



African
Union



AFRICAN UNION
INTERAFRICAN BUREAU
FOR ANIMAL RESOURCES

The Resilient African Feed and Fodder Systems Project

Visit of the Principal Secretary 29th January 2024

Brief Outline/Description of the Initiative

- AU-IBAR with joint funding from the Bill & Melinda Gates Foundation and the AUC is implementing an Emergency initiative 'The Resilient African Feed and Fodder Systems Project' (RAFFS Project) (Full Title: Evidence Driven Short Term Solutions to Build Resilience and Address the Adverse Effects of Crises on African Feed and Fodder Systems). This strategic initiative seeks to address the feed and fodder shortages in the continent occasioned by Climate Change; compounded by effects of COVID-19, and the Russia – Ukraine Crises that have disrupted feed and fodder systems.
- **The Goal** of the Initiative is to respond to eroded food and nutrition security occasioned by recent crises that have negatively impacted on African feed and fodder systems and production of animal sourced foods
- **The Purpose** of the Initiative is to harness evidence driven solutions for emergency and short term interventions to enhance access to affordable and quality feed and fodder critical to ensuring sustainable production of animal sourced foods
- The Initiative aims to
 - **Result 1:** Enhance the Knowledge and Analytical Ecosystem for Informing Evidence Based Solutions
 - **Result 2:** Support Viable business models, Strategic Partnerships, Catalytic Interventions for Coordinated Action to Attract Enhanced Investment for Short Term Solutions to Feed and Fodder Shortages
 - **Result 3:** Empower Women to Participate and Benefit from Feed and Fodder and Animal Sourced Food Supply Chains to Enhance their Food and Nutrition Security
 - **Result 4:** Reform and Strengthen the Policy, Regulatory and Institutional Environment for development of a more sustainable and resilient feed and fodder sector/industry

- Feed constitutes sixty to seventy percent of the total cost of production of livestock making it a key driver of livestock production, productivity, growth, stabilization and resilience – but African livestock keepers feed what is available not against targets.
- Globally, 60% of grain is for livestock feed, not in African Union Member States
- The Livestock Development Strategy for Africa prioritizes production of feed as critical to the livestock sector
- Meeting Malabo Declaration targets on nutrition have remained perennially elusive:
 - In the 2023 BR Report only 7 out of 40 Member States on track to reduce stunting
 - Kenya at 17.6% making progress toward reducing the prevalence of stunting to 10percent or less by 2025.
 - Other RAFFS Project countries among the 25 (out of 40 that Reported) with high stunting: Uganda 26%; Zimbabwe 26.7%; Cameroon 28.7%, and Nigeria 30.5%, (Other countries ranging from 26% to 79.7%)
 - Feed shortages a key factor in undermining the **critical importance and role that high density nutritious livestock sourced foods can play in quickly shifting nutrition outcomes.**
- Africa's feed and fodder systems have been severally affected by the triple global crises (Covid-19 Pandemic, Climate Change and the Russia – Ukraine conflict) further exposing inherent vulnerabilities of the sector and further reducing already low capacities to produce nutritious animal sourced foods and support livelihoods of a third of the continents households that depend on livestock

Continental Survey on Feed and Fodder

The RAFFS Project Continental Survey on the Effect of the Triple Crises on Africa's Feed and Fodder Systems conducted in mid-2023 reveals four worrying features and trends:

a) There is a trend of worsening drought and flood episodes with the last three droughts, each in turn, as they occurred, having been declared the worst in living memory:

- The 2010/2011 drought, where 250,000 people lost their lives;
- The 2016/2017 drought where the combined effects of less precipitation and high temperatures made experts declare it to be of the severity of a drought that occurs once every 250 years in observational records (Xue Han, Yan Li, Weidong Yu and Licheng Feng (2017)).
- The latest drought from late 2020 to 2022/early 2023 had the unprecedented feature of being the first with five consecutive rainy season failures, a climatic event not seen in the last 40 years. The severity of the drought was compounded by the effects of covid-19 and the Russia – Ukraine on feed and fodder supply chains, with massive loss of livestock and wildlife.
- This outlook augers a trend that future droughts might be worse and warrants urgent need to stabilize and build the resilience of feed and fodder systems to reduce vulnerability to the threats and mitigate effects of climatic shocks.

- An estimated loss of 9.5 million livestock in the Horn of Africa, the drought decimated a financial equivalent of over two billion dollars underscoring huge market failures
- Equivalent to about twice the total food import budget for Kenya (which according to KNBS stood at 1.2 billion USD in 2022) or thrice of the export value of coffee from Uganda, Africa's largest coffee exporter, which earned 876 million USD in 2022 (Food Business Africa).
- Huge genetic resources developed over decades, key to adaptation to climate change and for livelihoods and incomes especially among pastoralists and small holders who produce over 70 to 90% of meat and milk
- Loss of millions of liters of milk leaving 1.6 million underage children malnourished
- Huge loss of incomes for downstream processing and retailing businesses, many unable to service loans closed business
- **What does the loss of 9.5 million livestock signal?**
 - **Policy failure: need to move from a 'climate' disaster centric narrative to a feed and fodder sector development narrative**
 - **Opportunity/gap in the utilization of business and insurance solutions towards stopping the loss of two billion USD**
 - **Loss of employment and job creation**
 - **Destitution and migration to urban areas – exit of male youth in particular**
 - **Resource based conflict and reversion to non-sustainable alternative livelihoods**
 - **High prices/ unaffordable livestock sourced foods**

b) Disarticulated feed and fodder sectors:

- i. Few African Union Member States have a well-articulated economic feed and fodder sector or industry. In other regions, sixty percent of grain is grown explicitly for livestock feed underscoring the fact that most AU MSs have chronic feed deficits.
- ii. The deficits are further exacerbated by forty percent or more wastage of available feed and fodder resources and degradation of rangelands
- iii. Africa's annual import bill for livestock sourced foods is four billion USD and growing.

c) Thresholds for declaration of emergencies and disasters related to feed and fodder shortages are

- i. Generally pegged to climatic episodes (drought and floods) rather than to actual feed requirements for maintenance and against livestock production targets based on actual human food and nutrition needs;
- ii. Largely dependent on outcome and impact level indicators including standing hay, animal body condition and humanitarian indicators. Few AU Member States undertake feed inventories to regularly generate national feed balances;
- iii. Not linked to mechanisms that trigger necessary investment and action to rectify the feed shortages. This is a consequence of the focus on the highly visible outcomes of climatic disasters and not on the underlying vulnerability of the feed and fodder sector. Emergency thresholds are tagged to climatic episodes and disaster management rather than explicitly to feed and fodder sector or industry development indicators that can trigger actions to rectify feed shortages and forestall loss of livestock and loss of livestock production that affects human food and nutrition security indicators.

d) The lack of and poor quality of feed is a driver of production inefficiencies translated to the high cost of livestock sourced foods unaffordable for those that need the nutrients most:

- i. The perennial inability to make any substantive progress to meet critical human nutrition targets remains delinked from the structural constraints in feeding livestock which is reflected in livestock sourced foods being beyond the income of most Africans costing more than 10% of daily incomes.
- ii. The cyclic/seasonal fluctuations in availability of quality livestock feed is a perennial problem and cause of unaffordable livestock sourced food

Unstructured Feed and Fodder Sector

Feed and Fodder Resources Feed Production, Pasture Agronomy, Rangeland	Animal Feed and Nutrition Security	Human Food and Nutrition Security
<ul style="list-style-type: none"> • Feed • Pasture • Agricultural residues and kitchen waste • High reliance on global/regional supply chains • Other than high input and high output systems, primary livestock producers produce some or most of their feed themselves (core business?) • 40% wastage of existing resources • Most Member States do not undertake regular feed inventories • Nor generate national feed balance • Often a source of resource based conflict/ insecurity and competition with food production • Poorly developed/ unstructured markets 	<ul style="list-style-type: none"> • Not feeding to targets as feed expensive • High inefficiencies and low productivity • Livestock keepers get only 40% to 60% of the returns • 19% to marketing costs and 20 to 40% benefits to middlemen • Middlemen transfer risks to primary producers and high prices to customers 	<p>Market = those with purchasing power therefore livestock sourced foods are a luxury instead of a food and nutrition necessity</p> <p>Cost more than 10% of the daily incomes of African households</p> <p>Does not link the human nutrition targets to source of nutritious livestock sourced foods</p> <p>Only 7 Member States on track to address stunting</p> <p>19 African Member States between 26 and 79.9% children stunted</p>
<ul style="list-style-type: none"> • Use feed inventory but do not respond to it: • No alert system based on primary feed and fodder indicators • Countries with 60 to 70% feed deficits and more but no emergency alert issued • Information not linked to specific remedial action 	<ul style="list-style-type: none"> • Use body condition as an indicator – outcome indicator • Low capacity for remedial actions since low feed and fodder development 	<p>Humanitarian indicators especially related to climate disasters and not on the inability to address stunting: 2023 BRR shows 19 MS with stunting between 26% and 79.9% Alert system could be 25% Alert, 45% Emergency and 60% disasters rather than waiting for a climate disaster before issuing alerts</p>

Development of an Economic/Structured Feed and Fodder Sector

Feed and Fodder Resources Feed Production Pasture Agronomy Rangeland Ecology	Animal Feed and Nutrition Security	Human Food and Nutrition Security
<ul style="list-style-type: none"> • Agronomy/ natural resource based 'businesses'/access and utilization • Institutionalized: Policy, regulatory – standards, institutional • Multi-stakeholder Coordination mechanism including finance, agronomists, livestock sector actors • Financing mechanism - contractual • Feed Inventory and National Feed Balance • Value chains – supply to Markets/trade • Infrastructure for markets, conservation and distribution • Conflict resolution mechanism 	<ul style="list-style-type: none"> • Main core business of livestock producers • Access to affordable all year round sources of feed and fodder • Based on maintenance, production, reproductive and trade targets • Highly efficient • Therefore price rationalization of products • Accessible markets/ contracts for access therefore reducing conflict 	<ul style="list-style-type: none"> • Market structure for livestock based foods defined by both policy and market factors <ul style="list-style-type: none"> • Needs for production of animal sourced foods based on human food and nutrition objectives and gaps • Market for high and growing demand • Affordable and accessible
<ul style="list-style-type: none"> • Inventory/ balance sheet linked to and used to determine business/ utilization gap • Linked to emergency alert system e.g., 10% warning, 30% Alarm, 45% emergency, 60% disaster alert • Linked to direct feed remedial action 	<ul style="list-style-type: none"> • Body condition a secondary indicator highlighting hotspots and specific issues of mismatch in alignment between production targets and production of feed and fodder • Emergency action specific to the feed and fodder needs of affected livestock 	<ul style="list-style-type: none"> • Humanitarian approach to address emergencies in human access to animal sourced foods not only those from climate disasters

Main Areas	Six Themes	Parameter / Factor of Measurement	NI	KY	ZI	CMRN	UG	SO	Aver
Baseline Vulnerability	Scope of the Baseline vulnerability, gaps, and challenges prior to the crises	Existence of articulated feed industry	1	3	5	4	2	1	3
		Feed Balance	1	2	2.5	2	4	3	2
		Agility of data ecosystem	1	3.5	1	1	2	1	3.5
	Capacity to respond to sector needs	Investments	2	1	1	3	1	2	1
		Agility of data ecosystem	1	3	1	1	1	1	3
		Level of coordination	1	2	1	2	1	3	2
		level of contracting between actors	2	2	3	1	1	3	2
		Adoption and implementation of Best Practices	1	2	2	1	1	1	2
Crisis Impact	Scope and scale of the crisis	Drivers of the crises	1	1	2	2	4	1	1
		Primary and secondary effects of the crises	1	1	2	2	4	4	2.5
		Underlying factors (e.g., pre-existing of feed shortage, and LSF high cost, etc.)	1	1	3	2	4	3	1
	Situation of the affected population / Stakeholders' groups	Assessment of stakeholders needs	4	3	4	1	2	4	3
		Assessment of Vulnerabilities and Risks	4	3	3	1	1	4	3
		Physical disruption of key assets, activities, and losses	1	2	4	1	1	2	2
Operational Resilience	Capacities and response	National and sub-national capacities and response	1	2	2	2	1	1	2
		International/Regional capacities and response	3	3	3	1	1	2	3
		Affected populations 'crisis coping mechanisms	1	2	2	3	1	1	2
	Action / intervention / best practices	Availability and access of affected groups to coping interventions	1	2	3	1	2	1	2
		Availability and access of affected groups to assistance programs or initiatives	2	2	4	2	1	1	2
		Constraints of interventions adoption or implementation e.g., policy or physical constraints	1	4	2	2	2	2	4
Total			31	44.5	51.5	35	37	41	40

Country Self-Generated Score

COUNTRY	Adapted Score	CLASSIFICATION	SCORING GUIDE
Nigeria (31%)	6.51	Unstructured	0-4 (Unarticulated) 6-9 (Unstructured) 10-14 (Emerging) 15-19 (Complicated / Areas that need attention) 20 – 21 (Best Practice)
Cameroon (35%)	7.35	Unstructured	
Uganda (37%)	7.77	Unstructured	
Somalia (39%)	8.19	Unstructured	
Zimbabwe (51.5%)	10.8	Emerging	
Kenya (44.5%)	9.35	Unstructured	

Baseline Vulnerability	Scope of the Baseline vulnerability, gaps, and challenges prior to the crises	Existence of articulated feed industry	A well-established, formal feed industry, especially in the concentrates space with the Feed Millers Association, (AKEFEMA), and Fodder and Pasture Society of Kenya, but the Fodder sector is highly informal and there are issues with operationalization.
		Feed Balance	Kenya has as low as 60% and more feeds deficit, experiences 46% post-harvest losses: fodder productivity is low; the data is only 50% complete data is outdated as it was collected in 2017, real distribution challenges of fodder with high levies and charges across counties.
		Agility of data ecosystem	Each county has feed balance reports but not a centralized information system data may be collected but not made available to stakeholders dissemination of data is very limited data is outdated low optimization of data and limited analytics to enable informed decision-making
	Capacity to respond to sector needs	Investments	There is increased interest in funding for the feed and fodder sector with more banking and insurance being developed and offered as well as capacity development. There is a need for more targeted investment planning as this is still considered a risky sector to invest in
		Agility of data ecosystem	Lack of a centralized repository of data and data sharing lack of credible data analytics contributes to this as investors do not have information to base decisions on.
		Level of coordination level of contracting between actors	Improved coordination now but not centralized Contracting is highly informal and contract unenforceable real challenges in the implementation of contracting and commercialization
		Adoption and implementation of Best Practices	There exist quality ad operating standards, especially for millers initiatives to link fodder access- e.g. Rift Valley to Northern Kenya but this is still in the initial stages there are real challenges and bottlenecks in the distribution
Crisis Impact	Scope and scale of the crisis	Drivers of the crises	Drought identified as the biggest climate change stress (compared to covid-19 and the Russia-Ukraine conflict)
		Primary and secondary effects of the crises	Loss of animals, income, livelihoods and resilience and adaption capacity, exacerbates already vulnerable situation and attendant spillover effects. Devastating loss of assets
		Underlying factors (e.g., pre-existing of feed shortage, and LSF high cost, etc.)	With climate change animals that were already vulnerable due to below-target feeding, disease management, and control, costs, and unavailability are more exposed
	Situation of the affected population / Stakeholders' groups	Assessment of stakeholder needs	Has been done well at the county level but some data is guesstimates so not very accurate
		Assessment of Vulnerabilities and Risks	Done well at the county level but some data is guesstimates so not very accurate
		Physical disruption of key assets, activities, and losses	Access to markets constrained, distributed channels severely constrained leading to loss of income and deteriorating livelihoods with attendant spillover effects on the economy
Operational Resilience	Capacities and response	National and sub-national capacities and response	Resources available but sub-optimized, tax waivers for the importation of feeds, funds for the purchase of emergency feeds available but not deployed or not deployed on time
		International/Regional capacities and response	International and regional players showing increased interest and action
		Affected populations ' crisis coping mechanisms	Coping mechanisms and abilities are very limited. 30 feed millers closed, others operating at limited capacity currency risk very constraining
	Action / intervention / best practices	Availability and access of affected groups to coping interventions	Implementation of policies and interventions for recovery is ad hoc and untimely, access to coping interventions is low. Resources not deployed or not in time
		Availability and access of affected groups to assistance programs or initiatives	Implementation of assistance and programs for recovery is ad hoc and untimely, and access to coping interventions is low. Resources not deployed to not in time
		Constraints of interventions adoption or implementation	Budgetary and policy provisions are available but are ad hoc in the development and implementation of areal distribution

Plans for 2024 and 2025

- **Piloting of Focused Emergency and Short Term Interventions to Reduce Feed Shortages in six Member States:**
 - i. Support emergency/ immediate actions in Cameroon, Kenya, Nigeria, Somalia, Uganda and Zimbabwe
 - ii. Short term priority interventions in enhancing data capacities, infrastructure and ecosystems; identification of viable business and financing models for coordinated action on feeds and fodder, coordination and investment mechanisms; enhancing women beneficial participation in the feed and fodder and livestock sourced foods value chains, and policy and institutional reforms
- **Continental Support to Transform the Feed and Fodder Sector Policy, Legislative, Regulatory and Institutional Framework**
 - i. Based on the continental Survey, support policy, regulatory, legislative and institutional reforms
 - ii. Mutual accountability framework for annual reporting at national and regional level and biennial reporting at continental level on feed and fodder resources
 - iii. Support a continental task force on identification, and expanding financial and insurance packages for resourcing feed and fodder investment
- **Advocacy for Increased Targeted Investment in the Feed and Fodder Sector**
 - i. Engagement of strategic partners and development banks to enhance a more coordinated approach towards mobilizing resources for expanded action on feed and fodder
 - ii. Mobilize finance and investment to attract increased private sector investment

Integrated Data Ecosystem

Implement a robust, digital system to enhance coordination of feed and fodder sector interconnected with Kenya Livestock Early Warning systems (Incorporating a module for Feed and Fodder Early Alerts) and KIAMIS Regular updates for real-time data accuracy.

Support Update and Utilization of National Feed and Fodder Inventory and Feed Balance Data

Development of capacity to harness and utilize the national livestock feed balance as a key decision for the feed and fodder sector

Mapping & Regional Analysis

Detailed regional mapping of feed and fodder and animal source food supply chains

Utilization of geographic information systems (GIS) for spatial and market function analysis.

Institutional Collaboration

Support to strengthen collaboration among Ministry of Agriculture, Livestock, and Fisheries (MoAL), statistical agencies, private sector, research and markets. Support to institutionalized update of feed assessment tools.

Capacity Building

Support capacity building on new technologies for data collection and management.

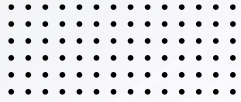
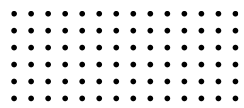
Focus on People, Processes, and Products in both the feed value chain and animal source food supply chain.

Data-Driven Decision Making – Data as a Service

Leverage feed and nutrition security data for policy-making.

Cost-benefit analysis and studies on gender and financial inclusion for enhancing livelihoods.

Enhancing mobile access to feed and fodder data and information



CATALYZING CHANGE: VIABLE BUSINESS MODELS, WOMEN BUSINESSES, MULTISTAKEHOLDER PLATFORMS AND POLICY ACTION FOR FEED AND FODDER IN KENYA



BUSINESS MODELS IN FEED AND FODDER

Attracting more investment in to the feed and fodder supply chains. Modelling best practices in Feed and Fodder Contracting and tailored Financial & risk MGT solutions



WOMEN ENTERPRISES IN FEED & FODDER

Offering the right capacity, supporting gender inclusive financial and risk management products and incubation for women-led Feed and Fodder Businesses



COUNTRY LEVEL FEED & FODDER MSPs

MSP's to drive and coordinate Feed and Fodder sector development on targeted Infrastructure, investments and link to nutritional targets



POLICY & INSTITUTIONAL REFORMS

Support development of policy that catalyzes the development of Feed and Fodder to a full Economic Sector



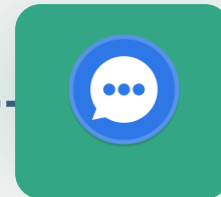
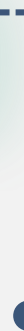
ENHANCING COMMUNICATION AND UNDERSTANDING OF THE FEED AND FODDER SECTOR INVESTMENTS AND SOLUTIONS

CAPACITY BUILDING

- Capacity development for focal persons and media specialists in the feed and fodder sector
- Highlight the current state and gaps on the reporting on the feed and fodder sector
- Practical insights and strategies for effective **reporting** and communication to increase visibility of investment opportunities and solutions in feed and fodder

MULTIMEDIA PLATFORMS

Use of a mixed media approach in communicating feed and fodder issues



KEY MESSAGES AND NARRATIVES

- Detailed mapping of key audiences and stakeholders for enhanced engagement and coordination
- Clearly outlined messages to enhance coherence, coordination, and resilience in the feed and fodder sector
 - Emphasis on greater accessibility to quality feed, preventing feed shortages and averting future feed-related disasters

Actions at Continental Level

UNDERSCORING that both the Livestock Development Strategy for Africa (LiDeSA) and the Policy Framework for Pastoralism in Africa (PFPA) underscore the urgency of enhancing availability and access to quality feed, the 5th Conference of the Specialized Technical Committee on Agriculture, Rural Development, Water and Environment is requested to:

- **TAKE NOTE** of the **URGENT NEED** to address the animal feed and fodder situation on the continent exacerbated by the impact of the triple crises (covid-19, drought and the Russia-Ukraine conflict) on the already vulnerable sector
- **ENDORSE** the following recommendations to **URGENTLY** address feed and fodder shortages and avert future feed related disasters:
 - The formulation of **Guidelines for the Development of Feed and Fodder Sectors or Industries** as a critical strategic action to enhance the stabilization, efficiency of production of quality livestock sourced foods, resilience and protection of livestock-based livelihoods, businesses and economies and for youth employment
 - The formulation of **Guidelines to enhance emergency response within the feed and fodder sector** utilizing tools that are explicitly based on feed and fodder sector indicators and linked to human food and nutrition security indicators that define livestock production targets, and with clear remedial actions to address feed and fodder shortages
 - The **establishment of a continental African Alliance of Multi-Stakeholder Feed and Fodder Associations** to guide the growth of more robust African Feed and Fodder systems
 - The **Institution of a monitoring and mutual accountability framework that generates an annual status report on the African Feed and Fodder Sector** and highlights issues of strategic and emerging importance in view of the dynamic environment and growing threats
- **REQUEST** the Commission to work with Development Partners to support **URGENT** mobilization of resources for addressing the feed and fodder situation on the continent; including, the development and implementation of the above mentioned Guidelines; establishment of an appropriate African Alliance of Multi-Stakeholder Feed and Fodder Associations, a Feed and Fodder Monitoring and Mutual Accountability System, and funding and finance to support/enable increased private sector investment and public-private partnerships.



Thank You

