipment for grain drying, grain store, hay barn, feedlot; whereas it will include refrigerated storage (cold rooms, freezers) at the level of livestock products. Pasteurisation is required in the case of milk products. This will decrease rates of spoilage, increase the distance producers can travel thereby expanding market access, and hence decreases the frequency of sales at less than optimal prices. This whole process also flows into processing, which also requires refrigerated storage (cold rooms, freezers), packaging, quality control and setting quality standards.

Crosscutting the value chain will be research, and this will be undertaken at each level of the chain. It will allow a better understanding, and hence necessary improvements, around inputs, production, collection, processing as well as marketing of livestock products as well as other related activities.

2.3. Strategic Priorities for Economic Investment

2.3.1. Securing natural resources – land, water, feed

The input supply value chain through gazetted grazing reserves will ameliorate the challenges around access to resources and mitigate conflict. Ensuring that non-gazetted reserves are gazetted, will also ensure increased access to resources for cattle production. Incentive schemes for private landowners to engage will be investigated.

2.3.2. Sustainable models for ranching developed

The development and testing of different models of ranching involving various combinations of value chains, be it beef or milk production will lead to evolving different types of ranching models. This will eventually lead to the gradual modernization of the cattle production systems through appropriate ranching practices, which could include aspects of breed improvement through artificial insemination embryo transfer to increase milk and meat yield of local cattle breeds. It will also contribute to the gradual transition from migratory and extensive cattle breeding and rearing practices to a more sedentary cattle breeding and rearing practices, again contributing to mitigating conflict.

2.3.3. Infrastructure needs for ranches are met – roads, electricity, fencing

On the back of developing ranching models, and meeting resource needs, is also the need to develop complementary infrastructure. Critical infrastructure of road, electricity and fencing will ensure security especially for cattle and will particularly make the grazing reserves attractive to cattle herders.

2.3.4. Other support services developed – transport, health, education

Other support services are required to complement infrastructure, and are particularly critical because cattle herders will be encouraged by the presence of health and educational facilities, in addition to robust infrastructure. Having a good transport network will provide the confidence to herders that they can easily get their meat and milk products to the market.

2.3.5. Stakeholders have developed a deeper understanding of value chains – from input supply to marketing

An understanding of the flow of materials through the value chain is important in understanding how each point on the chain functions; bearing in mind that value chains involve several products, including waste and by-products. This understanding would include production and risk issues such as disease, and would engender an understanding of the flow and distribution of incentives along the chain and how to manage those risks.

2.3.6. Private Sector Investment is encouraged

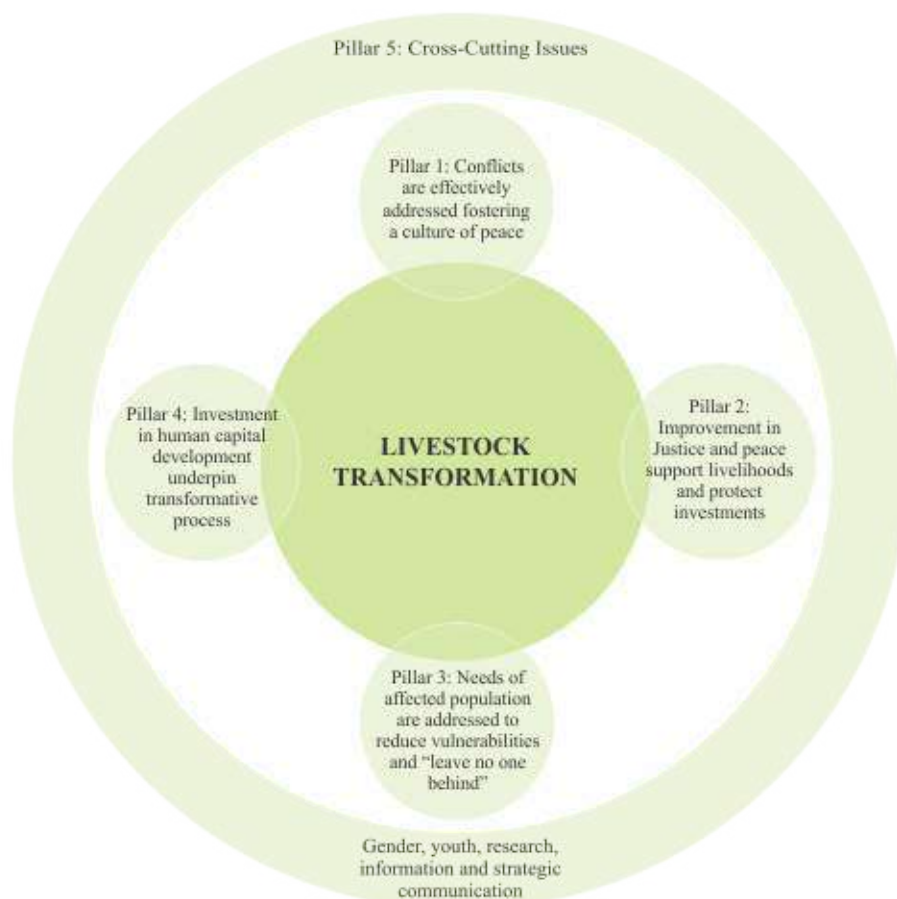
Recognizing that government alone cannot possibly undertake all the investment initiatives, the private sector will be critical in investing in areas such as infrastructure, as well as aspects of the value chain such as marketing and processing.

2.3.7. An enabling policy and legislative environment are put in place – in support of value chains

Enabling policies around access to land, credit facilities, and private sector involvement are critical to the proper implementation of the plan, and would drive investment opportunities along the value chain. In the medium term, supportive and enabling legislation around the national livestock system should be developed at both federal and state level.

3. CREATING THE ENABLING ENVIRONMENT

The NLTP Strategy also clearly identifies five main supporting pillars as priority areas requiring support in order to successfully implement the transformation of the livestock sector through the establishment of ranches, improved fodder production and economic investment into associated value chains: Pillar 1 – Conflict Resolution; Pillar 2 – Justice and Peace; Pillar 3 – Humanitarian Relief; Pillar 4 – Human Capital Development; and Pillar 5 – Cross-Cutting Issues. The components of each supporting pillar are described below, including key investment and intervention areas.



3.1. Supporting Pillar One: Conflict Resolution

3.1.1. Context and Conflict Analysis

In recent years, the Nigerian economy, particularly the agricultural sector, has witnessed huge shocks and disruptions, linked to deadly clashes between farmers and pastoralists over access and control of natural resources, particularly land and water. This has been a dominant feature of inter-group relations between the two production forces. Embedded in this conflict is organized crime that manifests in the form of deadly attacks against communities, as well as cattle rustling, which accounts for huge deaths, displacements, as well as disruption of livelihoods. While this phenomenon constitutes a national security challenge, states such as Adamawa, Benue, Kaduna, Nasarawa, Plateau, Taraba and Zamfara, represent the epicenters of the crises. There is a sense in which this conflict is not unique or peculiar to Nigeria. It is a global challenge, though, with specificities in terms of root causes, manifestations, impacts and responses across regions and states that are faced with such challenges.

The drying up of the Lake Chad constitutes one of the major drivers of conflict and insecurity in Nigeria's North East region and the Lake Chad Basin area in general. It was reported that between 1973

and 2002, the Lake Chad lost over 50 percent of its water. It is estimated that in the last sixty years, the desert of the Lake Chad has claimed over 350,000 sq.km of land area in Northern Nigeria, thereby affecting the lives of over 28 million people and 58 million livestock². So far, fifteen states, representing an estimated 64% of Nigeria's landmass are affected by this spate of desertification that has led to a situation whereby 151,000 hectares of productive land are lost yearly³. It was also observed that diminution of the Lake Chad has contributed to conflicts in two notable ways. Firstly, by intensifying the frequency of contact between farmers and pastoralists. Secondly, it intensifies the pattern of migration as a response to the contraction of the lake⁴.

Though tensions between these production forces are longstanding, they have traditionally been mediated by cooperation to the mutual advantage of the two groups. While the pastoralists have benefitted from grazing, the farmers have benefitted from the manuring of their farmlands. However, a combination of factors has heightened tension between them. Climate change, rising population density and urbanization, have led to the forced migration of pastoralists, coupled with weak policing and the proliferation of Small Arms and Light Weapons (SALWs)⁵. Typically, farmers accuse the pastoralists of allowing their animals to stray into farmlands and damage crops and pollute domestic water sources, while the pastoralists also accuse the farmers of encroaching on their traditional grazing routes, which results in blockade of such routes⁶.

There has been a gradual erosion of local capacities for conflict management in the country. Notwithstanding the proactive role of the traditional and community leaders in mediating on conflicts between farmers and pastoralists in the past, the country has witnessed an erosion of this role. The non-inclusion of the role of traditional rulers in the constitution remains a major hindrance to the effective discharge of their mediatory role across the communities. The modern state is one in which key institutions of the state, particularly the police and the judiciary become increasingly active in issues around crime prevention, maintenance of law and order, as well as the administration of justice, which in the past were effectively handled by traditional rulers and their cabinets.

Land represents the primary causes of conflicts in the country, which makes it an important determinant and shaper of relationship between peasant farmers and pastoralists. The political economy of Nigeria's agrarian society is one that shows a strong and organic link between the peasant societies and land. In this sense, the notion of land goes far beyond its utility as a factor of production. In Kaduna and Plateau States, the question of indigeneity, as it relates to the issue of belongingness and rootedness, continue to shape the nature and character of conflicts between peasant communities that are mostly farmers and sedentary, against the pastoralist communities. This phenomenon represents a dominant feature and determinant of the conflict between farmers and pastoralists in the Middle Belt, a region with the highest number of ethnic nationalities in the country.

Though the establishment of grazing reserves in the 1960s was meant to address the clash between crop

2. See Jibrin Ibrahim, *State Crisis, Pastoralist Transhumance and Rural Banditry*, Daily Trust, April 20th 2017.

3. See *Galvanising Climate Action in Nigeria: Environmental Justice and Food Security*, Shehu Musa Yar'Adua Foundation, 2016.

4. Onouha, C. F (2009) Climate change, population surge and resource overuse in the Lake Chad area: Implications for human security in the North-East zone of Nigeria, in Mwiturubani, A.D., Van Wyk, J (eds) *Climate change and natural resource conflicts in Africa*, Addis Ababa: Institute for Security Studies (ISS).

5. Kwaja, A.M.C & Adelehin, A.LB (2018) *Response to Farmers and Herders and Conflict in the Middle Belt Region of Nigeria: Managing Past Efforts and Opportunities for Violence Production*, Policy Brief: Search for Common Ground (SFCG), January.

6. See *Watching Us Die on CNN*, Report of the Nigeria Stability and Reconciliation Programme that examined Community Level Conflict Management Mechanisms in Nigeria, available in <http://www.nsrp-nigeria.org/wp-content/uploads/2013/11/CCMM-Vol-1-Reports-6.12.12.pdf>

farmers and pastoralists, many of them were taken over due to population expansion and urbanization. The enactment of laws that ban open grazing by the Benue and Taraba State Governments was hinged on the justification that it restricted grazing pastoralists⁷, would reduce cases of livestock straying into farmlands and damaging crops, which in turn would reduce clash between the farmers and pastoralists. Though there are no official figures on the number of deaths and displacements associated with these conflicts in the country, there are concerns that the number of deaths recorded in the form of conflicts between farmers and pastoralists is more deadly than the Boko Haram insurgency due to its frequency, intensity and geographical scope⁸.

The violence associated with the fractured relations between farmers and pastoralists is one that has impacted heavily on women, children and youths. While many of the women have experienced physical and psychological trauma, including the death of their husbands, which left them as widows and brad winners with little or no access to livelihood opportunities, many of the youths were directly involved in the conflict either as perpetrators or persons who fought against the perpetrators. With a rising youth population that is characterized by limited opportunities for social mobility, the vulnerability of the youths and their proneness to violence have had a negative impact on inter-group relations between farmers and pastoralists.

Currently, Nigeria is faced with a widening youth bulge, with more than half of its population of 180 million people, under the age of 30 years⁹. It was also projected that the population of the youth (10-24) of age will be hovering around 73 million by 2025 and 116 million by 2050. There is a sense in which young people are often perceived as the main perpetrators of conflict. However, such a narrative fails to capture the fact that many young people represent the promise and hope for solutions. Their vulnerabilities are largely driven by several push factors, including high levels of social, economic and political exclusion, poor governance, corruption, impunity, poverty, unemployment, inequality and illiteracy among others.

It is estimated that about 49% of Nigeria's population are women, with 70% of them directly engaged in subsistence agricultural production¹⁰. For most women, the impact of conflict has been far reaching. The adoption of UN Security Council Resolution 1325 on women, peace and security, highlighted both the impact of conflict on women, as well as their roles in peace and security decision-making processes. Nigeria has ratified this resolution and has developed a National Action Plan (NAP) around five key pillars - prevention, participation, protection, promotion and prosecution. These are important pillars that are meant to strengthen women participation in peace and security related decision-making processes.

Through a strategic partnership with the World Bank, the Federal government of Nigeria launched the National Fadama Development Project (Fadama I) in the early 1990s, as a vehicle for promoting simple and low-cost improved irrigation technology under World Bank financing. Though the project was expected to boost agricultural production in the country, it also became a major source of conflict between irrigation farmers and pastoralist who were denied access to water points at the bank of rivers and streams. Above all, it became a conflict driver in view of the fact that government failed to consider its impact on livestock.

7. International Crisis Group (2018) Stopping Nigeria's Spiraling Farmer - Herder Violence, Crisis Group Africa Report, No. 262, July.

8. International Crisis Group (2017) Herders against Farmers: Nigeria's Expanding Deadly Conflict, Crisis Group Africa Report, No. 252, September.

9. <https://www.bloomberg.com/news/articles/2016-11-08/nigerian-population-hits-182-million-with-widening-youth-bulge>

10. Mgbenka R.N, Mbah E.N and Ezeano C.I (2015) "A Review of Small holder Farming in Nigeria: Need for Transformation"

Table 1: Understanding the Dynamics of Conflicts between Farmers and Pastoralists in Nigeria¹¹.

	Structural / Root Factors	Intermediate/ Proxy Factors	Triggers	Conflict Dynamics
1. Social conditions and processes	Poor social and economic outcomes (poverty, health, employment); high income inequality; perceived social injustice; lack of social service provision; youth bulge and restiveness.	Declining trust and eroded social cohesion; social fragmentation; political manipulation and clientalism.	Social polarization; openness to radicalization; loss of legitimacy of traditional authority	Changing gender and intergenerational relations; sexual and gender-based violence; crime; displacement.
2. Political/ Governance	Elite political settlement excluding majority; poor performance of govt. institutions; low state accountability.	Corruption and impunity; low legitimacy of the state; traditional institutions eroded.	Absence of trusted channels for re-dress, dispute resolution, justice, or political change.	Patrimonialism and patronage; fractured social contract
3. Economic	Lack of economic growth, infrastructure, markets, and effective agricultural and industrial policies; high poverty and food insecurity; overdependence on oil predisposes to shocks.	Loss of traditional livelihoods (environmental degradation and destruction and decline of northern industrial base); lack of new opportunities; large populations of unemployed and poorly skilled youth.	Collapse of Northern Nigerian industrial base; recruitment of youth as perpetrators of violence	Poor economic and human development outcomes.
4. Environmental	Climate change and environmental degradation (e.g. drought, desertification, contraction of Lake Chad); increased pressure on natural resources	Poor management and governance of natural resources (e.g. grazing reserves and routes).	Conflict over land and natural resources (incl. between agriculturalists and pastoralists).	Lack of effective institutions for managing conflict over natural resources.
5. Security	Weak rule of law; poorly performing state security services; low levels of human security.	Supply of unemployed and disaffected youth; proliferation of arms; criminal opportunism.	human rights violations; perceptions of injustice and persecution.	Excessive use of force; alienation of citizens; rise of vigilante groups.

6. Cultural/ Ideological	Manipulation of religious and/or ethnic identity for political ends; use of religion or collective grievance to challenge the state.	Hardening of social identities; increased interpretation of grievances in ethnic/communal terms.	Rhetoric of confrontation and reprisal.	Religious factionalism and competition;
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From the foregoing, it is evident that the complex peace and security challenges associated with the design and implementation of the NLTP would rely heavily on the adoption of a dynamic and multifaceted and multi-stakeholder approach. Such a proactive step would be harnessed in ways that allows for mutually beneficial relations between the state and its citizens, leveraging on the existing consultations and dialogue platforms.

3.1.2. Responses: Mechanisms for Conflict Resolution and Peacebuilding

In the context of the National Livestock Transformation Plan (NLTP), the essence of conflict resolution and peacebuilding in its broadest sense is one that seeks to identify, establish and support structures that will strengthen and solidify peace in order to avoid a relapse into conflict. The focus on peacebuilding aims to address the sources of current hostilities and build capacities at all levels for conflict resolution.

National Peace Architecture

The 1999 Constitution of the Federal Republic provides the foundational basis for Nigeria's peace architecture. Particularly, Section 14(2a) of the Constitution provides that “the security and welfare of the people shall be the primary purpose of government”¹². To guarantee peoples participation in decision-making process, Section 14(b) provides that “the participation by the people in their government shall be ensured in accordance with the provisions of this Constitution”¹³. This expression as contained in the Constitution, makes peace a central vehicle for national unity and cohesion.

In the light of the foregoing, the establishment of the Institute for Peace and Conflict Resolution (IPCR) in 2001 represented one of the first attempts by the federal government to put in place an institutionalized mechanism for utilizing the soft approach to conflict management and peacebuilding in the country. The biggest challenge confronting the institute lies in its lack of autonomy and weak link with structures and institutions for peacebuilding at the state and local levels, which to a large extent, undermines the ability for proactive, grassroots level responses to conflict and has paved the way for peace architectures at other levels to emerge.

In September 2018, the Secretary to the Government of the Federation, Mr. Barrister Boss Mustapha , inaugurated a committee to establish a framework for the transformation of the IPCR into a National Peace Commission (NPC). This was sequel to a resolution reached at the end of a security summit convened by the National Economic Council¹⁴. Prior to the inauguration of the committee, in July, the Senate passed a bill for the establishment of a National Commission for Peace Reconciliation and Mediation¹⁵. The overall goal of the bill is to ensure the implementation of a National Peace Policy that would provide the framework conflict prevention, management and resolution, with the broader agenda of peacebuilding. In the light of the fact that these efforts by the executive and the legislature share the same vision in relation to a united and peaceful country, the need for harmonization and synergy becomes imperative.

12. See Chapter 2, Section 14.2a of the 1999 Constitution of the Federal of Nigeria.

13. See Chapter 2, Section 14.2b Ibid.

14. <https://www.pmnewsnigeria.com/2018/09/03/sgf-inaugurates-committee-to-establish-national-peace-commission/>

15. <https://punchng.com/senate-passes-national-commission-for-peace-reconciliation-and-mediation-bill/>

State and Local Level Peace Architecture

Across the states of the federation, the deployment of security forces has been one of the primary mechanisms for conflict management. The state security councils are charged with the responsibility of ensuring the cessation of violence under such circumstances, with little room for sustained dialogue and mediation as the case may be. Chaired by the Executive Governor, the Council is made up of all the security agencies, as well as some members of the State Executive Council such as the Deputy Governor that serves as the Vice Chairman, the Attorney General and Commissioner for Justice, as well as other members to be appointed by the Governor. The work of this council is driven by the desire of the States to discharge its primary responsibility of guaranteeing the security of lives and property of the citizens. At the local government level, the same structure exists, with the Local Government Chairman serving as the Chairman of the Local Government Security Council. The key functions of the State Security Councils include:

- ❖ Periodic appraisal of security situation in the state, with the view of taking proactive actions;
- ❖ Receiving briefs from the various security heads in the state;
- ❖ Formulation of policies towards enhancing peace and security in the state;
- ❖ Directing the implementation of security related decision and programmes; and
- ❖ Ensuring synergy and cooperation of security agencies between and among neighbouring states.

In 2016, the Plateau State Government established the Plateau State Peacebuilding Agency. Kaduna and Adamawa state governments creating the Kaduna State Peacebuilding Commission (KSPC) and the Adamawa State Agency for Peace, Reconciliation and Reconstruction in 2017 and 2018 respectively followed this. This proactive step is meant to ensure the use of dialogue and mediation as more concrete and institutionalized mechanisms for managing conflict, as against the kinetic approach that is characterized largely by the use of force to enforce peace. Kaduna State has in turn, set up Local Peace Committees at the LGA level to further ground the peacebuilding response into the local context. This is a model that should also be replicated at the local government level. The Adamawa State Government is currently implementing an early warning system, which was set up in 2017. It utilizes the traditional and community leaders as key sources of information and intelligence. Stipends are given to the traditional leaders on a monthly basis to enable communicate effectively with the government at both the state and local government levels, as well as security agencies.

3.1.3. Strategic Priorities in Strengthening Conflict Prevention and Building Peace

Effective Mechanisms for Conflict Prevention and Resolution

The incessant attacks and violence between farmers and pastoralists affect state-level and local level contexts differently and thus play out differently across the parts of Nigeria. This fact calls for a localized level of conflict prevention and peacebuilding that take into account these nuances and leverage existing capacities for peace, which may be different from state to state and from community to community. Efforts to promote effective mechanisms for conflict prevention and peacebuilding will take this best practice as an entry point, as a basis for building on existing mechanisms where they exist and are effectively functioning.

Notwithstanding the importance of such an approach, these would be coordinated and harmonized by legitimate, sustainable and credible institutions that can help advance peace initiatives. It is therefore important that Nigeria's national peace architecture is further strengthened and capacitated. This will be done through increased support to the Institute for Peace and Conflict Resolution, the adoption of a

nationwide National Peace Policy, as well as harmonizing the various efforts to create a National Peace Commission.

At the state-level, financial and technical support will be required to promote the creation of similar institutions that are borne out of the peculiar state-level dynamics, and completely owned by the state government. Such institutions would be enshrined in state laws, to ensure legitimate, credible and sustainable institutions to help advance peacebuilding in the long term. These processes would follow extensive consultations at the state and community levels, as well as reflect the needs of all women, men and youth, regardless of religion or ethnicity.

Where such institutions already exist, support will target the strengthening and consolidation of peace architectures towards more effective prevention of conflict. Such support includes linking state-level institutions to local government institutions, civil society organizations, traditional and religious institutions, etc. For effective conflict prevention, peace architectures at the state level must be closely anchored to the communities affected by conflict, and ensure an effective, timely, and sensitive response to the crisis.

Integrated early warning early response systems

Attacks and violence do not manifest without a series of events and factors taking place beforehand. The transhumance period that sees pastoralists and livestock move south in search for pasture and water is a known seasonal phenomenon, but there are more proximate indicators that signal impending violence. Moreover, and in light of the conflation of farmer-pastoralist violence with other forms of violence labelled as such, there is a need for effective early warning early response systems in strengthening the ability to prevent and/or manage impending violence. Although institutionalized systems do exist for natural disasters, they are less frequently formalized and widespread for issues of violent conflict.

In strengthening the preventive capacity of communities and states to proactively engage in this crisis, this strategy foresees the establishment of early warning and early response systems that are grounded at the local level, which can quickly trigger an effective response to signs of impending violence. These structures would rely on a wide range of stakeholders at the community level, including a series of response options, from promoting dialogue and mediation at the local level to resolve the dispute, to triggering an effective and timely security response. The structure for the early warning and early response systems can vary, but will link up to efforts at the national level under the Ministry of Interior to ensure interstate collaboration, coordination and sharing of information. Early warning and early response systems at the state level would be situated under the relevant peace architecture, and should always promote dialogue as a first response.

Inclusive dialogue in support of peaceful coexistence

Violence that has caused loss of lives, property and displacement has also caused a breakdown in social ties and the social fabric of many communities has been fractured. In efforts to rebuild the lives and communities of those that have been affected by the crisis, dialogue will be the centerpiece around which all other things circulate. Inclusive dialogue must be placed at the center for the conflict prevention and resolution efforts under this strategy, equally features as cross-cutting elements for the other pillars to ensure a bottom-up approach to addressing the political, economic, social and environmental dimensions to the crisis.

Dialogue, whether formal or informal, will be promoted at the national, state, LGA, community and village level. These dialogues will help to foster an increased understanding across people and communities, and bring people together in search of common causes and solutions. Integral in this approach is to allow such dialogues to contribute to a national healing process and reconcile people and communities. Dialogue in this respect serves both as a method to promote conflict prevention and resolution, as well as result in and of it.

Land Administration

In promoting a more peaceful future, this strategy prioritizes resolution of land issues and disputes. At its core, the ongoing crisis is about access to land and natural resources. In light of the demographic trends, desert encroachment and other environmental impacts, finding a lasting solution to ownership and use of land is imperative. Such a process, although highly delicate, will help address some of the state-level drivers of tensions around indigeneity, to promote a more inclusive society for all. It is envisaged that this would also facilitate resettlement of populations displaced as a result of the crisis. Efforts will be made to ensure that this strategy does not, advertently or inadvertently, alienate people from their indigenous lands.

By virtue of its cross-cutting elements, it is foreseen that states would embark on an interagency process that involves relevant peace architectures, ministries or commissions of land, surveying institutes, etc. For purposes of helping to address one of the root causes of the crisis, this process will rely heavily on dialogue at the state, local government, community and village level to help. Such a process must be wholly inclusive and transparent, and should settle naming, demarcation and boundary issues, registration and issuance disputes. In addition to the process being transparent, results and outcome of activities and efforts must also be widely published for the public's knowledge. Addressing the issue of encroachment and illegal/unauthorized use of parts of some of the grazing reserves for crop production and housing would require that appropriate policy be put in place to manage this situation to avoid conflicts between the ranches and their communities. Cattle route demarcation in areas of potential conflict should be considered to facilitate the movement of cattle between grazing reserves.

3.2. *Supporting Pillar Two: Justice and Peace*

3.2.1. *Context*

The clashes between farmers and herders have, over time, exposed inherent weaknesses in the rule of law. Over decades, perceived injustices both amongst farming communities and pastoral communities have deteriorated relationships. Farmers complain of lands being encroached upon and crops being trampled by pastoralists. Pastoralists claim that cattle rustling and overtaking of stock routes by farming communities is threatening their livelihoods. Ultimately, the lack of security and justice at the local level has undermined law and order, and its continuation erodes public trust in government and a breakdown of the social contract. Where government is seen as unable to protect its citizens by responding to signs of attacks and holding people to account, a culture of retribution has manifested, and attacks are frequently met with counter attacks in trying to settle scores.

Historically, movement of pastoralists and livestock through settled communities was closely monitored and regulated by traditional rulers, who would also resolve any disputes that amounted from such activities. However, with the modernization of Nigeria, the powers vested in traditional institutions and rulers to play such a role has been restricted. Many continue to do so where possible,

but their influence has been diminished and their ability to prevent and resolve conflicts has been hampered. The transfer of powers to local level government and constitutionally mandated institutions, such as police and court systems, has left a void as the latter have failed to establish an adequate presence in the most rural communities. Decades of meagre budgetary allocations to local level policing initiatives and decentralized court systems have effectively hollowed out a functioning law and order architecture for many rural populations, which has been exploited by perpetrators of the current crisis.

3.2.2. Responses

The federal government has taken notable steps in addressing the prevailing insecurity. It has scaled up its security presence, most notably through an increase in deployment of policemen and women as well as the military through *Operation Cat Race*, *Operation Whirl Stroke I*, and *Operation Whirl Stroke II*. These efforts enhance already ongoing efforts in the affected states by law enforcement agencies and other personnel deployed under *Operation Safe Haven* and *Operation Rainbow*¹⁶ to curb clashes and strengthen the protection of citizens. Despite these notable efforts, clashes have continued. This has increased calls for a revision of the security architecture for Nigeria, including the provision of state police, to provide more responsive and effective protection of citizens. There has been the proliferation of community level security structures established to address the rising spate of insecurity across the communities. These vigilantes are mostly made up of able-bodied youths, with a clearly defined chain of command. In the meantime, many communities who remain vulnerable to attacks have chosen to take matters into their own hands and constituted localized militias for protection. With the proliferation of Small Arms and Light Weapons (SALW), they capitalize upon the lacking rule of law, particularly in remote rural areas where the security presence is weaker. The quest for increased law and order has, as a result, begun undermining the government's monopoly on violence, and it is imperative that the security response to the crisis is made more effective and impactful to protect the lives of all Nigerians.

In a context where law and order fails to deliver expedient and unbiased accountability, as well as redress for victims, many communities have taken to using armed militias not only for protection, but also to exact justice. Out of this has been borne a vicious culture of attacks and reprisal attacks, where communities resort to violence to settle scores. The result is that all people become aggrieved in one way or another, and the divide between citizens and government and between citizens grow wider. Attempts to promote a speedy and transparent judicial process include efforts, such as by Plateau State, to hold persons to try persons locally. Whereas such efforts are important in ensuring justice is seen at the local level, they must not jeopardize due process and the guarantee of a fair trial.

16. Operation Rainbow is an initiative of the Plateau State Government that was established in 2010, backed by a presidential approval. The outfit is fully funded by the Plateau State Government, with personnel drawn from the Nigeria Police Force (NPF), Nigerian Security and Civil Defence Corps (NSCDC), Department of State Services (DSS), Prisons, National Drug Law Enforcement Agency (NDLEA), Nigerian Prison Services and the Federal Road Safety Commission (FRSC).

3.2.3. Strategic Priorities in Strengthening Justice and Peace

1. Reducing the proliferation of Small Arms and Light Weapons

Essential to promoting law and order lies in addressing the proliferation of Small Arms and Light Weapons (SALW). The easy access to weapons reduces the thresholds for communities and people to take matters into their own hands and use violence in search of justice and accountability. It also constitutes a serious threat to the work of the Nigerian Police Force, National Security Civil Defence Corps, military, and other institutions in upholding public safety and security. As such, it is a national imperative to curb the spread of SALW, particularly in the affected states.

This strategy addresses the spread and accessibility of SALW in four key areas. First, it will support the establishment of effective SALW structures at the national and state levels in line with the ECOWAS Convention on Small Arms and Light Weapons. This will help strengthen the regulatory framework and ensure that SALW are managed in compliance with international best practice. Second, efforts will target the security institutions to ensure that intrastate, interstate and international dimensions of SALW are effectively addressed, including tracing and tracking of stockpiles. Third, weapons collections initiatives will help reduce the arms in circulation. These efforts will include profiling exercises and synergize with other elements under this strategy, such as vocational training, education, psychosocial support etc. to ensure that viable alternative livelihoods are made available. In light of the foreseen economic growth and diversification into new markets, livelihood support options will aim to establish the human capital needed to support an emerging labour market, including the professionalization of private security for businesses to promote a conducive environment for investments. Finally, efforts will specifically address the local manufacturing of SALW, which is particularly prevalent in the target states. Through a combination of making alternative livelihoods available and scaling up community policing and intelligence efforts at rooting out local manufacturers and gun-runners, it is envisioned that the supply of weapons, particularly the most affordable ones, will be reduced.

2. Enhancing coordination and accountability of security response

The perception of a biased or ineffective security response in this crisis is prevalent at the community level, and overwhelmingly so in certain areas. Public trust in the security apparatus is at the very core of the social contract. This is to ensure that security agencies operate effectively, without prejudice and bias, to help prevent and respond to crises is essential. As a matter of priority, the security response to the crisis must be made more coordinated, transparent, and accountable to the communities it intends to serve. To this end, security operatives charged with this responsibilities must be explicitly neutral and above board.

Efforts to improve the security response in this crisis will target three main areas: coordination, operational capacity, and accountability. Coordination efforts will be linked to early warning early response systems outlined in this strategy, but will more broadly entail support across the gambit of national agencies to include strengthened border management, improved platforms for interagency collaboration, and improved monitoring of movements of people and goods within Nigeria. This necessitates an increased operational capacity for security agencies to enable rapid and efficient reach into rural areas. Lack of operational capacities impede security agencies from effectively fulfilling their duties and significantly undermine the promotion of law and order. The transparency of the security response will be enhanced through publicly making information available about ongoing

operations, including but not limited to increased town hall meetings as well as establishment and continuation of dialogue platforms to engage communities in the security response and ensure that this response addresses their needs.

Such processes will build upon investments in effective community policing, and help to also ensure accountability of the security response, which will be further strengthened through establishment and empowerment of internal oversight functions within security agencies to ensure human rights compliant operations and ensure that any human rights issues are properly investigated, and perpetrators are sanctioned. These efforts will align to relevant legal and policy frameworks, such as the National Counter Terrorism Strategy (NACTEST) and the Policy Framework and National Action Plan for Preventing and Countering Violent Extremism to ensure a coordinated approach with targeted support to states to operationalize these efforts.

3. *Criminal Justice Administration*

The notion of justice extends beyond the security agencies, and in order to restore public faith and trust in institutions, efforts must also address effective administration of justice within the context of upholding law and order. A systemic lack of justice and accountability of perpetrators have created an environment of lawlessness and violence, and this must be broken through concerted efforts at strengthening rule of law and establishment of effective redress mechanisms to promote justice. It is imperative that people are quickly, effectively and transparently held to account for violation of Nigerian law in all its aspects. This becomes particularly important in remote rural areas where many of the clashes occur amidst strong perception of weak state presence.

In promoting an effective justice response to the crisis, this strategy foresees support under two main areas. First, it will leverage local justice and redress mechanisms already in place, including traditional/customary structures, to ensure that the administration of justice is as local as possible within the confines of existing legal frameworks. As traditional leaders are largely seen as being closer to the community than many government institutions, efforts would explore to what extent minor level disputes can be addressed by these structures through alternative dispute resolution processes that are anchored in the national legal architecture. It is foreseen that capacity building around alternative dispute resolution will be provided to traditional rulers, religious leaders and law enforcement agencies posted in the communities to help promote expedient access to justice whilst combining traditional and modern institutions. Second, the plan foresees targeted support to states in the process of investigating, prosecuting and adjudicating crimes related to access to and use of natural resources, as well as high-profile cases. Efforts will be placed on ensuring expedient and transparent due process without bias to ensure that the legal system works for everyone.

4. *Effective Compensation Framework Promotes Reparation*

In recognition of the vast economic losses that the crisis has incurred, particularly affecting rural and vulnerable populations most, there is need to provide a robust compensation framework to provide relief to those who have been aggrieved through loss of life, property or livelihoods. Such a mechanism would help mitigate the adverse impact of the crisis by quickly injecting economic compensation to victims of the crisis, possibly averting an escalation of the crisis. Moreover, it is foreseen to help revitalize confidence in local adjudication and dispute resolution mechanisms which will help restore law and order.

To support such efforts, this strategy calls for the setup of state-level compensation funds to support in compensating victims for losses. This fund shall be resourced from state-based tax revenue that will be increased by the transformation of the livestock sector. In particular, beef, dairy, hides, and other economic outputs from the transformation would be levied with a tax to ensure that the compensatory framework at the state-level is well-financed. A state-level process would determine the available compensation from different occurrences (crops trampled, cattle rustled, etc.) through an inclusive dialogue process leveraging on traditional institutions and mechanisms who have traditionally served as adjudicators in local level disputes. The compensation structure and disbursement process should be structured in such a way as to disincentivize fraudulent claims, and disbursement to individuals must only be made through an alternative dispute resolution process led by a competent authority at the local level with vested powers to adjudicate such matters.

3.3. Supporting Pillar Three: Humanitarian Relief and Early Recovery

3.3.1. Context

In recent times, deadly clashes between farmers and pastoralists became a major feature of inter-group relations been the country's drivers of Nigeria's agricultural sector. Injuries, deaths and displacements of people from their communities and sources of livelihood constitute some of the direct consequences of the farmers/pastoralists conflict. It was reported that in 2018 alone the number of attacks against peasant civilian population in Kaduna, Taraba, Plateau, Benue , Nasarawa, Adamawa and Zamfara states were 48% higher than the number of attacks linked to Boko Haram in the North East region¹⁷.

The implementation of the NLTP would no doubt be an important entry point in addressing some of the immediate challenges faced by communities affected by the conflict in ways that helps the recover from the shocks associated with displacements from their places of abode and livelihoods among others. It is envisaged that the federal and state governments would work with relevant stakeholders in systematically assessing the humanitarian situation with specific focus on documenting the impact of the conflict as well as needs of the persons and families affected with a view to putting in place measures for compensation.

3.3.2. Responses

Within the framework of state responsibility to protect and provide for its citizens, governments at all levels have responded to the impact of the conflicts between farmers and pastoralists in varied ways. One common approach with respect to civilian protection has been the deployment of security agencies towards cessation of violence and stability. The provision of life-saving support and relief to victims of the conflict has also been a major priority. Such responsibility is often discharged through the National Emergency Management Agency (NEMA), State Emergency Management Agency (SEMA), Local Emergency Management Agency (LEMA) at the federal state and local levels. The primary mandate of these agencies is the provision of immediate relief to victims.

Though population displacements have been a common feature and impact of conflicts in Nigeria, currently there is no national policy on the management of displacements, which explains or underscores the absence of a comprehensive policy and programme that addresses some of the fundamental needs of displaced persons. Most of the reliefs provided are meant to address short-term needs such as food and clothing, while temporary shelters are provided through the use of public buildings such as schools.

17. www.erceportal.jrc.ec.europa.eu/ECHO-Flash/ECHO-Flash-List/yy/2018/mm/7

3.3.3. Strategic Priorities in Providing Humanitarian Relief and Early Recovery

Conflict between farmers and pastoralists brought about a humanitarian crisis that was linked with deaths and mass displacements. Conditioned by this reality, the need to put in place framework for humanitarian and early recovery becomes imperative. This framework as highlighted below, acknowledges and adheres to both nationally and internationally recognized and humanitarian principles around state responsibility to protect and provide for its citizens in emergency situations.

Addressing the immediate needs of the victims of conflict

The conflict has exerted a heavy humanitarian toll, both on communities that have been displaced as well as other communities whose security, livelihood and overall wellbeing has been compromised by the violence. Insecurity continues to prevent communities from farming, rearing livestock and fishing, further exacerbating local economies and hampering food security. Addressing the immediate concerns and needs of these communities constitute one of the most important humanitarian responsibilities of governments at all levels. While the majority of affected people sought refuge with host communities who provided support within their limited resources, displaced persons both in camp and non-camp settings continue to display huge unmet needs, warranting targeted and scaled up humanitarian efforts. These efforts must address the immediate needs of highly vulnerable populations, including support in areas such as livelihood, shelter, food, education, water, sanitation, and health among others. These constitute the immediate needs that key entities such as NEMA, SEMA and LEMA should handle, with strong support by the National Assembly and State Houses of Assembly¹⁸.

Voluntary, safe and dignified return and resettlement

Within the framework of International Humanitarian Law (IHL), all displaced persons as a result of conflict or disaster have a right to voluntary, safe, and dignified return and resettlement in their original places of abode. Recognizing that the state has the primary responsibility for actualizing this, the federal government, in concert with the states and local governments would facilitate the realization of these rights within the broader framework of its humanitarian action. In this light, a framework that outlines the processes and mechanisms for the safe and dignified return and re-settlement of all displaced persons would be implemented. Such a framework would build closely on elements under Pillar II, linking the voluntary, safe and dignified return to dialogue efforts as well as Pillar III to ensure that such processes are undertaken with adequate security and protection mechanisms in place.

Protection

In accordance with its primary responsibility of protecting citizens, the federal government is committed to the protection of all persons affected by the conflict. Within the broad framework of the NLTP, the notion of protection would be linked to all efforts and activities designed to create a conducive environment for preventing further harm to people, as well as addressing the immediate impact of the conflict.

In order to achieve the foregoing, the federal government would work with other levels of government, development partners and civil societies, towards the enhancement of civilian protection, with mandate to establish mechanisms and framework for inter-agency collaboration, cooperation and synergy in the protection of the civilian population affected by the conflict or prone to it. This work

18. There should an independent verification system to ascertain casualty figures.

would center on four main areas. First, and as a matter of priority, initiatives targeting physical security will be strengthened to prevent further loss of lives, property and displacement. This work will leverage closely upon efforts under Pillar III in providing a more effective and efficient security response to the crisis. Second, and in light of the disproportionate impact this crisis has on women and girls, targeted support would be scaled up to prevent sexual and gender-based violence. The ongoing crisis has exposed some of the weaknesses in the protections of women and girls, and they remain highly vulnerable to sexual exploitation and abuse. Third, a robust child protection framework will be put in place to support children and younger populations, specifically including efforts around family reunification for displaced populations. Finally, given the magnitude and scope of attacks, there is need to support affected populations with psychosocial healing initiatives and trauma recovery. Whereas Pillar II includes dialogue as a means for collective healing and promotion of social cohesion and reconciliation, efforts will also need to address individual needs through making provisions for access to mental health services and support groups. Although civilian protection is the primary duty of the state, development partners and civil society have a role to play, in terms of the provision of support for enhanced coordination in achieving the desired goal.

Early Recovery and Livelihood Support

Communities affected by the impact of conflicts between farmers and pastoralists face a major challenge to early recovery. The destruction of vital elements of economic productivity not only endangers livelihoods and entrenches already compounded vulnerabilities, it also hampers the local economic output and the prospects for collective prosperity.

This strategy will therefore target investments towards areas of early recovery and livelihood support with specific focus on resettlements and reconstruction. The huge potential of the agricultural sector will guide these efforts, ensuring that investments help to restore livelihoods at the local level, but also contribute to enhanced food security, increased agricultural productivity, and improved economic diversification at the macro level. Although investments in the agricultural value chain are key in the early recovery efforts, other sectors will also be prioritized to rebuild damaged properties and improve upon local infrastructure as a means to provide an enabling environment for early recovery and economic growth.

Enhanced Coordination and Information Management for an Improved Humanitarian Response

The humanitarian architecture is well laid out, dividing roles and responsibilities between national, state and local levels. Although the broader provision of services is an interagency process involving various ministries, departments and agencies, the coordination and impetus on delivery of services in humanitarian contexts rests with the National Emergency Management Agency (NEMA), the State Emergency Management Agency (SEMA) and the Local Emergency Management Agency (LEMA).

In addressing the ongoing humanitarian needs, closer coordination and collaboration is needed. This will include efforts to ensure vertical coordination through the NEMA, SEMA, LEMA links, as well as horizontal coordination at the various levels ensuring that national, state and local structures coordinate with relevant line ministries. Central to effective coordination of humanitarian assistance is timely, accurate and reliable information and analysis that promote an evidence-based humanitarian response. This strategy foresees support to enhancing the information management and analytical capacities at the different levels to ensure that information is made available, readily shared to partners, and used as an effective tool to alleviate the suffering of victims of the crisis.

3.4. Supporting Pillar Four: Human Capital Development

3.4.1. Context

Human capital integrates concepts such as human resources; including knowledge, skills, attitudes and motivation; human capability and productivity engendered through knowledge and skills acquired from education, training and experience; It is that intangible factor of the production process that contributes human to intellect, skills and competencies in the production and provision of goods and services. Thus, anything that contributes to the improvement of human productivity, stimulate resourcefulness and enhance human dignity and overall quality of human life while refining attitudes, is an integral part of the human capital.

The belief in human capital as a necessity for growth started in Nigeria during the implementation of the 1955-60 development plans and today, with the importance of knowledge in the economy, human capital has increasingly attracted both academic and public interest. The introduction of modern practices especially around ranching, would require capacity development in crop and livestock production, value chain development and ranching practices more broadly. Human capital development is therefore one of the fundamental issues to be addressed by this plan.

3.4.2. Strategic Priorities

The overarching priorities of the human capacity development is to help improve the efficiency of the livestock value chain, to improve production and make production sustainable. Priorities will focus on entrepreneurial and technical innovations, as well as business development and management practices. These will draw on practical training and extension and outreach services, and a particular focus on young people.

Educational programmes and support to the sector – from Federal and state budgets

Educational personnel capacity development (teaching and non-teaching). This includes facilitating the deployment of teachers to nomadic school from State Universal Basic Education Boards and Local Government Education Authorities (SUBEBs and LEGAs); identification of training needs of personnel, development and production of training manuals, and training and retraining of nomadic teachers, head-teachers, nomadic education supervisors and coordinators on pedagogical renewal. Pedagogical renewal will focus on meeting the educational and social needs of nomadic herder's children in a way that improves livestock production in the medium to long term. Given the nature of this support, the bulk of the financing will need to come through the federal and state ministries of education and SUBEBs budgets, as well as the National Commission for Nomadic Education (NCNE). The dearth of ranch and range management professionals and practitioners in Nigeria and limited academic and research programmes available in these critical areas in our education and research institutions will need to be addressed as a priority.

Herder education systems

This will complement the first priority above and will be specific to ranches or grazing reserves. It will centre on the provision and strengthening nomadic and sedentary education infrastructure. It will involve the identification and school mapping in grazing reserves, condition survey of construction sites in the grazing reserves. There will then be an upgrading and rehabilitation of existing infrastructure in the grazing reserves. The ultimate aim will be to ensure that the educational needs of the herders especially their children, are met in a sustainable and meaningful way.

Capacity building

As mentioned earlier, the introduction of modern livestock systems through this plan, will require capacity building of herders and other stakeholders involved in ranching and associated value chains. Capacity building will focus on areas such as livestock management, range management, farm management, which are important for long term sustainability of the programme. Capacity building will also happen along the whole value chain and would include areas such as meat and milk production, processing and marketing. This priority will draw support from agricultural research institutes and colleges, who provide training. It will also draw extensively on the agricultural extension services of the state ministries of agriculture.

Vocational training and skills acquisition

This will draw and attract investment from the private sector and public-private-partnership arrangements to support the transformation process. It will also link with Universities and research institutes and other livestock institutions like the veterinary colleges. Vocational training will especially target young people who might be interested in cattle ranching or getting involved along the value chain, such as the production of feedlot for cattle, or low cost but efficient handling and processing of meat and milk products, as well as marketing. This priority will leverage support from vocation skills training initiatives in agricultural research institutes, colleges as well as universities.

Linkages with N-Power programme

A main priority of this pillar will be ensuring linkages and leveraging from the Federal Government's N-Power initiatives. The N-Power Agro Volunteers is aimed at providing advisory services to farmers across the country. They will disseminate the knowledge that has been aggregated by the Federal Ministry of Agriculture and Rural Development in the area of extension services, and will also gather data of Nigeria's agriculture assets. The N-Power Teach Volunteers initiative will help improve basic education delivery in Nigeria, and where possible, they will also assist in taking basic education to children in marginalized communities.

3.5. Supporting Pillar Five: Crosscutting Issues

3.5.1 Content

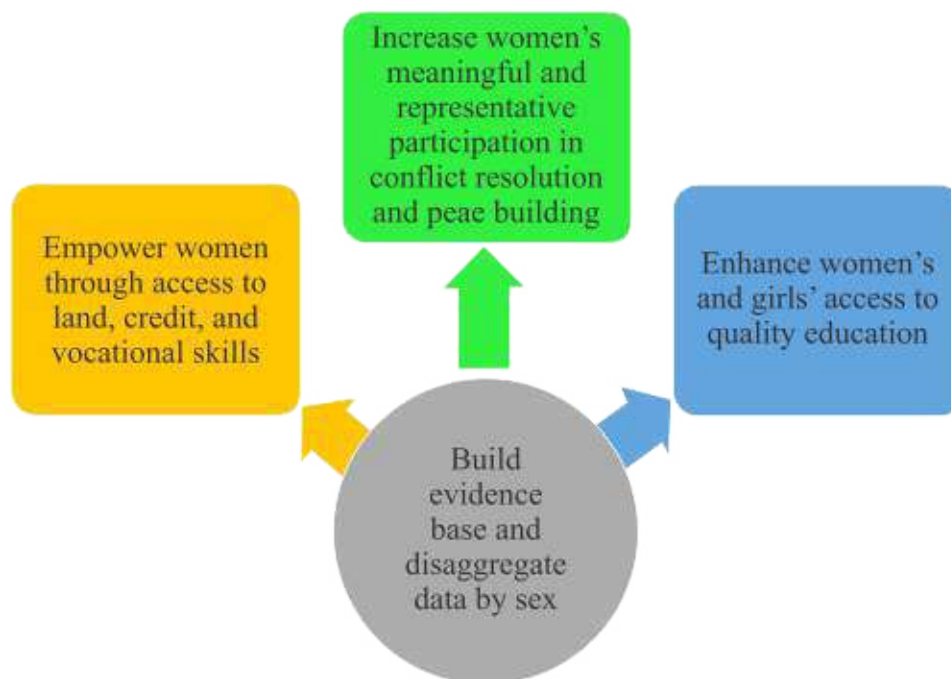
Various crosscutting issues necessary to realize the objectives of this programme range from gender and youth issues, targeted research, and information and strategic communication. The mainstreaming cross-cutting issues means that the NLTP initiatives should have a positive effect on issues such as gender equality and youth. This requires a strategy to make these themes an integral dimension of the NLTP pillars' design, implementation, as well as monitoring and evaluation. Targeted research and information and strategic communication are necessary to ensure that relevant analyses and studies are conducted and that the NLTP implementation and results are adequately communicated to citizens and other stakeholders.

3.5.2 Responses

3.5.3 Strategic Priorities

3.5.1. Gender

The NLTP recognizes that the impact of conflict is different for women than men and that this has been linked to women being more vulnerable due also to the socially constructed gender roles. Gender-based discrimination in access to resources, education, and exclusion from decision making processes have made displaced women one of the most vulnerable groups in the world. For example, according to the World Food Programme (2017), If women farmers had the same access to productive resources as men, agricultural production in developing countries would increase by 2.5 to 4%, translating to a 12 to 17% reduction in global hunger, or 100 to 150 million fewer hungry people.



As an overarching initiative, the NLTP implementation will build the evidence base and disaggregate data by sex, to track who is reached by the interventions, including making the information publicly available.

The public private partnerships under the NLTP must create the incomes for women, including improving access to finance, tackling discrimination to create economic opportunities for the empowerment of women. The empowerment initiatives need to address the problems of inadequate capital, the challenges to accessing credit facilities, as well as the cultural pressures and stereotypes which discourage women from going into ranching. This should include any other barriers to women working in the livestock sector through targeted programming and advocacy.

Implementation should ensure that land tenure security is improved for women, because without access to land, which is one of the most important input factors for performing agricultural activities; women are restricted to being laborers and this restricts their economic productivity and sustains unequal power dynamics.

The NLTP implementation activities should ensure that women and girls have access to good quality education, including ensuring that the capacity building as well as vocational skills training initiatives adequately and meaningfully include women and girls. In addition, NLTP implementation needs to ensure that women have access to agricultural extension services, perhaps through special services targeted at women.

In relation to conflict, implementation needs to ensure that the needs of women and girls are heard, and increase their meaningful and representative participation in the conflict and protracted crises. In particular, the NLTP implementation should pursue mechanisms which break down the barriers caused by gender-based violence, cultural pressures and lack of resources; all of which limit women's participation in peace processes. The creation and maintenance of mechanisms for the protection of women's rights in conflict situations should also be pursued.

Strategic Priorities

The following interventions should be undertaken as part of implementation, to ensure that gender is adequately reflected.

Build evidence base and disaggregate data by sex. This will link to the overarching initiative under research around having a Management Information System (MIS) in place, to capture all information relating to the implementation. The MIS should be designed in a way that ensures all data captured is disaggregated by sex and age. This will ultimately contribute to the evidence base around who is reached by the programme, with gendered considerations.

Empower women through access to land, credit, and vocational skills. This should link to the ranching options initiatives, as well as the human capacity development initiatives; to ensure that women have access to land, credit and other inputs, so they can get involved in ranching and other livestock production activities. The vocational skills training initiatives should ensure that women are fairly and meaningfully involved.

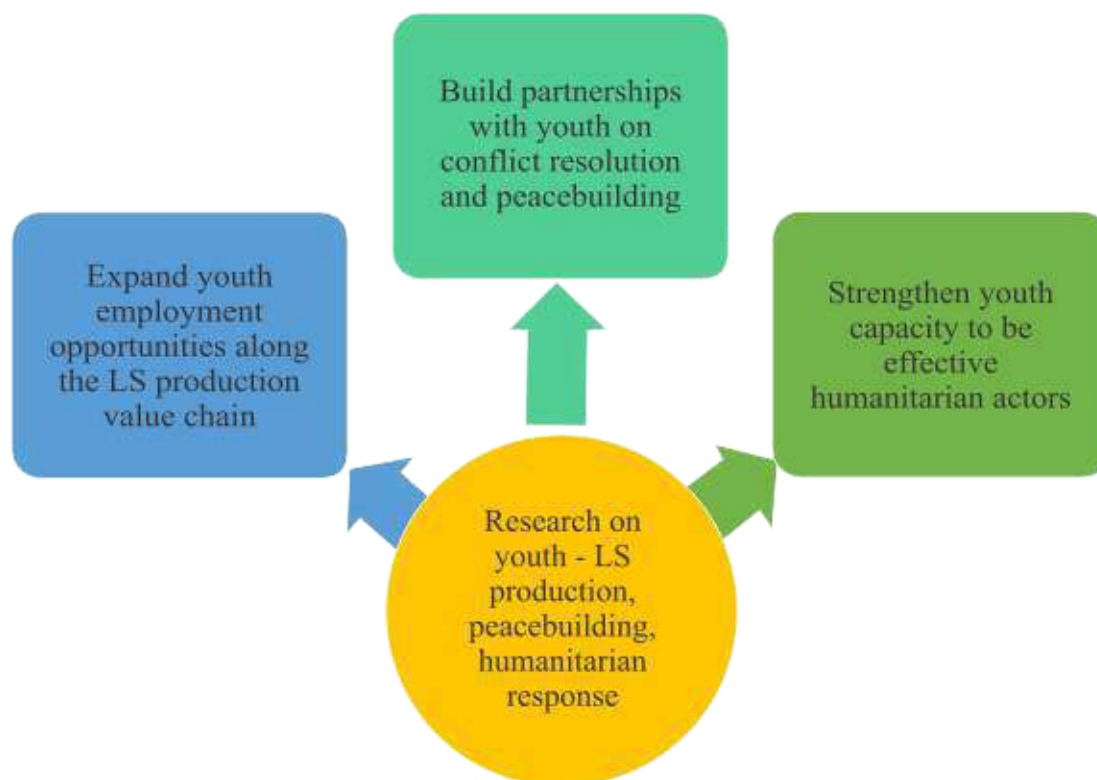
Increase women's meaningful and representative participation in conflict resolution and peace building. States should facilitate capacity building for women and women organizations to be part of the conflict resolution and peace building activities.

Enhance women's and girls' access to quality education. The implementation activities should ensure that all the support initiatives aimed at improving access to education for farmers and pastoralists, adequately captures women and girls.

Increase protection for women and girl's rights especially as it relates to gender-based violence complaints arising from displacement due to farmer herder crisis. States should strengthen security mechanisms to mitigate the risks of gender-based violence arising out of internal displacement caused by farmer herder crises. Security agencies must proactively respond to issues of gender-based violence and ensure that there is access to existing justice mechanisms and swift resolution of complaints. The existing human rights protection for women and girls must be greatly improved on to handle all gender-based violence complaints.

3.5.2. Youth

In implementing the NLTP, the importance of youth participation in successfully carrying out this plan is recognized. Indeed, the plan shares the sentiment of the former UN Secretary General Kofi Annan, "...a society that cuts itself from its youth severs its lifeline, but a society that engages their interest, enlists their talents and liberates their energies brings hopes to the entire world." Therefore, preference should be given to public-private partnerships which heavily utilize youth in their programmes and also make provision for their education and entrepreneurial mentoring. In order to encourage youth participation in the livestock sector the current traditional investment models need to be revamped as youth are constrained by access to affordable capital to start and expand businesses.



Efforts will need to be made to ensure that youth can access employment opportunities at every point on the livestock value chain. There must therefore be investment into the education and enterprise of young people. The implementation should see youth as the potential solution and not the problem as regards the farmer herder crises; thus, youth contribution to intelligence gathering and conflict resolution and peace building programmes must involve youth.

The NLTP should encourage programmes which promote proactive partnership with the youth in order to address issues of insecurity and clashes. The NLTP will thus support community policing to encourage citizens especially youth participation in restoring law and order. Youth are instrumental in helping the security operatives to understand the roots of the challenges of several communal issues including drug abuse, gender base violence and the incessant farmer herder crises. The youth should be empowered with dispute resolution skills and mediation skills amongst other skills.

The NLTP implementation should commit resources to strengthen youth capacities to be effective humanitarian actors and also support local youth led initiatives in humanitarian response. Programmes which recognize youth as indispensable stakeholders, decision makers, problem solvers, change agents and humanitarian actors will be prioritized.

The following sets of activities and interventions should be undertaken as part of the implementation of the NLTP.

Undertake research on youth. This process should be at the core of the support to youth as part of implementation. It should be done at the beginning and then on an on-going basis so as to capture emerging issues. The research conducted should focus on the impact of conflict on youth, and on the challenges that youth face participating in livestock production, peace building and conflict resolution, and increase capital development with a view to building leadership and other life skills which will empower youth to be effective actors in decision making that affects their lives.

Expand youth employment opportunities along the livestock production value chain. This initiative should link into the human capital development and other ranching interventions, and ensure that youth are adequately captured as part of the vocational skills trainings, as well as other capacity development initiatives. The N-Power initiatives mentioned under the human capacity development activities will be very instructive.

Build partnerships with youth on conflict resolution and peacebuilding. States should identify, train and support local youth community policing groups with knowledge and skills with a view to strengthening the youth and police partnership, as a strategy to prevent crime and restore order. Strengthen youth capacity to be effective humanitarian actors. States should facilitate capacity building for youth and youth-led organizations to be part of the humanitarian response activities. This could be to deliver peer to peer services such as non-formal education and intelligence, but also to actively take part in other specific humanitarian activities.

3.5.3. Research

A core objective of this plan is to develop and deploy research-based solutions that will drive the transition of smallholder producers, value chain actors, pastoralists and agro-pastoralists from near subsistence to productive small to medium scale enterprises for resilient livelihoods. Research-based interventions should help in increasing feed and residue yields from crops grown on arable lands, reducing losses from disease and parasites and improving the genetic potential for milk and meat yields. These improvements should have positive ramifications for long-term sustainability - both environmental and economic.

The research component will cut across the whole of the value chain and will focus on key areas such as flexible and adaptive inputs, feeding and innovative production systems including health systems; as well as processing and market systems. Priorities will thus include feed supply, animal health, genetic improvement, livestock management, crop/livestock farming systems, natural resources and policy. Another critical focus of research will be on the conflict continuum from early warning systems to the nature, causes and consequences of conflict including mitigation and resolution strategies. Underpinning all of these would be policy research on resource management.

Input supply

A primary constraint to livestock production is the fluctuating quantity and quality of all-year round feed supply; which is at the heart of the farmer-herder crises. Cattle and other ruminants will continue to depend primarily on forages and crop residues. However, energy and protein concentrates are required to supplement the diets of high-yielding dairy cattle. Pertinent issues for research on the input supply on the value chain includes access to land, seed and fodder supply.

Research priorities will focus on the land tenure systems and their interaction with agricultural and livestock production; as well as the differential issues involved in fodder production across climatic zones. The complementary infrastructure and other incentives to producers such as credit, will also be a focus of research.

Animal health.

Diseases and parasites (trypanosomiasis, tick-borne and the tick-associated diseases) are major constraints to livestock production. Research is needed to improve the efficacy of existing preventive

and therapeutic treatments and to develop new diagnostics and vaccines. Research would concentrate on diagnostic techniques, preventive management and genetically mediated resistance.

Genetic improvement.

Genetic adaptations to disease and climatic stresses are particularly important, to ensure better production. Research focus will include the crossing of high-yielding "exotic" breeds with well-adapted indigenous genetic resources. The identification, characterization and development of indigenous genetic material will also be a priority of research.

Livestock Production systems

Evidence from the extensive consultations for this plan suggest that farmers are already cultivating better grazing lands, thereby limiting pastoral herds to marginal lands - even these marginal lands are increasingly threatened by the expansion of cultivation. Research will focus on the typology of livestock production systems, including the options for ranching, as well as increasing the productivity from the better endowed and more robust lands and to improve the management of soil, water and vegetative resources on the more fragile lands. Research priorities will also include long-term monitoring studies on transhumance incorporating geographic information systems and remote sensing; This will document herding practices including the seasonal movement of herds, assisting in planning demarcation and tracking and tracing systems.

Processing and Marketing

Integral to the research on production systems will be research on processing options within the various systems. Low cost options for meat and milk processing will be priorities for research.

Marketing research is essential to provide vital information on the operations and efficiency of the livestock marketing system, and for planning and policy formulation. Table 2 below shows the components of a typical livestock marketing system. Research will particularly focus on the typology of markets and the flow of livestock from producers to the different markets.

Table 2. Characteristics of livestock markets¹⁹.

Type of market	Main sellers	Main buyers	Purpose of purchase
Primary collection markets	Producers	Other producers	For stock replacement or fattening
		Local butchers	Slaughter
		Traders	Collection for resale in larger regional markets
Secondary distribution markets	Traders	Local butchers	Slaughter
		Traders	For resale in terminal markets
Terminal markets	Traders	Local slaughter houses	Slaughter
		Traders	Export

19. Solomon Bekure and Negussie Tilahun. Available at <http://www.fao.org/wairdocs/ilri/x5542b/x5542b0j.htm>

Research on conflict

Research is necessary to characterize the nature of conflicts – farmer-herder, farmer-farmer and other types of conflicts. The role of different actors in the conflict and the impacts of conflict also require regular research. This will inform early warning as well as conflict mitigation and resolution strategies. The research on transhumance will compliment this as evidence from consultations show that majority of the farmer-herder conflict is caused by herders from outside the country.

Policy research

The absence of sound economic policies in support of livestock production is known to impede issues like investment in infrastructure; proper incentives to producers; adequate supplies of production inputs and the delivery of animal health services; effective marketing and credit facilities; as well as increased animal productivity through biological research. Insecure tenure, multiple ownership, common property and a lack of clearly defined and secure property rights result in the overexploitation, underinvestment in and general mismanagement of resources. This is exacerbated by a poor understanding of the appropriate role for institutions that govern the use of land, water, rangelands and other resources.

Resource management policies, including land-use rights, and how they affect resource use and how changes in policies might advance environmental objectives; are all required. Policies on credit, pricing, as well as monetary policies on resource use and the environment, especially for the mixed production systems, would be important areas of focus.

The Role of Research institutions

In the contemporary context research is not merely intended to develop and promote technologies to farmers but also empower farmers to better understand and respond to changing circumstances as they emerge. The Nigerian National Agricultural Research Institutions (NARI) and International Agricultural Research Centres (IARCs) have a role to play in ensuring that the research processes utilize basic, strategic, applied and adaptive methods, would be brought to bear on research problems. The research pillar will seek collaboration with NARIs and IARCs.

Many of the 15 agricultural research institutes in Nigeria are commodity based. For example, the National Veterinary Research Institute (NVRI) has mandate for large animals – cattle and other small ruminants, while the National Cereals Research Institute (NCRI) is into rice and other cereals improvement programme. The Institute of Agricultural Research and Training (IAR&T) focuses on sustainable farming system research and extension for effective adaptation and dissemination of improved technologies along the agricultural commodity value chain of Southwest Nigeria.

The 15 NARs, 3 are livestock - based namely NCRI, NVRI and IAR&T. These NARs will have a critical central roll to play in this strategy

IARCs, supported by the Consultative Group on International Agricultural Research (CGIAR), conduct strategic and applied research that complements and supports the efforts of NARS. The International Livestock Research Institute (ILRI) is the major IARC focusing on livestock in Nigeria. A core objective of ILRI to develop, test, adapt and promote science-based practices that achieve better lives through livestock.

3.5.4. Information and Strategic Communication

The consequences of pastoralist-farmer conflicts, including the negative impacts on the overall livelihoods of both pastoralists and crop farmers and by extension sustainable development of the country; has been well discussed in other sections. There are on-going efforts at solving the problems, including strategies contained in this plan. It is important that policy makers and communicators re-examine how information is generated and communicated in a way that educates the public with accurate and up-to-date information.

Information and strategic communication (ISC) plays a crucial role in bringing about changes in behaviours in relation to conflict, both in terms of prevention and management. ISC comprises a range of approaches, activities and outputs. Although the most visible component of ISC is often the materials produced and used, such as pamphlets or posters; materials are only a component of ISC. Effective ISC makes use of a full range of other approaches and activities, which may range from the use of mass media to inform and establish positive behaviours among the citizens, or the use of targeted interpersonal communication among groups of farmers and herders.

ISC activities may also include designing and providing training in communication skills, carrying out research on audiences to determine what information is needed and the most effective way of communicating such information. Overall, ISC must be integrated with all existing pillar interventions and with all conflict prevention strategies. For example, an awareness on reconciliation initiatives or the existence of grazing reserves and the facilities, or market channels for herders are all important aspects of a robust communication plan and implementation.

The goal of this intervention area is to provide information, education and strategic communication on the strategic focus as well as the implementation of the initiatives as contained in this plan. A particular focus will be on the socio-economic potentials along the livestock production value chain, as a strategy for mitigating the consequences of herders and farmers conflicts. Specifically, the pillar will focus on the following key activities:

Data generation and Management

This includes the registration of participating pastoralists along households, clusters and settlements; registration of participating crop farmers along households, clusters and settlements; registration of existing cooperative groups, associations and organizations. It will also include the gathering of data along the whole livestock production value chain, from inputs to marketing. Aspects of conflicts, including early warning and mitigation measures will also be captured. All of these will be underpinned by a Management Information System (MIS), which will provide a platform for generating and managing the wide variety of information required under this plan.

Content development

The effectiveness of ISC materials depends on relevance, appeal, uniformity, and simplicity of the content and language. The accuracy of information, length of the material, cultural appropriateness as well as the modes of dissemination are also critical. Workshop on Identification of thematic areas based on emerging issues. With a robust data management system in place, the base for effective communication would have been established. All of the information then needs to be adapted through the development of specific materials targeting specific groups like farmers, herders, communities,

policy makers and the general population. Content development will include initiatives such as workshops on the scope, sequence and plans for dissemination; as well as workshop on scripting and development of jingles, short drama series and documentaries.

Strategic communication

This will be done with two important aims – sensitization and perception management. Whereas sensitization is aimed at sensitizing the various groups of stakeholders, perception management will be aimed at changing the negative perceptions of stakeholders on conflict while promoting dialogue.

Sensitization management will involve stakeholder mapping and analyses, the production of IEC materials, the production of documentary and jingles (audio and visual), as well as the production and packaging of sponsored radio-magazine programme tagged “for the nomads in their homestead”, and short drama series. Sensitization will also involve the conduct of face-to-face campaigns on peaceful coexistence, farmer-pastoralists dialogue fora on peace building, as well as the training of pastoralist and farmers on peaceful coexistence. Other initiatives will include stakeholder engagement (Non-Governmental Organizations - NGOs, Community Based Organizations - CBOs, Faith Based Organizations - FBOs, opinion leaders, youths, women and cooperative groups).

Perception management will involve media engagement, the IEC materials, radio and television (TV) jingles and commentaries, editorials, advertorials and features, as well as media chats and dialogue. It will also involve stakeholder engagement and dialogue, the production of documentaries as well as conducting meetings, seminars, conferences and workshops.

In Phase one, the NKLTP will initially support the development establishment of 4 categories of ranches (small, intermediate, medium and large)

4. NLTP IMPLEMENTATION AND PILOTS

The NLTP presents the strategic direction for modernizing livestock production through the establishment of ranches and improved supporting environment for enabling nomadic and transhumant pastoralists to transition into more modern livestock practices; and to mitigate the ongoing crisis between pastoralists and crop farmers.

This Strategy will be supported by the development of an Implementation Plan (IP) that provides a guiding framework to states for implementing the National Livestock Transformation Plan (NLTP).

The plan will be implemented in phases reflecting the need to balance stabilizing the security challenge and extending the role of the private sector. In phase one, the NLTP will initially support the establishment of ranches with development of grazing reserves in each of the 7 pilot States (Adamawa, Benue, Kaduna, Nasarawa, Plateau, Taraba and Zamfara), with 4 categories of ranches (small, intermediate, medium and large) developed in each of the selected Grazing Reserves. States can also opt-in with private land provisions to help shape the success of the pilot phase.

In parallel, the IP will also have a second track outside of the 7 states; that track will provide support to the remainder of the federation on the key supporting and related industries, investments and capabilities required to build a livestock ecosystem. Whether it is a meat packing plant in Ibadan or Enugu, or a genetics laboratory co-located with a University of Agriculture, or a food warehousing plant in Ikeja or Onitsha, the goal is the same: provide strategic guidance, capital support, and connectivity to ensure the success of the venture. The IP and the project office will systematically track progress towards the emergence of a modernized livestock cluster so as to guide investors appropriately.

The developmental objective of the proposed programme is to improve the performance and sustainability of livestock production and value addition in Nigeria underpinned by technological interventions in livestock genetics, reproduction, health and nutrition combined with integrated solutions and enabling conditions (markets, policies, incentives, infrastructure and facilities, etc). The purpose of this activity is to improve the livelihoods of livestock producers and postharvest operators in Nigeria. The establishment of pilot ranches will also improve the genetic merit of indigenous cattle for milk and meat production and the reproductive performance of indigenous cattle.

The purpose of the IP is to provide the basic steps to making the NLTP operational. It sets down the main framework for NLTP implementation. The IP will be followed by more detailed guidance for each of the pilot States based on their peculiarities. The IP presents the main outcomes that need to be pursued and what new institutional arrangements will be needed to ensure that the plan is an effective mechanism for realizing the goals of the NLTP. In so doing it builds upon, and takes to a new level the broader goals of the national Agriculture Promotion Policy (2016-2020) – the Green Alternative, which has highlighted the low productivity of the livestock sector in Nigeria and outlined major structural and technological challenges facing the sector, dominated by nomadic herdsmen.

The IP provides the basis, initially for the pilot States, to integrate the NLTP into their existing state administration, planning and budgetary systems as well as ensure that the performance of the NLTP is monitored on the basis of a comprehensive Results Framework based on clear Outcomes, Outcome Key Performance Indicators (KPIs) and Targets. The NLTP IP also provides an important context and

point of reference for other sector components, such as the Federal Ministry of Agriculture and Rural Development, and their State and Local Government level counterparts.

The IP also shows how Development Partners and processes beyond the State administration, especially those in the Private and Civic Society sectors, relate to the NLTP and contribute to its goals. Essentially, implementation will be achieved through a coalition of the public sector, the private sector and the general public. The public sector consists of MDAs including parastatals, and local government bodies. The private sector includes organized bodies like the Chamber of Commerce, Small Business organizations, Traders Associations, and individual large Corporations and enterprises. The general public includes civil society bodies, consumer associations and the taxpayers. The role to be played by each and how they will use this IP is espoused in that document.

An essential component of the IP is the establishment of a comprehensive programme management structure to take care of planning, coordination, implementation, monitoring, evaluation, impact assessment and financial management in an effective and efficient manner. The Federal Government has the responsibility to oversee the implementation of the NLTP and to take the initiative in developing communication with non-state sectors about the plan. In order to undertake these tasks some additional institutional arrangements are necessary. The overall responsibility for the coordination of the NLTP will be carried out at the Federal level by the NEC NLTP Steering Committee through the Programme Coordination Secretariat (PCS) to be domiciled in the Office of the Vice President, Federal Republic of Nigeria.

