



AFRICAN UNION
INTERAFRICAN BUREAU
FOR ANIMAL RESOURCES



Enhancing Resilient African Feed and Fodder Systems

Introduction

Droughts in Africa have become increasingly severe and frequent, imposing significant threats to rain-fed agriculture and livestock systems.

The livestock sector plays a central role in the economies of most African countries. Feed constitutes 60 - 70% of the total cost of animal production. Top among the key challenges facing the sector include; Inadequate feed production, distribution, and access to quality feeds. Climate patterns are a leading factor in determining availability and quality of feed resources.

There is an urgent need to address these shortages in order to protect livelihoods, guarantee economic viability, and assure sustainability of livestock enterprises into the future. Given the vulnerability of the sector across many countries in Africa, the response to the livestock feeding challenges call for a continental approach. Over 9.5 million livestock in the Greater Horn of Africa region alone valued at over 2 billion USD, were lost in a recent drought. This loss is equivalent to twice Kenya's total food import budget in 2022. It's also three times the export value of coffee from Uganda, Africa's largest coffee exporter. This loss underscored the vulnerability of the livestock sector, particularly in

regions where drought has become a norm. These losses included a substantial amount of genetic resources, crucial for adaptation to climate change and for livelihoods, especially among pastoralists and smallholders who contribute over 80 to 90% of meat and milk production in the region. The economic impact extended to other enterprises on the downstream side of the supply chain, among them aggregators, processors, distributors and retailers, many of which had to shut down due to losses, occasioned by insufficient volumes of livestock products.

There is a significant business gap that presents an untapped opportunity for the sector. There should be a significant focus on inclusive finance and engagements with financial institutions to support the sector's development. This will ensure a commercial fodder production through public private partnerships. It would be beneficial for African countries to look into the African Continental Free Trade Agreement (AfCFTA), leverage on this agreement to address the feed and fodder challenges across the continent.

The agricultural livestock sector plays a pivotal role in many economies, and women are increasingly recognized as key agents of change in

this field. Women and youth are key participants in both the feed and fodder and the livestock source foods but are constrained in terms of effectively participating in the sector value chain and as a result, their contribution to the sector is undermined mainly due missed capacity development opportunities, and exclusion from financial and insurance services. Considering the disproportionate impact of feed and fodder shortages on women, especially those in rural or informal sectors, it is critical that women, and by extension youth, are meaningfully engaged in the feed and fodder value chain.

Globally, it is estimated 187 million women-owned enterprises exist, with many of them actively engaged in agricultural activities. Women's participation in agriculture in Africa is particularly crucial for building sustainable food systems. However, women in agriculture face various challenges that hinder their ability to scale up their operations. These challenges include a lack of access to proper training and support to access and benefit from diverse financial sources, such as loans, grants, equity, and crowdfunding. The African Women in Animal Resources Farming and Agribusiness Network (AWARFA-N) established under AU-IBAR, is a key network that can be used to enhance interventions to bolster women's engagement in feed and fodder sectors and livestock-sourced food supply chains.

One of the major hurdles in advancing the feed and fodder sector is the absence of reliable data. Having precise information is crucial for making informed decisions, investments, and policy changes. Without accurate data on the number of farmers, livestock production, and feed resources, stakeholders struggle to fully understand the dynamic of the livestock market. Many African countries do not have reliable sector data for example the feed balance sheet. It is critical to align data management systems at the continental, regional and national level.

The Resilient African Feed and Fodder Systems (RAFFS) project seeks to enhance the feed and fodder sector in Africa. This is an emergency,

short-term action that is aimed at contributing to understanding the effects of the recent and on-going global Triple Crises (Climate Change shocks, Covid-19, and the Conflict between Russia and Ukraine) on the African feed and fodder systems. The crises have exposed the significant weaknesses and vulnerabilities in the African feed and fodder input and supply chains.

Through this brief, we present a range of policy recommendations, each crafted to address the unique challenges of the livestock sector. These recommendations serve as a roadmap towards an ecosystem where feed and fodder resources are secure, sustainable, and accessible. By doing so, we strengthen the foundation of the livestock sector, ensuring its role as a driver of economic growth and a guarantor of food security across Africa.

Background

The Resilient African Feed and Fodder Systems (RAFFS) project is a collaborative effort between the African Union-InterAfrican Bureau for Animal Resources (AU-IBAR) and the Bill & Melinda Gates Foundation. The project, scheduled to run from December 2022 to December 2025, has set its sight on building resilience in African feed and fodder systems. It does so in response to the detrimental impacts of the recent triple C crises, which encompass the Covid-19 pandemic, the ramifications of climate shocks, and the Ukraine-Russia conflict.

The Project will be implemented in 6 countries namely; Uganda, Nigeria, Somalia, Kenya, Cameroon and Zimbabwe all focusing on priority livestock value chains. Cameroon: Dairy, Red Meat and Live animals; Kenya: Dairy, Red Meat and Live animals; Nigeria: Poultry and Dairy; Somalia: Camel Dairy, and Red Meat and Live animals; Uganda: Dairy and Poultry; Zimbabwe: Dairy, Red Meat and Live animals

Project Initiatives

The RAFFS Project embarks on a multifaceted approach to foster resilience in African feed and fodder systems. This approach entails:

Analytical Capacity Enhancement: The project strives to enhance understanding by delving into the factors that influence the resilience of African feed and fodder systems.

Innovative Solutions Development: The RAFFS project aims to develop and test innovative solutions to address the challenges that confront African feed and fodder systems.

Partnerships: Collaboration is a cornerstone of the Project, with engagement extending to governments, the private sector, and civil society organizations, fostering synergistic efforts to ensure success.

Key Challenges Facing the Feed and Fodder Sector

The Feed and Fodder sector in most of the Africa countries faces a myriad of challenges, which are further compounded by unpredictable occurrences for crises such a conflict (local and global), pandemics and climate related challenges. In addition to that, it is underdeveloped its technological, data and financing systems, an aspect that makes it unable to support a vibrant livestock sector, and yet the potential for growth as demonstrated by a growing demand for livestock sourced products is huge and rapidly growing due to the demographic and urbanization trends evident in most of these African countries. The challenges facing the sector include

1. **Inadequate Feed and Fodder resources.**



Numerous African countries struggle to meet their demands for feed and fodder due to low volumes of forage produced in relation to livestock numbers. This is further compounded by low and inconsistent quality of feeds. The continent's agricultural landscape is susceptible to climate challenges, including extreme weather-related occurrences like droughts and floods, which disrupt feed production and availability.

According to a recent survey conducted under the RAFFS project, 50% of African livestock value chains reported significant unavailability and limited access to feed for their livestock. This is a major challenge for the livestock sector in Africa, as it can lead to malnutrition in livestock, reduced productivity, and increased health risk on occasioned by poor livestock feeding practices

2. **Weak Markets and Financing systems**

Feed is an input sector to the livestock enterprises, however it is not viewed or clearly articulated as a sector on its own. As a result of this, the sector lacks an organized marketing standards and systems, weak checks and regulations and less development stakeholder support models. As a result of this under development, the sector suffers huge inefficiencies and is viewed as unattractive for purposes of financing and risk management. With poorly defined markets and underdeveloped financial systems, the technological developments also tend to be slow and untargeted, these factors collectively lead to hugely underrated impact of the feed and fodder sector as a key driver of food security and economic development.

3. Data-Driven Decision Making in the Feed and Fodder Sector

Data-driven decision making is the process of using data and evidence to inform decision-making. It involves collecting, analyzing, and interpreting data to identify patterns and trends. Data-driven decision making can help to improve the quality of decisions, make them more efficient, more targeted, this contributes to a reduction of unintended consequences. In a Survey conducted at an earlier stage of the RAFFS project, it emerged that 72% of African member states lacked a national database for feed and fodder, while 52% collected data irregularly or on an as-needed basis. This lack of, or prevalence of disjointed data systems further affects accuracy and quality of decision making in the feed and fodder and closely related sectors.

4. Women's Participation in the Feed and Fodder Supply Chain in Africa



Women play a vital role in the feed and fodder supply chain in Africa. They are responsible for producing, processing, and marketing a significant portion of the feed and fodder that is used to feed livestock. However, women face a number of challenges in participating in the feed and fodder supply chain, including limited access to land resources, financial opportunities, and capacity development opportunities.

Further to this, Women are often denied access to land ownership and control, which limits their opportunities to participate in the feed and fodder supply chain. With limited access to credit and other financial resources, it makes it difficult for them to invest in feed and fodder production and other supply chain activities. The low participation of women in the feed and fodder space, limits the availability of affordable and nutritious feed for livestock, which further reduces incomes and growth opportunities for women, this amounts to a missed opportunity to produce and deliver more feed and fodder resources to the feed and fodder sector.

5. Weak and under developed policy and regulatory mechanisms on Feed and Fodder

The growth of any sector requires an enabling policy, a policy that is informed by an accurate diagnosis of the growth gaps, and one that capitalizes on addressing such gaps from a governance and regulatory angle. Based on the reduced articulation of feed and fodder as a full supply chain that requires its own policies, most of the policies have focused on livestock while leaving out the feed and fodder. As a result of this, the sector is exposed to quality risks and lower ranking by potential actors especially investors and financiers, who view the sector as largely informal and unattractive, yet the role of the sector in sustaining livestock enterprises remains the most significant.

Recommendations for addressing these challenges

1. **Development and implementation of a national feed and fodder strategy.** The strategy should identify and prioritize the key challenges and opportunities in the feed and fodder sector, and outline a plan for addressing them. The strategy should be developed in consultation with all stakeholders, including farmers, feed and fodder producers, and the relevant public sector agencies.

The sector should invest in research and development of new feed and fodder products and technologies. This research should focus on developing new feed ingredients that are more nutritious, accessible and affordable, as well as on developing new technologies for the production and processing of feed and fodder.

Promotion of sustainable feed and fodder production systems. This could include measures to improve the efficiency of feed production, reduce environmental impact of feed production, and increase the use of renewable energy sources for feed production.

2. **Governments can provide financial, technical, and regulatory support to feed and fodder businesses that are implementing innovative models.** They can also promote public-private partnerships and collect and disseminate data on these models.

Contracting models that encompass feed reserves for associations and cooperatives while concurrently setting up feedlots to augment the efficiency of the supply chain. These measures are aimed at streamlining and fortifying the process of providing feed and fodder resources to ensure a more efficient and resilient feed and fodder system.

By enabling associations and cooperatives to establish feed reserves, it not only enhances the availability of these critical resources but

also contributes to strategic planning and management. Meanwhile, the establishment of feedlots fosters concentrated production and distribution centers, ensuring a consistent and timely supply of feed and fodder products to meet the demands of the agricultural sector, thus enhancing overall supply chain efficiency.

The Governments as a key driver of public private multi-stakeholder action should provide financial and technical assistance to livestock producers to help them access affordable and nutritious feed for their livestock. This could include programs to subsidize the cost of feed, provide training on feed management practices, and help farmers to develop their own farm-based feed production systems.

These actions are pivotal in addressing the challenges faced by African feed and fodder systems and are integral to the overarching goals of the RAFFS project.

Recommendations:

1. African governments can improve data-driven decision making in the feed and fodder sector by;
 - Developing a national database for feed and fodder that collects data on all aspects of the sector, including production, consumption, prices, and trade.
 - Investing in data collection and management systems, including standardized data collection methods and IT infrastructure to store and manage data.
 - Promoting data sharing and collaboration between government agencies, research institutions, and private sector stakeholders.
 - Making data accessible to decision makers and the public through online data portals and training on how to use data.
2. Governments should support women participation in feed and fodder by;
 - Enacting policies that support women's access to land ownership and control. This could include providing women with secure

tenure rights, supporting women's land titling programs, and providing women with access to agricultural inputs and extension services.

- Collaborating with financial institutions to develop and implement programs to promote women's access to credit and other financial resources. This could include providing women with microloans, developing women's savings and investment groups, and providing women with access to financial literacy training and other innovative mechanisms aimed at increasing financing opportunities for women.
 - Collaboration with stakeholders should provide training and capacity building opportunities for women on feed and fodder production, processing, and marketing. This could include developing training programs, providing women with access to mentors, and supporting women's participation in networks and associations.
3. Investment in policy review and reform processes aimed at identifying the gaps in existing policies and using the example of more progressive sectors to propose reforms that can be contextualized to the governance systems of each country.
- In some cases, it is a total absence of policy, and in such cases, the relevant public sector agency should benchmark with more developed feed and fodder sector with an aim of introducing and operationalizing an enabling policy that will guide regulation, quality, investments, innovation among other steps that bring sector growth and expansions

while aiming to preserve indigenous feed and fodder related knowledge in each of the countries.

Conclusion

African feed and fodder systems face a number of challenges, including inadequate feed and fodder resources, lack of innovative solutions, inefficient data-driven decision making, limited women's participation and under-developed sector policy environment.

Governments and other stakeholders should take a leading role in addressing these challenges by developing and implementing a national feed and fodder strategy, investing in research and development, supporting the development of sustainable feed and fodder production systems, providing financial and technical assistance to farmers, supporting feed and fodder businesses that are implementing innovative models, developing a national database for feed and fodder, promoting data sharing and collaboration, making data accessible to decision makers and the public, enacting policies that support women's access to opportunities in participating meaningfully in the feed and fodder production, processing and other supply chain enterprises. By taking these actions, governments and other stakeholders can help to improve feed and fodder security in Africa and support the growth and sustainability of the livestock sector.

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