



AFRICAN UNION  
**INTERAFRICAN BUREAU  
FOR ANIMAL RESOURCES**



# **THE LIVESTOCK DEVELOPMENT STRATEGY FOR AFRICA (LiDeSA)**

**2015 - 2035**

*Transforming Africa's Livestock Sector for Accelerated Equitable Growth*



# **LIVESTOCK DEVELOPMENT STRATEGY FOR AFRICA (LiDeSA) 2015 - 2035**

*The Roadmap to a Successful Livestock Sector*

**Department of Rural Economy and Agriculture  
African Union Commission**

*Transforming Africa's Livestock Sector for Accelerated Equitable Growth*

**JANUARY 2015**

## **Disclaimer**

All rights reserved. Reproduction and dissemination of material in this information product for educational or other non-commercial purposes are authorized without any prior written permission from the copyright holders provided the source is fully acknowledged. Reproduction of material in this information product for resale or other commercial purposes is prohibited without written permission of the copyright holders. Applications for such permission should be addressed to:

The Director

African Union - Inter-African Bureau for Animal Resources (AU-IBAR)

Kenindia Business Park

Museum Hill, Westlands Road

P.O. Box 30786

00100, Nairobi, KENYA

or by e-mail to: [ibar.office@au-ibar.org](mailto:ibar.office@au-ibar.org)

**ISBN: 978-9966-077-30-1**

© AU-IBAR 2015

Citation: The Livestock Development Strategy for Africa 2015-2035. Nairobi, Kenya

# Table of Contents

	<b>Acronyms</b>	<b>vii</b>
	<b>Foreword</b>	<b>xi</b>
	<b>Acknowledgments</b>	<b>xiii</b>
	<b>Executive Summary</b>	<b>xv</b>
	<b>PART I BACKGROUND</b>	<b>I</b>
<b>1.</b>	<b>Introduction</b>	<b>I</b>
<b>2.</b>	<b>Rationale for the Livestock Development Strategy for Africa</b>	<b>II</b>
<b>3.</b>	<b>Situational Analysis of the Livestock Sector in Africa</b>	<b>15</b>
3.1	Continental Level	15
3.2	Regions (Central, Eastern, Northern, Southern and Western)	22
	<b>PART II THE STRATEGY</b>	<b>43</b>
<b>4.</b>	<b>Vision, Goal and Strategic Approach</b>	<b>43</b>
4.1	Vision and Goal	43
4.2	The Strategic Approach and Broad Strategies	43
<b>5.</b>	<b>Implementation Principles</b>	<b>47</b>
5.1	Guiding Principles	47
5.2	Implementation Arrangements	48
<b>6.</b>	<b>Strategic Objectives and Expected Results</b>	<b>51</b>
<b>7.</b>	<b>Stakeholders</b>	<b>87</b>
7.1	Private Sector Actors	87
7.2	Civil Society and Stakeholders Organizations	88
7.3	Public Sector Actors	89
<b>8.</b>	<b>Risks and Assumptions</b>	<b>93</b>
8.1	Risks and flexibility	93
8.2	Assumptions	95

<b>PART III IMPLEMENTATION MODALITIES</b>	<b>97</b>
<b>9. Engagement Platform</b>	<b>97</b>
9.1 Introduction	97
9.2 Objectives	98
9.3 Functions	98
9.4 Membership	99
9.5 Governance Structures	99
9.6 Sustainability Mechanisms	102
<b>10. Planning and Alignment Tool</b>	<b>103</b>
<b>11. Accountability, Monitoring and Evaluation</b>	<b>105</b>
11.1 Accountability Mechanism	105
11.2 Performance Measurement Framework	107
11.3 Monitoring and Evaluation Framework	108
11.4 Targets	112
11.5 Theory of Change	113
11.6 Milestones	115
<b>12. Communication and Awareness Strategic Guidelines</b>	<b>116</b>
12.1 Objectives	116
12.2 Expected Outcome	116
12.3 Interventions	116
<b>13. Investment and Financing Framework</b>	<b>120</b>
13.1 Public Expenditure	120
13.2 Attracting Private Foundations and Social Venture Capital	123
13.3 Mobilizing the Private Sector	123
13.4 The African Diaspora Investment	125
13.5 Coherence, Coordination and Alignment of Investment	125
13.6 Resource Mobilization for LiDeSA	125
<b>14. Conclusion</b>	<b>129</b>
<b>15. References</b>	<b>131</b>
<b>16. LiDeSA Validation Workshop – List of Participants</b>	<b>138</b>

## **Acronyms**

ACTESA	Alliance for Commodity Trade in East and Southern Africa
AfDB	African Development Bank
AI	Artificial Insemination
ALiDeP	Africa Livestock Development Platform
AnGR	Animal Genetic Resources
ARIS 2	Animal Resources Information System
ASAL	Arid and Semi Arid Lands
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
ASF	Animal Source Foods
AU	African Union
AUC	African Union Commission
AU-IBAR	African Union - Interafrican Bureau for Animal Resources
AU-PANVAC	African Union - Pan African Veterinary Vaccine Centre
AU-PATTEC	African Union - Pan African Tsetse and Trypanosomiasis Eradication Campaign
AU-SAFGRAD	African Union - Semi-Arid Food Grain Research and Development
AW	Animal Welfare
BMGF	Bill and Melinda Gates Foundation
BOT	Build and Operate
CAADP	Comprehensive Africa Agriculture Development Programme
CAMPFIRE	Communal Area Management Programme for Indigenous Resources
CBO	Community Based Organisations
CCARDESA	Centre for Coordination of Agricultural Research and Development for Southern Africa
CEBEVIRHA	Communauté Economique du Bétail, de la Viande et des Ressources Halieutiques
CEMAC	Central African Economic and Monetary Community
CET	Common External Tariff

CILSS	Comité Permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel
CIRDES	Centre International de Recherche-Développement sur l’Elevage en zones Subhumide
COMESA	Common Market for Eastern and Southern Africa
CORAF	The Congolaise de Raffinage
CSAO	Commerce équitable et développement durable
DAC-OECD	Development Assistance Committee – OECD
DBO	Design Build and Operate
DREA	Department of Rural Economy and Agriculture
EAC	East African Community
EAR	Eastern Africa Region
ECOWAP	ECOWAS Regional Agricultural Policy
ECOWAS	Economic Community of West African States
EDF	European Development Fund
EPA	Economic Partnership Agreements
FARA	Forum for Agricultural Research
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
ICPALD	IGAD Centre for Pastoral Areas and Livestock Development
ICT	Information and Communications Technology
IGAD	Intergovernmental Authority for Development
IIED	International Institute for Environment and Development
ILRI	International Livestock Research Institute
INRA	Institut National de la Recherche Agronomique
IPCC	Intergovernmental Panel on Climate Change
LiDeSA	Livestock Development Strategy for Africa
LPH	Livestock Policy Hubs
LSIPT	Livestock Sector Investment & Policy Toolkit
LVC	Livestock Value Chain
M&E	Monitoring and Evaluation
MS	Member States



NASRO	North African Sub Regional Organisation
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organisations
NSA	Non State Actors
OECD	Organisation for Economic Co-operation and Development
PPP	Public Private Partnerships
PVS	Performance of Veterinary Services
RAHC	Regional Animal Health Centre
RBM	Result-Based Management
REC	Regional Economic Community
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
RESEPI	West and Central African Regional Networks for Epidemiological Surveillance
RESOLAB	West and Central Africa Veterinary Laboratory Network
RLPH	Regional Livestock Policy Hubs
ROPPALe	Réseau des organisations paysannes et de producteurs de l'Afrique de l'Ouest
RVF	Rift Valley fever
SADC	Southern African Development Community
SADC-LTC	SADC Livestock Technical Committee
SME	Small and Medium Enterprises
SPS	Sanitary and Phyto-Sanitary
UNECA	The United Nations Economic Commission for Africa
USD	United States Dollars
VPH	Veterinary Public Health
VSF	Vétérinaires Sans Frontières
WAEMU	West African Economic and Monetary Union
WAHO	Western Africa Health Organization
WTO	World Trade Organisation



## **Foreword**

Livestock is central to the livelihoods of rural Africa and is strategically important to the continent's food and nutritional security and economy through intra-African and global trade. The African livestock sector contributes between 30 and 80% of the agricultural gross domestic product (GDP), and has the potential to deliver both the agricultural-led growth and the socio-economic transformation as envisioned in the June 2014 African Union (AU) Malabo Declaration on Accelerated Africa Agriculture Growth and Transformation for shared prosperity and improved livelihoods. This declaration forms a key part of the framework of the AU Agenda 2063. The importance of livestock is likewise reflected in the increasing awareness by African policy makers of the need to enhance livestock production in order to meet the rising demand for animal source foods (ASF) by the expanding number of urbanized African consumers.

It is becoming widely recognised that unless a quantum and continuous increase in livestock production is achieved, many African countries will face progressively larger livestock import bills. Moreover, the failure to transform the African livestock industry will adversely impact on the growth of local industries, deny employment opportunities to the youth who dominate Africa's growing human population, reduce income for African livestock producers and other actors along the value chain, and result in losses in revenues, taxes and import income.

Recognizing these challenges and the opportunities, the African Union Commission (AUC) was mandated, through the decision of the Twenty Fourth Ordinary Session of the Executive Council (Addis Ababa in January 2014), to lead and coordinate the formulation of a Livestock Development Strategy for Africa (LiDeSA) to transform the livestock sector by energising its under-utilized potential. This decision was based on the recommendation of the AU's Ninth Ministerial Conference on Animal Resources which was held in Abidjan, Cote d'Ivoire in April 2013.

With the support of a grant from the Bill & Melinda Gates Foundation, the LiDeSA was developed through a truly African and inclusive consultation process that reached out to experts and stakeholders at continental, regional and national levels. The LiDeSA is a 20 years (2015-2035) strategy geared towards addressing Africa's development needs and challenges. The strategy is aligned to the ongoing regional strategies, policy frameworks and guidelines; and is coherent with the Comprehensive Africa Agriculture Development Programme (CAADP), Frameworks and Agenda at the Continental, Regional Economic Community (REC) and Member States' (MS) levels. The LiDeSA embraces "business unusual" approaches and focuses on encouraging increased investments from both public and private sources for the transformation of the sector to enhance its contribution to socio-economic development and equitable growth

The challenge that lies ahead is to successfully implement the LiDeSA. To this effect the AUC and its lead specialized technical entities, the Inter-African Bureau for Animal Resources (AU-IBAR), AU-Pan African Veterinary Vaccine Centre (AU-PANVAC) and The Pan African Tsetse and Trypanosomiasis Eradication Campaign (AU-PATTEC) will work collaboratively with MS, RECs and development partners from within and outside Africa. An imperative will be to develop programmes capable of putting the strategy into action, thus delivering the desired results and impacts.

Implementing the LiDeSA as planned will dramatically transform the African livestock sector, realising its potential as a major contributor to the continent's socio-economic development, equitable growth and poverty reduction.

***H.E. Mrs. Tumusiime Rhoda Peace***  
**Commissioner for Rural Economy and Agriculture**



## **Acknowledgments**

Due recognition and appreciation is due to all those responsible for the formulation of a continent-wide livestock development strategy, that embraces the needs, aspirations and varying mandates of the fifty-four African Member States, eight Regional Economic Communities and multiple development partners.

Utmost gratitude should go to the representatives of the Member States, the Regional Economic Communities and all other stakeholders who tirelessly provided their energies, knowledge and expertise in discussing and identifying the issues and solutions for the livestock sector in Africa. Special thanks go to the 10 experts, who rose to the challenge posed by limited time and resources to successfully conduct a quick and precise stock-taking exercise aimed at providing an overview of the livestock sector on the continent.

The commitment of the African Ministers responsible for livestock development to the formulation process in particular and the sector in general, amidst competing and equally important national interests, deserves the highest appreciation and accolade. Similarly, the commitment of the Members of the LiDeSA Formulation Guiding Group, ably led by H.E. Madam Rhoda Peace Tumusiime, Commissioner for Rural Economy and Agriculture of the AUC, went well beyond the call of duty. The support of the AUC, through H.E. the Commissioner was invaluable and fundamental to achieving such a successful outcome. .

Lastly, I am deeply indebted to all staff of AU-IBAR for their tremendous commitment and efforts in coordinating and providing technical guidance to the process and ensuring that the desired results were attained and the Consultants: Prof Sidahmed Ahmed, Dr Mwilola Imakando and Dr Chris Daborn, who enriched and gave invaluable advice and direction from conception through to the finalisation of this LiDeSA document.

On behalf of the African Continent, I can but say that words do not adequately express the feeling of gratitude and appreciation to the Bill and Melinda Gates Foundation for their financial support and to all responsible for the sterling work that has been undertaken. May the LiDeSA stand as a long serving and productive testament to the efforts of all who have contributed from the genesis to completion of this critically needed livestock development strategy.

**Prof. Ahmed El-Sawalhy**  
**Director African Union Interafrican Bureau  
for Animal Resources**



## ***Executive Summary***

The Livestock Development Strategy for Africa (LiDeSA) stems from a resolution of the Twenty-Fourth Ordinary Session of the Executive Council held from 21st to 28th January 2014 in Addis Ababa (EX.CL/Dec.792(XXIV)). This strategy has the goal of transforming the African livestock sector for enhanced contribution to socio-economic development and equitable growth. The resolution was informed by the realization that innovative and transformative technical, policy and investment interventions are required to address the challenges facing the livestock sector. The decision to call for the drafting of the LiDeSA was based on the recommendation of the Ninth Ministerial Conference on Animal Resources held in Abidjan, Cote d'Ivoire from 18th to 19th April 2013 on increasing and sustaining investment in the livestock sector.

The recommendation of the Ministerial Conference was drawn from trends observed in demand for livestock and livestock products in the continent which indicate that the demand will increase two to eight fold between 2030 and 2050 due to various factors, particularly the increase in human population in urban areas and increased incomes. Projections indicate that if the current scenario in the livestock sector (low levels of public and private investments and low sector growth) is maintained, the increase in demand will not be matched by a corresponding increase in production, leading to a critical shortfall in the supply of quality proteins of animal origin, with negative impacts on the food and nutritional security of many households in Africa. The alternative for meeting this rising demand will be to increase import of animal source food to make up for the projected shortfalls. This will result in a series of negative effects on African populations and economies inclusive of increased livestock products prices leading to a looming potential crisis in food security, food safety and nutrition, depressed growth of local industries, loss of employment opportunities for the youth, reduced household incomes and loss of government revenue.

The AUC was requested, to coordinate and lead the formulation of a Livestock Strategy for the continent that will accelerate reforms in the sector for the realization of its full potential. In response to the decision of the Executive Council, the AUC led through AU-IBAR a joint multi-stakeholder process of comprehensive sector assessments, consultations and an in-depth situation analysis covering the five official geo-political regions of Africa. This resulted in the identification of issues affecting the sector throughout the continent including but not limited to; breeds with low productivity, lack of quality land, pasture and water resources, inadequate access to animal health and husbandry services, limited access to markets and weak compliance with sanitary and phytosanitary standards. These are coupled with deficiencies in policy, legislative and institutional frameworks that deter investments along the value chains as well as the inadequate application of available technologies, knowledge and skills. Furthermore, most of Africa's livestock is kept by herders in challenged extensive systems in the arid and semi-arid lands and smallholders in subsistence-oriented mixed crop livestock systems. The majority of livestock owners are poor and are not market oriented. In addition, past investments, both from private and public sectors, in the development of the livestock sector have been largely project-based and disjointed with scant regard to long-term institutional development needs. Notwithstanding, there are numerous instances of successful performance of the sector in the continent including; a thriving beef sector in some countries, impressive growth and development of smallholder dairy and poultry sub-sectors, the export of live animals to the Middle East, cross border mobility and pastoral resilience in the Economic Community of West African States (ECOWAS), water use and conservation in North Africa and the successful eradication of Rinderpest from the continent. These cases provide encouragement and show that transformation of the sector in the continent is an achievable objective.

The LiDeSA is guided by the vision of the Accelerated African Agricultural Growth and Transformation Goals of the Malabo Declaration, and is informed by the CAADP results framework. The strategy will guide countries and RECs in formulating livestock investment priorities within their agricultural investment plans. It is also aligned to the aspirations of Agenda 2063; a 50-year strategy for the African Continent in all spheres of socio-economic development. The LiDeSA will position the livestock sector as a key



driver for delivering the target of 6% annual growth in agriculture in the Member States, thus contributing significantly to national growth. It will also guide stakeholders' efforts in addressing major development barriers facing the sector ensuring coordination of effort at national, regional and continental levels, promote synergy in addressing critical issues facing livestock development and bring about result oriented actions that will lead to the realization of livestock sector's full potential.

To achieve envisaged goals, the LiDeSA lays out the following strategic approach;

- Significant public and private sector investments with associated supportive policy environment;
- Encouraging governments to create appropriate enabling investment environments thus reducing the cost of conducting business and minimizing risks in the livestock sector;
- Gradual intensification and commercialization of Africa's largely extensive livestock production systems in arid and semi-arid lands and transition from subsistence to market economies by mixed crop-livestock system smallholders;
- Dissemination and application of new available technologies, knowledge and skills and increased investment in research and development;
- Value chain approach and;
- Fostering mind-set change by challenging existing narratives and value paradigms.

The strategy, which aims at addressing identified barriers in the sector, has the following strategic objectives:

- To attract public and private investment along the livestock value chains
- To enhance animal health and increase production, productivity and resilience of production systems
- To enhance innovation, generation and utilization of technologies, capacities and entrepreneurship skills of value chain actors
- To enhance access to market, services and value addition

The success of the LiDeSA strategy will be strengthened by stakeholders committing to two key obligations; ownership of responsibilities and their commitment to monitor and report on progress towards achieving those responsibilities.

To ensure effective delivery of the LiDeSA, this document outlines five implementation modalities: the stakeholders' engagement platform; the planning and alignment of existing and planned interventions; monitoring and evaluation; awareness and communication; and financing modalities.



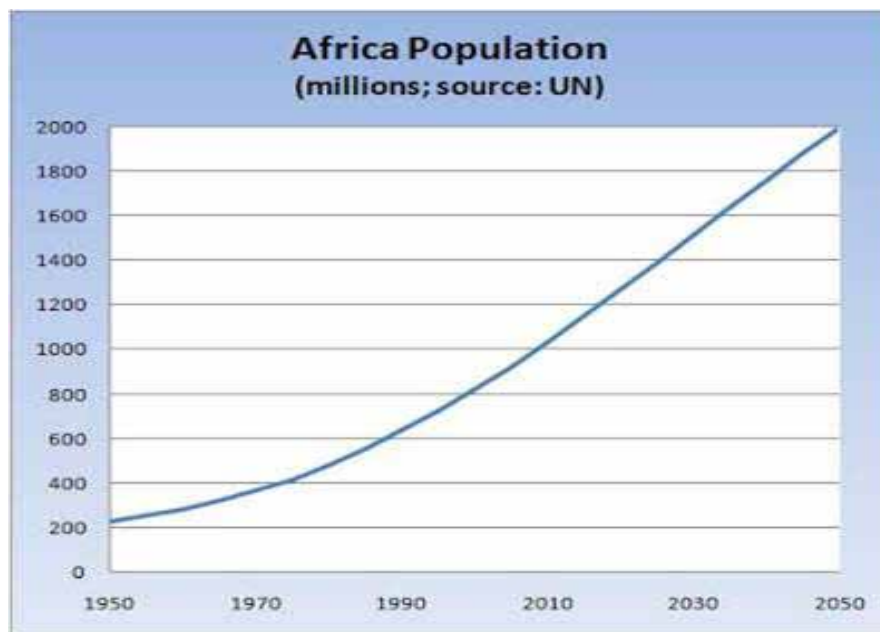
© AU-IBAR

*LiDeSA. Transforming Africa's Livestock Sector for Accelerated Equitable Growth*

## PART I BACKGROUND

### I. Introduction

Trends in the demand for livestock and livestock products in Africa indicate that between 2030 and 2050 the demand will increase two to eight fold. This is due to various factors such as the increase in the human population (Fig. 1), particularly in urban areas, and the overall increase in incomes and change in eating habits.



**Figure 1:** Africa Population Projection to 2050

Projections indicate that if the current scenario in the livestock sector (low levels of public and private investments and low sector growth) is maintained, the increase in demand (Fig. 2) will not be matched by a corresponding increase in production, leading to a critical shortfall in the supply of quality proteins of animal origin, with negative impacts on the food and nutritional security of many households in Africa<sup>1</sup>.

<sup>1</sup>African Livestock Futures - (21) – (number in parentheses is the number in the reference list page 131)

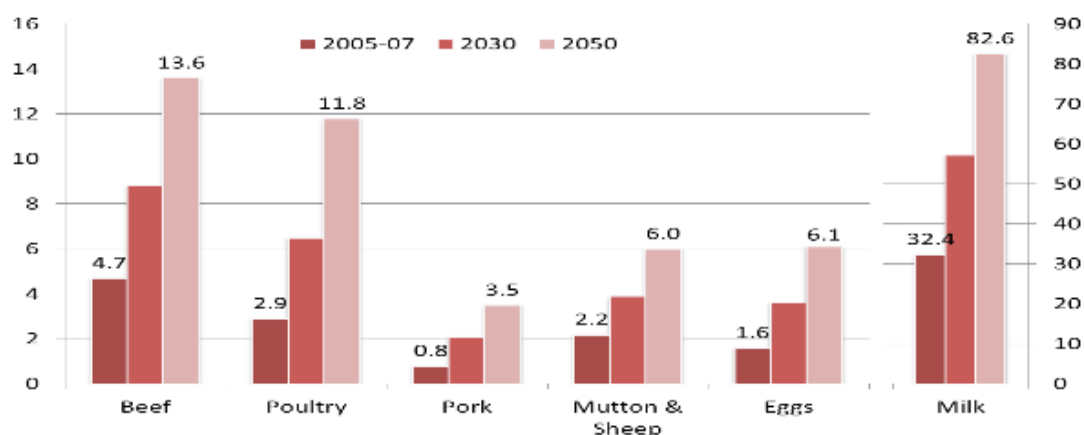


Figure 2. Projected Demand for Animal Source Foods to 2050 (FAO: 2011)

The alternative for meeting the increased demand will be to import animal source foodstuffs to make up for the extremely large deficit expected (Fig 3). This will lead to a dramatic increase in livestock products import bills for African countries resulting in a series of negative effects including increased prices of livestock products; a potential crisis in food security, food safety and nutrition; depressed growth of local industries; loss of employment opportunities for millions of youth; reduced income for African livestock producers, and other livestock value chains actors; and the loss of government revenues from levies and taxes.

The livestock sector in Africa has the potential to deliver both the agricultural-led growth, and the socio-economic transformation envisioned in the Malabo Declaration.

It is estimated that the livestock sector contributes between 20 to over 80 percent<sup>2</sup> of the agricultural value added in African countries, averaging at 35% across the continent. Currently, in some African countries, the livestock sector is already the fastest growing sub-sector within the broader agricultural sector, generating positive growth and out performing better funded and supported food and cash crop sectors<sup>3</sup>. Africa is endowed with enormous land, water and pasture resources, most of which are under-utilized and under-developed<sup>4</sup>.

<sup>2</sup>Companion document to CAADP: integrating livestock, into CAADP (3)

<sup>3</sup>World Agriculture towards 2030 – 2050 (22)

<sup>4</sup>Livestock's many virtues (15)

**Box 1. Extracts from the Malabo Declaration having particular resonance with LiDeSA:**

**Commitment to Enhancing Investment Finance in Agriculture**

- a. Uphold our earlier commitment to allocate at least 10% of public expenditure to agriculture, and to ensure its efficiency and effectiveness;
- b. Create and enhance necessary appropriate policy and institutional conditions and support systems for facilitation of private investment in agriculture, agri-business and agro-industries, by giving priority to local investors;

**Commitment to Boosting Intra-African Trade in Agricultural Commodities and Services**

- a. Commit to harness markets and trade opportunities, locally, regionally and internationally
- b. Triple, by the year 2025, intra-African trade in agricultural commodities and services;
- c. Create and enhance policies and institutional conditions and support systems:

**Commitment to Enhancing Resilience of Livelihoods and Production Systems to Climate Variability and other related risks**

- a. Ensure that, by the year 2025, at least 30% of our farm, pastoral, and fisher households are resilient to climate and weather related risks;
- b. Enhance investments for resilience building initiatives, including social security for rural workers and other vulnerable social groups, as well as for vulnerable ecosystems;
- c. Mainstream resilience and risk management in our policies, strategies and investment plans.

The majority of African livestock is raised on natural pasture and has the potential to attract niche markets for quality assured residue free products if well promoted<sup>5</sup>. However, the sector faces various challenges as listed in Box 2, constraining its capacity to meet the rising demand for livestock and livestock products and from making a significant contribution to economic growth.

A sizeable proportion of Africa's livestock are kept in extensive systems in the arid and semi-arid lands and by smallholders in subsistence-oriented mixed crop-livestock systems<sup>6</sup>. The majority of the livestock owners are classified as poor and considered not commercially oriented. Past investments, both from the private and public sectors, in the development of the livestock sector have been largely project-based and disjointed, with little regard to the required long-

<sup>5</sup>Diversification and Sophistication of livestock products (25)

<sup>6</sup>African Livestock Futures (21)

### **Box 2. Summary of Regional Livestock Situational Assessment findings**

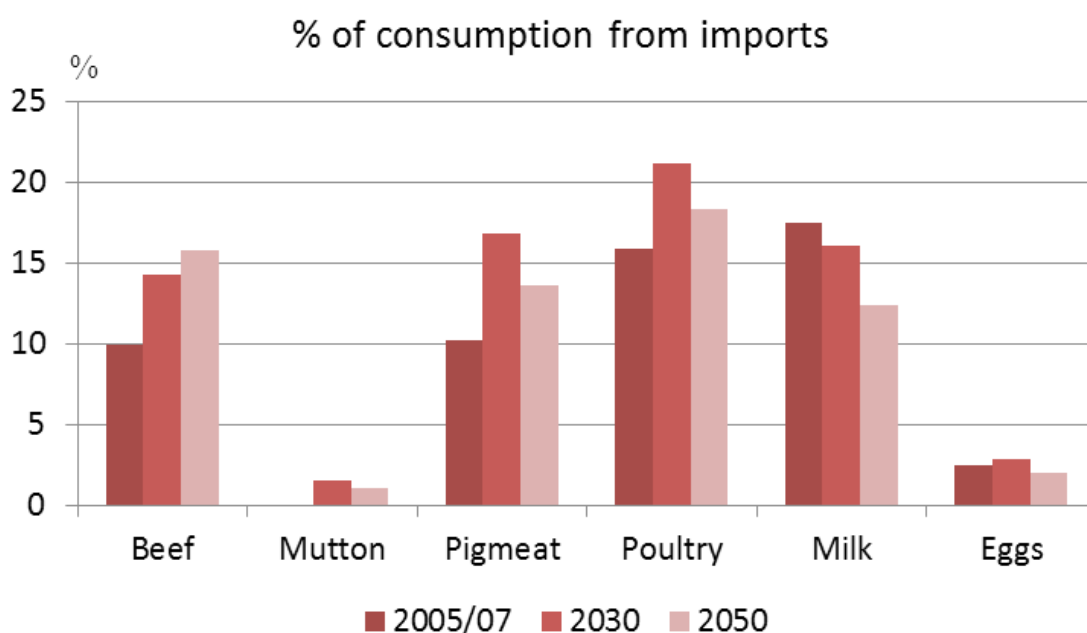
Assessments carried out in the five geographical regions of Africa indicated that the sector is negatively affected by various factors including:

- low breed capacity for production and productivity
- limited availability of quality land, feed and water resources,
- gaps in animal health support systems, disease control measures, input supply and service delivery,
- lack of value addition, market information, market infrastructure and competitiveness of African livestock products,
- weakness in the application of and compliance with sanitary and phytosanitary standards.
- deficiencies in policy, legislative and institutional frameworks
- inadequate application of and support for the deployment of available technologies, knowledge and skills.
- low public and private sector investments

term institutional development<sup>7</sup>. Private sector investments in livestock, which should drive accelerated and equitable growth, stimulate growth in other sectors and galvanize widespread socio-economic transformation, have been inhibited. This has been due to lack of supportive policy environments, lack of appropriate infrastructure and unavailability of reliable supplies of essential inputs and services - making the sector uncompetitive and unattractive to investors.

---

<sup>7</sup>*Minding the Stock—bringing public policy to bear on Livestock Sector Development (9)*



**Figure 3:** Trends in the % of Local Consumption -Derived from Imported Animal Products of Source Food Consumed (FAO: 2011)

Notwithstanding these negative observations, there are numerous examples of successful performance of the sector on the continent<sup>8,9</sup>. These include the thriving beef sector in countries such as Botswana, Namibia and Swaziland, the growth and development of the smallholder dairy sub-sector in Kenya and Tanzania; the vibrant and rapidly expanding poultry industry seen in many countries; the export of live animals from the Greater Horn of Africa (Djibouti, Ethiopia, Somalia and Sudan) to the Middle East; the cross-border mobility and pastoral resilience in the Economic Community of West African States (ECOWAS) and Intergovernmental Authority for Development (IGAD) regions; the water use and conservation in North Africa; and the successful eradication of rinderpest from the continent. These cases provide good examples and encouragement that transformation of the sector on the continent is feasible.

It is vital that the livestock sector expands in keeping with Africa's growth and meets the social development vision through the transformation of the sector. In recognition of this crucial need the Executive Council of the African Union

<sup>8</sup>Livestock sector development for poverty reduction: an economic & policy perspective (15)

<sup>9</sup>The Livestock Revolution: A Pathway out of Poverty? (19)



*Africa is endowed with enormous land, water and pasture resources and the majority of African livestock is raised on natural pasture and has the potential to attract niche markets for quality assured residue free products*

(AU) responded to the recommendations of the African Ministers Responsible for Livestock, by mandating the African Union Commission and Regional Economic Communities (RECs) to coordinate the efforts of all the relevant stakeholders to formulate a Livestock Development Strategy for Africa (LiDeSA). This strategy has been given an extended timeframe of 20 years in order to adequately prepare for and answer the multiple challenges that the sector faces.

In response to the mandate given by the Executive Council, the AUC, through AU-IBAR, led a joint multi-stakeholder process of comprehensive sector assessments, consultations and in-depth situation analyses in the five geographical regions of Africa. This exercise culminated in the identification of the issues constraining the sector throughout the continent. These findings were consolidated in an





*Swaziland bred Brahman bulls supporting the country's lucrative export market to Europe*

Issues Paper that informed the formulation of LiDeSA. The process was led by a guiding group that brought together representatives of key stakeholders of the livestock sector in Africa. The guiding group was chaired by the African Union Commissioner for Rural Economy and Agriculture. The studies were carried out by an independent group of consultants (2 per region) who crystallised their findings in Regional Assessment Reports, which were tabled and validated at Regional Stakeholders Workshops. Continental stakeholder workshops were convened to consider the Regional Reports, Issues Paper and the Draft Strategy. A high level meeting of African Ministers responsible for livestock was convened in Nairobi in November 2014 to consider and adopt the draft strategy.

As an integral part of the broader agricultural sector, the livestock agenda is guided by the vision and aspirations of the Accelerated African Agricultural Growth and Transformation Goals of the Malabo Declaration. This strategy is also informed by the Comprehensive Africa Agriculture Development Programme (CAADP) results framework (Box 3) and will guide and assist countries and RECs in formulating livestock investment priorities within their national agricultural investment plans.

**Box 3. Sustaining CAADP Momentum – the 10-Year Results Framework**

- a. An effort and guide to systematically strengthen the focus on implementation and delivering results
- b. A means to set and monitor clear and attainable results and impact goals
- c. A tool to foster alignment and harmonisation in the numerous efforts and initiatives on agriculture development
- d. A tool to support the iterative and learning nature of the CAADP implementation process

LiDeSA is also in line with the aspirations of the Agenda 2063<sup>10</sup> (Box 4), a 50 year strategy for the African Continent in all spheres of social and economic development. It will position the livestock sector as the key driver for delivering the desired 6% annual growth in agriculture in the AU Member States thus contributing significantly to national economic growth. It will also guide and mainstream stakeholders' efforts in addressing major development challenges facing the sector.

**Box 4. Agenda 2063 - Our Aspirations for the Africa we want:**

1. A prosperous Africa based on inclusive growth and sustainable development
2. An integrated continent, politically united and based on the ideals of Pan Africanism and the vision of Africa's Renaissance
3. An Africa of good governance, democracy, respect for human rights, justice and the rule of law
4. A peaceful and secure Africa
5. An Africa with a strong cultural identity, common heritage, values and ethics
6. An Africa where development is people-driven, unleashing the potential of its women and youth
7. Africa as a strong, united and influential global player and partner.

The strategy will also ensure coordinated actions at continental, regional and national levels to promote synergy in addressing critical issues facing livestock development<sup>11</sup> and bring about tangible actions that will lead to the realization of the full potential of the livestock sector to make a significant contribution to food and nutrition security and sustainable economic development.

---

<sup>10</sup>Agenda 2063 - the Africa we want (1)

<sup>11</sup> AU-IBAR Strategic Plan 2015 – 2017 (12)



© ILRI

*Africa's Youth – with investment and training they can transform from herders to professional livestock farmers*

This document, providing an overall guide for the implementation of LiDeSA as well as laying a secure foundation on which any future shifts in the strategy can be supported, is divided into 3 parts. Part I elaborates on the background to the development of the LiDeSA with chapters on the rationale for the strategy and a situational analysis on which the strategy is built. Part II details the strategy itself with a description of the vision, goal and strategic approach taken; strategic objectives; results areas; strategic options; implementation principles; stakeholders; and risks and assumptions. Part III contains chapters describing the LiDeSA implementation modalities including the engagement platform; planning and alignment tool; Monitoring and Evaluation (M&E) framework; communication strategy; and investment and financing framework.”



## 2. Rationale for the Livestock Development Strategy for Africa

Despite past interventions, Africa's livestock sector is yet to realize its full potential and contribution to food and nutritional security, income generation and socio-economic development. This has been partly caused by inadequate investment to spur optimal performance, and the lack of a coherent strategy and supportive policy environment leaving most development efforts to operate in an insular, ad-hoc and disjointed manner. Consequently, although Africa has the second largest livestock population in the world<sup>12</sup>, the continent still faces shortages of livestock products and does not command a significant proportion of the global livestock trade. Africa has thus, remained a net importer of animal products with an estimated annual and growing expenditure, currently amounting to 4 billion USD per year<sup>13</sup>.

Indicators suggest that Africa has significant capacity to increase the consumption per capita of animal source foods. The current per capita annual consumption of meat and milk of about 14kg and 30 litres, respectively is projected to rise to 26 kg levels and 64 litres respectively by 2050<sup>14</sup>. The African market for animal-source foods has been estimated at US\$ 51 billion annually in 2005/07 (FAOSTAT farm-gate prices) and is expected to triple by 2050 to more than US\$ 151 billion annually. Imports of livestock products are expected to grow, with the net trade balance for all livestock products becoming increasingly negative unless drastic changes occur in the current production practices. During the period 2030 and 2050, 16 - 20% of the beef, pork, poultry and milk consumed in Africa will be imported from other regions with only Eastern Africa projected to be self-sufficient. Intra-African trade in livestock is not well developed with regional markets remaining disjointed and therefore challenged in taking advantage of the increasing demand for livestock and livestock products.

<sup>12</sup>FAO Stats

<sup>13</sup>Why has Africa Become a Net Food Importer? FAO 2011 (70)

<sup>14</sup>World agriculture towards 2030 -2050. (22)

Livestock productivity in terms of yield per head per annum is estimated at 50%; below the standard for developing countries, and much lower than that of developed countries<sup>15</sup>. Much of the reported growth in the livestock sector is largely derived from estimated increases in herd and flock sizes that account for increases in supply for as much as 96% for beef, 82% for milk, 89% for poultry and 98% for sheep and goat meat<sup>16</sup>. This large productivity gap can only be narrowed if existing improved low cost innovations and technologies are adopted and market linkages are improved. The effectiveness of these technologies in expanding output and enhancing product development has been demonstrated in the dairy and monogastric (poultry and pigs) sub-sectors. The sector has also innovatively applied Information and Communications Technology (ICT) and mobile money transfers to improve functionality, marketing and trade in extensive pastoral and agro-pastoral systems<sup>17</sup>. These successes in the application of innovation and technology could be scaled up and extended across the industry.



*LiDeSA will guide the steps needed to transform Africa's livestock sector*

---

<sup>15</sup>Companion Document to CAADP – Livestock (3)

<sup>16</sup> Livestock production - recent trends, future prospects (40)

<sup>17</sup>The Economics of M-PESA (100)



*Value addition in the Leather value chain creates increased quality employment opportunities for both youth and women*

These observations emphasise the need to take steps that will transform Africa's livestock sector by giving it impetus, mainstreaming investments; strengthening of policy and institutional reforms; enhancing production, productivity and competitiveness; and orienting livestock production to the market. The LiDeSA is intended to provide a coherent long term approach to livestock development that will unlock the value of the standing livestock asset; untapped multiplier potential; and distributive capacity of the sector.

Among the productive sectors, livestock has the greatest capacity to stimulate a multiplier effect and it is estimated that the incremental effect of every additional \$1 spent will generate \$2.9 in primary livestock production and \$5.9 in value added<sup>18</sup>. The sector also has high spillover effects, providing strong stimulus for growth in other agricultural sectors, manufacturing and service sectors.

<sup>18</sup> Investing in African Livestock - business opportunities 2030-2050 (27)

There is also evidence that because of the structure of the livestock sector, with a huge number of rural producers, informal sector actors and indirect linkages across the different value chains, it provides an avenue for more equitable distribution of benefits and the creation of increased quality employment opportunities for both youth and women<sup>19</sup>.

Further, the strategy will facilitate emergence of livestock from the shadows and enhance focus by policy makers, development partners and investors, mainstreaming livestock into national and regional agricultural investment plans within the CAADP framework<sup>20</sup>. The strategy should also ensure coordinated action and promote synergy and multi-level partnerships in addressing critical issues in the livestock sector.

To realize the 6% annual growth rate in agriculture and national economic growth aspired in the Malabo Declaration<sup>21</sup>, livestock must play a more central role in the agricultural economy. Efforts to realize this aspiration will be best rewarded if all actors including Non-Governmental Organisations (NGOs), Community Based Organisations (CBOs), private, public and humanitarian sectors adopt and invest resources within their mandates through a common framework. The LiDeSA has encapsulated these principles as it seeks to guide and mainstream stakeholders' efforts in addressing the major development challenges facing the livestock sector in alignment with the CAADP, the CAADP result framework<sup>22</sup>, Agenda 2063<sup>23</sup> and Sustainable Development Goals (SDGs).

---

<sup>19</sup>Livestock sector development for poverty reduction: an economic and policy perspective (15)

<sup>20</sup>Framework for Mainstreaming Livestock in the CAADP Pillars (60)

<sup>21</sup>Malabo Declaration on Accelerated Agricultural Growth and Transformation (6)

<sup>22</sup>CAADP 10 Year Result Framework (2)

<sup>23</sup>Agenda 2063 - the Africa we want (1)



### 3. **Situational Analysis of the Livestock Sector in Africa**

Africa is a livestock-rich continent, with about one third of the world's livestock population. However, despite the numerical strength, the sector has not contributed fully to sustainable development, food and nutritional security and the livelihoods of the continent's inhabitants. To better understand the challenges, a rapid assessment of the situation of the sector in the five regions of Africa was undertaken focusing on strengths, weaknesses, opportunities and threats. These assessments provided essential baseline information for the formulation and execution of the LiDeSA.

#### 3.1 **Continental Level**

Results from the regional assessments provided an overview of the state of the livestock sector at the continental level. From a synthesis of the findings, overarching strengths, weaknesses, opportunities and threats variably affecting the sector across all regions were identified. Region specific issues are presented in subsequent sections of this chapter.

**Strengths:** Africa has a very large population of livestock with significant regional variations in the proportion of the different species of domestic animals kept<sup>24</sup>. The aggregate estimated populations for 2014 were 304 million cattle, 1.825 billion chicken (including 25 million guinea fowls, 25 million turkeys and 13.5 million pigeons), 347 million goats, 328 million sheep and 35 million pigs. The continent is also home to 23 million camels and 18 million equines. Further, there is an emerging trend of domestication of tradable and locally consumed wild species of animals including grass cutters in Western Africa, ostriches in Southern and Eastern Africa and quail in different parts of the continent.

---

<sup>24</sup>FAO (2013) *Status and trends of Animal Genetic Resources-2012*, Rome 15-19 April 2013. (51)



*Domestication for Consumption - Grass Cutters, Ostriches and Quail*

Other types of wild animals that have entered the farmed species category in parts of Africa include buffalo, crocodiles, cavies, giant snails, grasshoppers, mopane worms, guinea pigs, cane rats, honey bees, mulberry and non-mulberry silkworms, snails, acarina, archachatina, edible frogs, turtles and snakes. This enormous biodiversity with the unique regional differences in the types, numbers and cultural uses of animals kept, represents formidable developmental and commercial opportunities for exploiting comparative advantages and opportunities to create new streams of income and wealth creation through the new strategy.



*Africa has a wealth of indigenous animals that represent formidable developmental and commercial opportunities*

**Weaknesses:** Most of Africa's livestock are kept in extensive systems in the arid and semi-arid lands (ASALs) by pastoralists and smallholders in mixed crop-livestock systems using traditional management practices and pursuing subsistence rather than market objectives. In spite of the substantial numbers and biodiversity of animals reared, the per capita performance is low partly because the production systems are low input-low output, the genetic potential of indigenous breeds is under-utilized and the majority of livestock keepers only keep small numbers of animals for livelihood support (food, insurance, manure, draft power) rather than for commercial purposes<sup>25</sup>. This, besides making the continent deficient in a wide variety of livestock products and animal source foods, has led to the entrapment of most livestock dependent communities in low income economies. Commercial livestock production is only practised by a small proportion of livestock keepers (5-20%) who also dominate markets and enjoy most of the sector's profits<sup>26</sup>.

Poverty is widespread in Africa with the proportion of people living on less than US\$ 1.25 per day (extreme poverty) ranging from less than 5 percent in North African countries to over 80 percent in some sub-Saharan economies. About 75% of the extremely poor live in rural areas, especially in sub-Saharan Africa. In most cases, the majority of these are farm households which also keep some farm animals, ranging from poultry through sheep and goats to cattle which can, with appropriate management interventions, provide an effective means out of poverty<sup>27</sup>.

---

<sup>25</sup>*Livestock Production Systems and Livestock Development in Tropical Africa (13)*

<sup>26</sup>*Livestock production - recent trends, future prospects (40)*

<sup>27</sup>*The Livestock Revolution: A Pathway out of Poverty? (19)*



*Most of Africa's livestock are kept using traditional management practices, pursuing subsistence rather than market objectives*

Further, of the 3,882 species of domesticated animals<sup>28</sup>, livestock keepers in Africa predominantly rely on just 5 large animal species - namely cattle, sheep, goats, donkeys and camels. This diminishes the potential contribution of livestock to economic and development objectives by the many other locally and regionally important species of farmed animals. Poultry, though widespread and an important player in food and nutritional security, has not received the deserved investment to realize its full potential.

The institutional and policy environment, though evolving favourably, exhibits enormous weaknesses in providing an enabling and level playing field to the livestock sector. Principal among these constraints are weak extension and animal health systems, unfriendly and often outdated policies and legislation, poor service and physical infrastructure and poor governance creating unnecessary cross-

<sup>28</sup>Livestock & the Environment - finding the balance (62)

border restrictions, open hostilities, and internal conflicts. The livestock sector in Africa has also experienced inadequate investment over time, especially following the structural adjustment programme of the 1980s that largely quashed growth in key aspects of service delivery and stagnated growth in most public sector driven aspects of the sector.



*Poultry has not received the deserved investment to realize its full potential.*

**Opportunities:** There is a large and increasing demand for animal products in Africa, partly driven by rising consumer populations, incomes and urbanization<sup>29</sup>. There are also instances of growing integration of livestock and other production systems such as crops and mining that is bringing additional resources to livestock development<sup>30</sup>. The African Union's regional integration agenda that is promoting intra-regional trade, social, economic and political integration also provides opportunities for the livestock sector. This is further supported by the CAADP framework and the AU New Partnership for Africa's Development (NEPAD)

<sup>29</sup>Livestock to 2020: The Revolution Continues (18)

<sup>30</sup>Livestock planning, challenges and strategies for livestock development (16)

coordination and implementation agency and other institutional structures that have been put in place to support coordination of the sector. Africa is also endowed with enormous land, water and pasture resources, most of which are under-utilized and under-developed. Further, whilst most African livestock is raised on natural pasture, the potential to attract niche organic markets remains an opportunity yet to be gainfully exploited.



*There is a large and increasing demand for animal products in Africa, driven by rising consumer populations, incomes and urbanization*

**Threats:** Africa's livestock sector is potentially under threat from a number of inter-related factors. Key among these is the escalating impact of climate change and over-reliance of most production systems on natural precipitation. With increasing frequency and longevity of unfavourable weather across the continent, the majority of livestock dependent communities are experiencing greater uncertainty and instability of their livelihoods. The rising human population and high rate of urbanization have also created more demand for land resulting in an accelerating annexation of grazing lands for housing, cultivation and urban centres. Exploration for minerals and fuels is also taking up significant amounts of land from grazing. This is reducing access to land, pasture and, most critically, water for livestock and to increased degradation of fragile lands<sup>31</sup>.

<sup>31</sup>Livestock and Water Interactions in Mixed Crop-Livestock Farming Systems (39)

Globalization and the consequent competition for the market between African livestock products and comparable products from more competitive production systems leads to a price differential and consumer preference in favour of the cheaper imported product. This makes it difficult to justify investment in local production with the attendant risk of reduced local growth and employment opportunities. The substantive exit of the youth from the currently low rewarding occupation of livestock rearing in favour of alternative urban based livelihoods is also denying the sector much needed human resources for maintenance and growth. Further, the inability of Africa's livestock and livestock products to access and compete favourably in the international markets has restricted most production to local markets that for various reasons have not offered sufficient incentives to attract more investment to the sector.



*There is an escalating impact of climate change making those production systems dependent on natural precipitation increasingly vulnerable.*

## 3.2 Regions (Central, Eastern, Northern, Southern and Western)

### 3.2.1 Central Africa Region



*Kuri Cattle with buoyancy aid bulbous horns suited to the semi aquatic habitat around Lake Chad*

**Strengths:** The strengths of the Central Africa Region include the abundance of genetic resources adapted to local ecological conditions, the low production costs, the existence of pastoral people and their livestock keeping traditions, the existence of promising markets, opportunities for enhancement of animal products and by-products. In terms of production systems, a significant scope exists for improving livestock productivity. Indeed, the genetic potential and inherent variability of breeds adapted to local conditions and the favoured qualities of the meat produced adds considerable opportunity for significant value added to the pastoral livestock resource. The other strength of the livestock in the Central African region, and particularly in the three main producing countries (Chad, Cameroon, Central African Republic), is the insufficiently exploited export potential. Taking into account the technical parameters (feeding, reproduction,



health care, offtake and market opportunities), the export capacity of the animals can be significantly increased. The competitiveness of the production systems is also the strength of the farming systems in the region (pastoral, agro-pastoral). According to studies conducted, it has been shown that there is a differential in cost of production in favour of the Sahelian countries as compared to the large livestock exporting countries (Brazil, Argentina, USA, EU, Australia and New Zealand). This differential remains significant, reflecting a real advantage for Sahelian livestock. For the product to be marketed, it should be noted that there is a flexibility of the marketing chain which explains its capacity to adjust and circumvent when exposed to very disruptive markets events such as harassment and insecurity. Similarly, the trekking of live animals helps to overcome the problem of the cold chain, required in the transport of meat, and also the risk of transport in trucks. The livestock sector is based on effective social networks that allow sourcing animals for markets from widely dispersed locations in the absence of developed means of communication (roads, telecommunications). The structuring of the regional exchanges in the Central African Economic and Monetary Community (CEMAC) areas is also increasingly dynamic.

**Weaknesses:** There are internal and external constraints to the development of the production and trade of livestock and meat in the region. At the production level the sanitary constraints, the feed and water constraints, the low productivity of the breeds, the absence or poor infrastructure, the institutional and the organizational constraints and the difficulties of access to formal credit faced by the different actors, were highlighted. Ignorance of the livestock sector actually limits its development. The lack of reliable statistics and indicators prevents taking relevant decisions. Marketing of products is hampered by the lack of organization of livestock markets and the lack of stock routes for export. Moreover, the processing units and slaughterhouses are absent or in a precarious state. The remoteness of production areas and the lack of transport infrastructure, the

rigidity of supply (animal destocking motives are not always linked to market conditions), the heterogeneity of products, the irregularity of supply of live animals (seasonal due to climatic variations), the conveyance of animals on foot which lengthens the time of the operations are also among the weaknesses. The multitude of intermediaries and the different taxes make the supply of live animals more complex. The distortions in the application of the Community rules hinder intra-Community trade and penalize operators.

**Opportunities:** A major benefit of the agricultural development in Central Africa is the existence of a strong regional market that currently comprises more than 140 million consumers. At the current rate of population growth in the area, the potential number of consumers will reach the 300 million by 2050. This represents a growing and largely creditworthy market, in relation to the purchasing power of the consumers. Additionally, more than half of these consumers will live in urban areas, providing a unique opportunity to accelerate the transformation of the regional livestock sector. Intra-regional trade is still very low in Central Africa. The major challenge is to promote the regional markets into key promoters of livestock development, regional integration, and improved incomes. This requires the acceleration of the construction of the common market within the region. The gradual replacement of trekked animals to vehicle transportation will reduce the transaction times and distances between production areas and markets. The producer's professional organizations could organize themselves to buy trucks or collaborate with well-structured transporters organizations. The development of fresh meat exports will also boost market share and create jobs. Mobile and new information and communications technology (ICT) bring change in practices (eg virtual exchanges) especially for large producers. These new technologies will play an essential role in the transactions.

**Threats:** In the Sahel-Saharan zone, desert encroachment is accelerating the drying up of rivers and the degradation of plant cover, seriously limiting the availability of water and feed for agro-pastoral production systems. We are witnessing a shift of climatic zones from north to the south, increasing the degree and extent of the area in the region affected by desertification. The challenge here is to exploit underground water resources to support agro-pastoral production. The influx of live animals from Nigeria and competition from European and world markets imported livestock products World Trade Organisation (WTO) Agreements and Economic Partnership Agreements (EPAs) respectively pose a significant socio-economic challenge to justifying support for livestock production in the region

### 3.2.2 East Africa Region



*The Boran – a breed well adapted to East African Conditions*

**Strengths:** The Eastern Africa Region (EAR) is endowed with immense livestock resources representing the largest proportion of Africa's livestock population. The livestock sector is a source of livelihoods (source of food, income and employment)

for many millions of people in the region. It also contributes to the growth of Gross Domestic Products (GDP) and foreign currency earnings of Governments in the region. The region is strategically located in relation to the livestock markets in the Gulf of Aden region and is subsequently the largest exporter of live animals in Africa generating income to producers, traders and governments.

Despite the erratic climatic conditions in the region, the livestock sector strives to record annual growth and remains as the preferred sector to minimize and spread risks of shocks and enhance resilience of disaster prone and vulnerable communities.

The livestock production system in the region is predominantly extensive depending on natural grazing with minimal external inputs making livestock products from the region potentially fit for the organic market.

A vibrant smallholder dairy sector is also found in the region with indigenous dairy breeds existing in some countries e.g. Kenya, Tanzania and Uganda. The diverse ecological zones provide for a rich diversity of livestock breeds

**Weaknesses:** Although the livestock sector is expanding in the East African Region, the rate of growth does not match the increased demand for livestock products being experienced in the region and beyond. The principal reason for the inability to meet the demand for livestock products is attributed to low livestock productivity.

Livestock management in the region is predominantly characterized by a low input – low output system of production which is dependent on communal natural grazing where the quantity and quality of nutrient available is inadequate, even for the predominantly small sized local breeds. Production mainly relies on rain fed

pasture produced on overstocked communal rangelands leading to cyclic seasonal nutritional stress, leading to livestock losses whenever there is shortage of rain in the arid and semi-arid lands (ASALs) of the region. The extensive nature of the production system and poor physical infrastructure constrain the delivery of livestock services, access to markets and enforcement of regulatory measures.

Livestock production in the region is mostly for subsistence rather than for commercial purposes. Consequently, production systems are not market-oriented as only a few livestock keepers actively practise measures to achieve higher yields per animal by using appropriate inputs. As a result the livestock value chains are not well developed nor effectively integrated and have weak participation of private sector actors such as feed processors and private veterinary service providers. There is little effort on value addition in the livestock sector. Governments and livestock value chain (LVC) actors tend to focus more on promoting live animal exports instead of facilitating the necessary policy and infrastructures for enhancing value addition along the market chain. This weakness in the sector has denied the creation of jobs and improved incomes and value along the VC and also makes the sector less rewarding to investors and unappealing to the youth and women.

Although most countries in the region have policies and strategies in favour of promoting the livestock sector enforcing them to move the sector forward remains a serious challenge. Furthermore, there is a lack of specific policies tailored to attract investors and the youth by facilitating easy access to credit and other incentives. The region also has serious challenges with the control of transboundary animal diseases and management of cross-border movements of animals. Resource based conflict both within and between MS, livestock theft, identification and traceability also remain key challenges.

**Opportunities:** There is increasing recognition by policy makers of the contribution by the livestock sector to food security, poverty alleviation and economic growth. Following targeted efforts by global, continental, regional and national actors, the livestock sector is now better integrated and mainstreamed in the CAADP framework in many countries in the region and is now recognized as one of the key pillars for the agricultural development agenda. Furthermore, there are efforts in the region to create institutional arrangements to promote the livestock development agenda. The creation of the IGAD Centre for Pastoral Areas and Livestock Development (ICPALD) and a livestock unit in the East African Community (EAC) are clear indications of the political commitment of Member States to advance the livestock sector in the EAR.

There is growing interest to support the livestock sector among development partners motivated by a broader agenda of building resilience and ensuring peace and security as part of the international fight against terrorism. This should be embraced as a golden opportunity to address the constraints and ensure sustainable development of the sector in the region.

The growing demand for livestock products by domestic consumers as well as trading partners is an opportunity to bring about transformation of the livestock sector in order to ensure the supply of adequate and safe livestock products. The region's proximity and the longstanding tradition of trading with the Middle East is an opportunity to deepen its trading relations. The availability of surplus production of livestock and livestock products provide the EAR with a comparative advantage for the promotion of intra-African trade.

**Threats:** The EAR is faced with eminent threats that could curb the potential gains achievable by the sector due to climate change. The region has been regularly affected by recurrent droughts and floods leading to the disruption of livelihoods of many millions of citizens. The most severe drought conditions in over 60 years were recorded during 2011 in the Horn of Africa with devastating consequences and impacts on human and livestock populations. Climate change also predisposes to climate-related diseases, particularly Rift Valley fever (RVF) that causes mortality of both humans and animals as well as serious disruption of the export trade.

Livestock production poses a threat to the environment in the form of methane gas emissions and other microbial contaminations. This is particularly important in small island countries and urban areas where human habitations tend to be in close proximity to animals. In some of the countries, food animals are not always slaughtered in recognized abattoirs and products from illegal or unauthorized slaughter facilities enter the market presenting serious threats to public health.

Rising insecurity and terrorism are also serious setbacks to the development of the livestock sector in the region, denying access to strategically important grazing areas, water points and market routes. In addition, the increasing expansion of crop agriculture, human population and the growth of urban centres and other settlements are also emerging as challenges to the livestock sector as they compete for the available resources. This can, however, also present an “opportunity” to advocate and promote intensification of the livestock production systems through utilisation of crop by-products, feed additives and maximising the potential benefits of a horizontally and vertically integrated and well managed crop-livestock system.

### 3.2.3 North African Region



Camels, often termed ships of the desert, maintain long established trade routes in North Africa

**Strengths:** The North Africa region has large areas of land suitable for natural grazing and feed crop production supporting large numbers of cattle, sheep, goats, camels and poultry. It also has natural water sources and reasonably well developed water harvesting and conservation infrastructure for rainfall, rivers, streams, lakes, ponds, boreholes, wells, underground and surface sources. Adapted livestock breeds are recognised for their unique ability to make use of these often difficult areas, utilising both natural vegetation and crop by-products which would otherwise have no use. There is strong political will for the development of the livestock sector responding to the increasing demand for animal products. Livestock rearing is based on natural grazing and has the potential to target niche markets for animal source foods especially from chemical free herds utilising extensive grazing systems. The region is witnessing growth in infrastructure for modern dairy and meat production (dairy



plants, large scale meat processing facilities). A large number of farmers exist who have a keen awareness of contemporary approaches to livestock development embedded in an inherited appreciation and experience of the values contained in traditional knowledge. There is a commitment throughout the sector to maximise the important role of livestock production in creating jobs in rural and urban areas, contributing to the national economy and to the rural economic growth by supporting income generation and reducing food insecurity. There has been noteworthy incremental growth in the poultry subsector complex in response to the high demand for animal source foods. Finally, and most significantly, there is a growing trend towards technical and investment partnerships between public and private sectors. The region's veterinary services are fairly strong and effective in their support to disease control and trade facilitation. The region has also shown leadership in the commercialization of specific livestock value chains e.g. dairy and poultry complexes in Egypt, and is self-reliant in the supply of small ruminants. Due to the relatively strong economies in North Africa, the potential exists for additional investment in livestock development.

**Weaknesses:** The weaknesses seen in the livestock sector of North Africa include the predominance of traditional production systems characterized by low production and productivity of the local and indigenous breeds kept. The region suffers from a shortage of forage resources due to the harsh weather and seasonality of rainfall. The lack of accurate data and information on livestock hampers optimal planning, investment and policy formulation. Similarly, weak support services such as animal health in the rural areas, poorly designed, disorganized and inaccessible livestock marketing infrastructure and, poor financial services among others limit the performance of the livestock sector in Northern Africa. Value addition for animal products is underdeveloped with inadequate slaughter facilities and unsafe meat and milk processing. The partnership between the public and the private sectors is weak as a result of unfavourable laws and policies. Livestock stakeholders

are poorly organized, especially among the small farmers. This has limited their ability to participate in sectoral development processes, influence policies and pool resources to take advantage of markets and access financial services among others. Livestock and crop production systems are poorly integrated, with limited development of fodder production and trading. Livestock production systems are highly dependent on natural precipitation leading to seasonal fluctuation of fodder availability. Inconsistent approaches and poor targeting of education and training, research and development priorities have persistently denied the livestock sector appropriate investment of resources leading to underdevelopment even when resources are available. This has to some extent been exacerbated by weak execution capacity of donor supported projects and low level of organization of the stakeholders. Poor rural financing instruments and resources coupled with inadequate or inactive financing policies also inhibit development of the livestock sector.

**Opportunities:** The growing demand for livestock products at the global, regional and national levels, rising incomes and changing dietary patterns are clear opportunities for the livestock sector in North Africa. New technologies are also available to enhance the competitiveness of the meat industry and to assist in opening access to new export markets. A number of countries in the region have established modern dairies with good breeds of cattle while a competitive export market niche exists for desert mutton and beef. The region also enjoys significant cooperation with international organizations such as FAO, OIE, USAID and the EC that can benefit livestock development. The region also has opportunity for the progressive vertical integration of the animal source food value chains enhanced by the availability of capacities for refrigerated transport of meat from slaughterhouses to markets and for export. The sector can take advantage of the comparatively wealthy governments to attract more resources to address priorities. The emergence of inter-professional organizations in the region also

provides opportunity to exchange ideas and collaborate across disciplines and national borders.

**Threats:** Threats that face the livestock sector in North Africa include climate change and environmental degradation, the spread of epidemic diseases and trans-boundary diseases and weak compliance with sanitary and phyto-sanitary (SPS) measures. The prevalent importation of highly competitive animal products and increasing dependence on imported animal source foods are serious challenges for the local livestock industry. Overgrazing resulting from increasing livestock numbers on natural resources is a perennial problem in North Africa, and has contributed to increased resource-based conflict especially between livestock holders and crop farmers. The livestock biodiversity is threatened by uncoordinated crossbreeding activities resulting in the genetic erosion of the resilient indigenous species.

### 3.2.4 Southern Africa Region



*The Nguni – a disease and variable nutrient resilient breed that has been shaped by natural selection in the African environment over an extended period of time*

**Strengths:** The Southern Africa region is endowed with an abundance of natural resources, including large expanses of land that can be used to support production by the highly productive and renowned animal genetic resources. Livestock products particularly meat originating from the region are highly appreciated for their superior qualities for taste and aroma. Farm labour is abundant in the majority of countries at relatively cheap rates. Women and youth are willing to play an increasingly important role particularly in dairying and poultry production. Some governments provide a wide range of incentives to livestock breeders to produce more and at lower costs. Trade limiting animal diseases are absent in many countries in the region. A large number of countries in the region produce maize and other major feed ingredients in large quantities providing a significant source of crop residues and bi-products for animal feed. Highly mechanised and efficient production systems exist in some countries of the region. The region also possesses many centres of excellence in livestock production and health, particularly in training, research and development. There is a high level of commitment from the regional economic communities of Southern African Development Community (SADC) and Common Market for Eastern and Southern Africa (COMESA) to ensure the development of the sector. There are many bilateral arrangements between Member States in the region, with vast opportunities for connectivity beyond the region. The region is relatively peaceful, has a generally favourable climate and a strong livestock keeping culture, especially for ruminants. Some governments and development partners have been active in supporting the sector in the region. Globalization and the projected substantial increase in demand for livestock products also offer vast opportunities to the region.

**Weaknesses:** Although in general political will for the sector exists, competition offered by other more economically attractive sectors such as mining, petroleum, tourism and fisheries makes the livestock sector less of a priority in the majority of countries, with many of countries not abiding by the commitment to provide at least

3 per cent of the National budget for livestock development. The livestock sector in Southern African region faces some challenges with a general preponderance towards subsistence production. Services rendered to the sector tend to be weak, especially veterinary and extension. The high capital investment required for commercial production is a major limiting factor and there is little value-addition to livestock products. The situation is not helped by the low level of private sector participation in livestock production. Infrastructure for livestock production and marketing, especially in the rural areas, is equally poor or dilapidated. Generally, there is a lack of supportive policies, institutional and legal frameworks and where they exist, implementation is poor. For example, compliance with SPS standards is generally poor. Technological innovations and appropriate infrastructure are largely lacking because of the dearth of investments. Records and information on livestock are sketchy and unreliable, making it difficult for informed decisions to be made. The sector generally receives very little budgetary support from governments when compared with other sectors. Yet there are heavy levies placed on livestock by local authorities. In recent times, there has been a net outflow of highly qualified human resources and this has resulted in a lack of capacity in some key areas, particularly animal breeding. There is little participation of the youth in livestock production. The institutional and organizational capacity of farmers tends to be limited resulting in fragmented approaches when addressing livestock issues. Livestock keepers rely heavily on donor and government support. The land available for livestock production is diminishing due to the competition from other sectors, such as mining and urbanization. Therefore, the availability of feed and water for livestock is becoming an increasing challenge.

**Opportunities:** The regional integration agenda offered by SADC and COMESA, and the increased possibilities for intra-regional trade which can boost livestock production. It is noted that most of the imports into the region come from industrialised countries whereas the same or similar products can be obtained

within the region. There are opportunities for specialised production systems with the potential to exploit niche markets especially for organic products. Consumers in developed countries tend to have a preference for livestock products, particularly meat, coming from African livestock for their highly prized qualities, offering producers a premium price in supplying these high value markets. Opportunities abound for the aggregation of livestock keepers to reduce production costs and increase production, value-addition, product differentiation and marketing. The demand for processed products, including ready to cook foods, will lead to an increased value-addition of livestock products. It is estimated that processed meat and milk products can achieve approximately 25 % of added value. The value chain and commodity-based trade are approaches which have considerable potential in the region. The region has a strong capacity for technological advancements which, if applied more purposively to livestock production, could make the sector a leading light in Africa. It is a considered view that with harmonization of disease control measures and export certification procedures, non-tariff sanitary and safety barriers can be overcome. The Performance of Veterinary Services (PVS) evaluations carried out by the OIE form a solid basis for greater investments in the livestock sector by Governments as well as International Donors.

**Threats:** Apart from the challenges as outlined above under weaknesses, there are other threats which adversely impact on livestock production in Southern Africa. The region has not been spared from the devastating effects of climate change where it is anticipated that ambient temperatures will rise by two degrees centigrade by the year 2050. Droughts and floods are becoming regular events. Increases in diseases and pests are also being experienced. As the world becomes one global village, cheaper imported livestock products are flooding into the region, negatively impacting on local production and posing an omnipotent threat to livestock development. The region's rich animal genetic resources have been the envy of the rest of the world. This has resulted in bio-piracy of some of these

resources with little regard or acknowledgement of intellectual property rights and breeders' rights. Increasing imports of parent stock and other live animals from countries with weak sanitary controls coupled with increasing movements of animals and people, significantly increase the risk of disease spread.

### 3.2.5 West African Region



*The Ndama – much valued for its trypanotolerance*

**Strengths:** The integration of the livestock sector in the Economic Community of West African States (ECOWAS) “Strategic Framework for Growth and Poverty Reduction in West African Countries” is perceived as a powerful instrument for livestock development. Other obvious strengths in West Africa include: the effective implementation of the Agricultural Policies through a set of institutional, legislative and regulatory reforms for creating an environment favourable to the agricultural development; the creation of a Regional Agricultural Development

Fund set up by the West African Economic and Monetary Union (WAEMU) and ECOWAS; the planned implementation of the Regional Programme on Access to Markets for facilitating trade in agricultural and food products within the Comité Permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel (CILSS) countries and with coastal countries; the existence of the Charter for free circulation of persons and goods adopted by ECOWAS; and the establishment of a custom union (harmonized custom policy) of a common external tariff (CET) - all contributing to the strengthening of the sector. The ECOWAS has also enacted several policies for the coordination, harmonization and promotion of livestock development. The region is also rich in livestock and has witnessed significant growth in consumption and demand, as well as production especially of monogastrics. Livestock rearing in the region is layered along discrete geo-climatic zones, creating definite intra-regional supply-demand axes that are good for intra-regional trade and the development of specialized value chains. The existence of strong regional integration institutions (ECOWAS and WAEMU) that have established well documented policies, strategies and integration mechanisms is a big strength for livestock development in the region. Western Africa also has well established specialized technical networks and regional institutions such as the West and Central Africa Veterinary Laboratory Network for Avian Influenza and other Transboundary Diseases (RESOLAB), West and Central African Regional Networks for Epidemiological Surveillance (RESEPI), the Regional Animal Health Centre (RAHC), Western Africa Health Organization (WAHO) and a number of centres of excellence in research and training.

**Weaknesses:** Western Africa is confronted with severe weather systems exacerbated by impacts of climate change that has increased the frequency and severity of unpredictable adverse weather events. The region is facing accelerated desertification characterized by a recession of the coastal forest belt and grazing zone, and increasing feed shortages due to drought and degradation of fodder



resources. Gender-based inequalities (access and control of resources between men and women); the low resilience of livestock and the low level of education and literacy among livestock farmers are inherent weaknesses in the region. Low adoption of improved technology, especially for improving integrated crop-livestock farming systems, improved husbandry practices, value addition of livestock commodities and access to enabling public services are also considered as significant weaknesses. Some countries in the region suffer significant shortages of livestock professionals thereby making access to services and appropriate technology an ongoing challenge. Environmental degradation and fodder variability constrain livestock development by limiting access to feed and water. Such phenomena often drive the need for transhumance with the associated risk of disease spread and conflict between migrant and sedentary communities. This problem is exacerbated by lack of clear policies on land ownership and tenure systems. Agriculture and agro-industry by-products are underutilized despite their huge potential mainly because of the absence of technologies to utilise by-products as animal feed. Livestock keepers have poor access to markets due to inadequate transport and market infrastructure, limited knowledge of market information, low literacy levels and weak organization among stakeholders. Livestock production in the region is largely subsistence with neither well developed value chains nor a clear understanding of market opportunities. Added to these factors is the lack of understanding and ownership by the various stakeholders, of the rules and regulations governing transhumance and other sectoral development policies at MS and regional levels.

The livestock sub-sector has in the past been subjected to unfavourable government policies, through incentive policies biased towards urban consumers and excessive regulation and unfair public sector competition. Even where appropriate policies have been put in place, for instance at ECOWAS commission level, implementation capacity and willingness among stakeholders has been underwhelming. The lack

of institutional capacity to apply appropriate solutions because of the inability to form effective working linkages between research institutions, the rising level of livestock diseases and the inadequate veterinary services pose serious challenges to the sector. The livestock sector in the region also experiences sustained low allocation of resources making it difficult to put in place adequate mechanisms for its development.

**Opportunities:** Livestock development in West Africa can benefit from political, institutional, economic, social and global instruments that have inspired the livestock revolution. Increased demand and consumption of livestock and livestock products resulting from improved incomes and changing lifestyles, urbanization and growing numbers of consumers are certainly opportunities in the region. The robust institutional and strategic instruments put in place by the ECOWAS to strengthen coordination and boost performance of the agricultural sector presents tangible opportunities for livestock development. Examples include the regional agricultural policy (ECOWAP) and the regional livestock transformation action plan (RAIP), regulation of veterinary medicines and products, transhumance policy and the Regional Animal Health Centre (RAHC). Western Africa is also endowed with several well established coordination mechanisms and institutions e.g. CLISS, Commerce équitable et développement durable. (CSAO) / Organisation for Economic Co-operation and Development (OECD), Le Réseau des organisations paysannes et de producteurs de l’Afrique de l’Ouest (ROPPA) which bring together local and institutional organizations tackling specific issues. These mechanisms provide opportunities for consensus building, resource mobilization and execution of actions for the sector. Further opportunities include the integration of livestock farming and agriculture using smart technology by emergent progressive agro-livestock breeders and exploitation of some complementarities (animal draught and animal manure) and the existing diversity of the local breeds of livestock that are well adapted to the production systems and different ecosystems.

**Threats:** Livestock development in West Africa is threatened by increased competition for land from alternative land uses such as crop agriculture, human settlement and growth of urban centres, land degradation and desertification. Adverse weather events associated with climate change are expected to present a formidable threat, especially considering the fragile nature of the Sahelian climate. The traditional practice of transhumance that comes to the rescue of livestock keepers during droughts is experiencing increasing resistance and conflict due to human settlement along the key corridors. The future feasibility of this model of livestock production is uncertain and could therefore become a threat. Another serious threat to the sector is importation of cheap livestock commodities from outside the region. This is by far the most serious threat considering the low cost of commodities versus inefficiencies of local production systems, and the close cultural ties between some of the exporters to the region.



*Climate adapted breeds will become increasingly important as a mitigation measure against the impact of climate change*



## **PART II THE STRATEGY**

### **4. Vision, Goal and Strategic Approach**

#### **4.1 Vision and Goal**

The vision and goal both resonate with issues of transformation, competitiveness and the sustainability of the Livestock Sector while contributing significantly to economic development, food and nutrition security and human well-being. The Vision Statement and Goal are therefore, as follows:

**Vision:** A competitive and sustainable Livestock Sector that significantly contributes to a prosperous Africa.

**Goal:** To transform the African Livestock Sector for enhanced contribution to socio-economic development and equitable growth.

#### **4.2 The Strategic Approach and Broad Strategies**

The envisaged goal of the strategy will be achieved when the prevailing subsistence livestock production systems are transformed into vibrant market-oriented systems by addressing the structural and functional challenges affecting the sector. The transformation of the sector therefore, will be achieved through significant public and private sector investments, to address key issues that affect the sector and catalyse annual growth to 5-6% in order to progressively reduce dependency on imports and increase exports.

In addition, sufficient and appropriate incentives will be required by the private sector to significantly increase investments in the livestock industry. Experiences in the livestock sectors in some developing and emerging middle income countries highlight the crucial role of the private sector in driving livestock revolutions in these economies. The private sector involved in these changes included big

enterprises, smallholders and the informal small and medium enterprises (SMEs) that have a pivotal role to play in creating this transformation.

The private sector invests where the conditions are conducive, and where the returns on investment are attractive. The primary role of the public sector, in addition to ensuring that public goods and services are guaranteed, will be to create the conditions for stimulating private sector confidence and investments. This will entail establishing policy, regulatory and institutional environments that:

- Protect the rights and the capital of the investors;
- Protect investors against unfair competition;
- Ensure easy access to financial services;
- Reduce the investment costs (improved governance, tax free regimes, etc.);
- Provide infrastructure;
- Facilitate access to markets, supplies and inputs;
- Facilitate access and use of ICT and other innovative technologies.

The transformation will also require the application of available technologies, knowledge and skills and increased investments in research and development. Interventions will be needed to bring about the gradual intensification and commercialisation of Africa's largely extensive and subsistent livestock production systems in the arid and semi-arid lands and develop greater market orientation by smallholders in mixed crop-livestock systems. The transformation of the sector will also need to be addressed through the development of sustainable livestock value chains supported by; improvements in genetics, production capacities and productivity, availability and use of quality land, feed and water resources, animal health systems, input supply and service delivery, value addition, market information and market infrastructure, competitiveness of African livestock products and the application of and compliance with sanitary and phytosanitary standards.



*Under LiDeSA traditional livestock management practices will be respected and supported.*

The CAADP Framework<sup>32</sup> and Agenda call for a radical shift in the political economy of agricultural investment to make it more evidence-based, inclusive, participatory and results-oriented, rather than the “business as usual” practice of making technical investment decisions without necessarily linking the investments to the desired quality of economic and development outcomes. This approach will engender a positive mind-set change that ensures investments are matched with the real needs of the sector and therefore, designed to harness the sector’s potential for equitable economic growth and sustained socio-economic development. The Strategy makes a clear paradigm shift in the approach to investment for the development of the livestock sector in order to ensure the desired/aspired change.

This strategic approach is aligned to the Malabo Declaration on accelerated agricultural growth and transformation for shared prosperity and improved livelihoods. This means that as commercialization efforts are supported for accelerated growth, fragile livelihoods in extensive production systems will also be protected and supported through improved income generation and alternative livelihoods.

<sup>32</sup>CAADP 10 Year Result Framework (2)



© ILRI

*LiDeSA seeks to guide and mainstream stakeholders' efforts in addressing the major development challenges facing the livestock sector*



© AU-IBAR

*Lead Livestock producers provide the most powerful advocacy for transition*



## 5. Implementation Principles

### 5.1 Guiding Principles

The implementation of the strategy will be based on the principles of subsidiarity, complementarity and comparative advantage taking into account the mandates and the relationships of the different institutions involved in its implementation. Transparency and mutual accountability will also be critical and mechanisms will be put in place to ensure that these principles are followed. Emphasis will be placed on establishing solid mutually beneficial partnerships among the various stakeholders at national, regional, continental and international levels based on the experiences and lessons learned from the successful implementation of previous continent-wide programmes in the livestock sector.



*Multi stakeholder platforms are key to ensuring proper and effective coordination and collaboration between all livestock development activities on the continent*

The implementation of this strategy will also provide an opportunity to improve the execution modalities of other continent-wide institutional development programmes and to develop multi-level and multi-stakeholder interactive platforms, networks, task forces, specific consultative groups and hubs, to ensure proper and effective coordination and collaboration between all livestock development activities on the continent. .

## 5.2 Implementation Arrangements

Based on the guiding principles, the roles and responsibilities of the various actors in the implementation of this strategy are defined to avoid implementation gaps and overlapping of interventions.

The African Union Commission (AUC) comprising of DREA<sup>33</sup>, AU-IBAR<sup>34</sup>, AU-PANVAC<sup>35</sup> and AU-PATTEC<sup>36</sup>, will be in charge of the overall coordination for implementation of the strategy and will lead the governance body that will be appointed to oversee the implementation process. The AUC will also be responsible for monitoring implementation and reporting to stakeholders. Within the framework of this strategy, the AUC institutions will focus on their core functions of coordination of activities and approaches, harmonization of institutional frameworks, capacity building, technical back-stopping of RECs, Member States and Non State Actors (NSA's).

The RECs and other regional institutions will be responsible for the regional harmonization of institutional and legal frameworks, facilitation of regional trade, promotion and establishment of regional infrastructure and support to MS and Regional stakeholders' organizations. The roles of the Member States will be central to the successful implementation of the strategy; they will be responsible for investing in supportive national infrastructures, delivery of public goods and services (livestock disease surveillance, Veterinary public health), developing and enforcing regulations, developing and monitoring national policies and strategies, supporting NSAs, creating a national environment conducive for private investment and livestock development envisaged in the national livestock policy hubs, conducting research and ensuring academic and continuous education.

---

<sup>33</sup>The AU Department of Rural Economy and Agriculture (66)

<sup>34</sup>The African Union Interafrican Bureau for Animal Resources (67)

<sup>35</sup>Pan African Veterinary Vaccine Centre (68)

<sup>36</sup>The Pan African Tsetse and Trypanosomiasis Eradication Campaign (69)



*Public Private Partnerships are seen as a key implementation principle for LiDeSA.*

The NSA and other stakeholders' organizations involved in the implementation at different levels will organize and mobilize actors, ensure the feedback of information from the primary beneficiaries to implementing agencies, conduct advocacy and awareness campaigns, build capacities of their members, deliver services and foster the integration of actors along the livestock value chains.

International organizations including FAO, OIE and ILRI will provide technical support, technical backstopping and capacity building for MS, RECs and AUC institutions in line with their respective mandates and comparative advantages. International bi-lateral and multi-lateral development partners will support the implementation of the strategy at continental, regional, national and local levels in a coordinated and harmonized manner to ensure synergy and coherence of their support.

Private Sector participation and driving force will be encouraged and facilitated at all levels through the formation of effective and working public private partnerships mediated by appropriate engagement platforms such as the existing livestock policy and strategy hubs.



## 6. Strategic Objectives and Expected Results

The Strategic Objectives that will lead to the realization of the LiDeSA Goal will include the following:

1. To attract public and private investments along the different livestock values chains
2. To enhance animal health and increase the production, productivity and resilience of livestock production systems
3. To enhance innovation, generation and utilization of technologies, capacities and entrepreneurship skills of livestock value chain actors
4. To enhance access to markets, services and value addition

### 6.1 Strategic Objective 1: To attract public and private investments along the different livestock values chains



The main livestock value chains will be identified, mapped and analysed to inform investments

#### **Result 6.1.1: Priority value chains with comparative advantage at the national and regional levels identified, mapped and promoted**

In order to maximise the use of available resources and engender best returns for private sector investment, value chains should be selected on the basis of their being the most efficient and that offer distinct comparative advantage<sup>37</sup>. For a given country or region this means not necessarily trying to produce all the livestock products it requires and consumes but to give priority to those

<sup>37</sup>Investing in African Livestock - business opportunities 2030-2050 (27)

products it is better placed to produce in relation to available natural resources and competitive costs of production. The two main effects of this strategy will be:

- to significantly improve the productivity of value chains, through a combination of various effects such as economy of scale, specialization, optimization of utilization of production factors and natural resources,
- to boost intra and inter-regional trade, and therefore generate employment and revenues in trade and marketing in the downstream levels of the value chains.

The main drawback associated with this approach is the increased risks inherent in specialization: sanitary risk, climatic risk, economic risk, etc. which will need to be addressed through the deployment of risk aversion strategies (see 6.1.4. below). To arrive at this result a number of strategic options will be employed.

#### *Strategy 6.1.1.1: Mapping, analysis and comparison of value chains*

The main livestock value chains will be identified, mapped, analysed and compared. The comparative analysis will take into account the use of resources, the efficiency, the productivity, the contribution to the economy and socio-economic factors such as poverty, employment, the risks and the negative externalities (environment, public health, social inequities, etc.)<sup>38</sup>. A stakeholder analysis will also be undertaken for each value chain analysed.

#### *Strategy 6.1.1.2: Selection of value chains with comparative advantages*

The priority value chains to be supported will be selected in a consultative and inclusive manner guided by the analysis as described above. The selection process will take place mainly at regional level, with continental engagement for inter-regionally traded commodities. Care will be taken to ensure that the interests of all countries and all categories of stakeholders are protected in the process.

---

<sup>38</sup>Livestock Sector Investment & Policy Toolkit (28)

### **Result 6.1.2: The asset values, socio economic benefits and potential of the livestock sector recognized**

It is crucial to convince both private and public investors that the sector is worth investing in and that returns on investments will be attractive and competitive in comparison to other financing opportunities<sup>39</sup>. Returns on investment can be of an economic nature, as will be attractive to private investors, or in-kind (environmental, social, sanitary, etc.), which can be of interest for the public sector, donors and philanthropists. To arrive at this result, the following strategic options will be employed:

#### *Strategy 6.1.2.1: Re-assessment and documentation of socio-economic benefits*

The contribution of the livestock sector to the economy, to livelihoods and income generation is still largely unknown, and most of the time, underestimated. Experience has shown that a scientific and evidence based<sup>40</sup> analysis of this contribution, generally generates figures on the economic contribution of the sector significantly greater than what is commonly estimated and accepted. This type of analysis should be performed in all countries, using tools such as the Natural Social Matrix and the Livestock Sector Investment & Policy Toolkit<sup>41</sup> (LSIPT) which, in addition to producing an evidence based report of the livestock contribution to GDP, will also assist the countries in prioritizing their investments.

#### *Strategy 6.1.2.2: Promote evidence based advocacy on the value and benefits of livestock*

The results and reports from evidence based studies on the contribution of livestock to MS GDPs and regional economies will be packaged and shared with public decision makers, as well as private investors, using all methods of dissemination available: policy notes, public media, conferences, etc. and by utilising market smart advocacy methods.

---

<sup>39</sup>Policy note-investing in livestock – Alive (29)

<sup>40</sup>The LSIPT in Mali, Zambia and Ethiopia showed the contribution to GDP was largely underestimated

<sup>41</sup>Livestock Sector Investment & Policy Toolkit (28)

**Result 6.1.3: Public and private sector investment policies, incentives and regulatory frameworks to enhance performance of priority livestock value chains developed and implemented**

Once the priority value chains have been selected, investment policies must be developed to attract private and public investment along these value chains. This will be developed and implemented utilising the following strategic options:

*Strategy 6.1.3.1: Create enabling conditions and incentives to support private investments*

Investment policies must encourage private investments in the sector, by creating conditions attractive and conducive for investors: investment procedures must be simplified and rationalized (e.g. one stop shop for investors and business creators), information related to investment procedures and requirements should be made easily available, contacts with potential business and investment partners should be facilitated (e.g. through trade fairs and business fora). In addition to this, economic incentives can be put in place for investments in the selected value chains, such as tax exemptions or other favourable tax regimes, subsidies and co-funding, re-designation of public land etc.

*Strategy 6.1.3.2: Develop specific investment frameworks for priority value chains*

Specific investment frameworks will be developed for the selected value chains. This could be undertaken at regional and/or national levels. Developing these frameworks will be an opportunity for mobilizing and consulting stakeholders, particularly lead companies from the private sector. Decision making tools such as the Livestock Sector Investment Policy Toolkit or the EXTRAPOLATE<sup>42</sup> tool will be used to select the most suitable investment scenario.

---

<sup>42</sup>EXTRAPOLATE EX-ante Tool for RAnking POLicy AITErnatives (26)



*Strategy 6.1.3.3: Promote and establish innovative funding mechanism in support of the values chains*

There is a need for developing innovative funding mechanisms to improve access to capital for investors and stimulate investment. These mechanisms should include: trust funds, guarantee funds for improving access to credit, subsidized credit, smart subsidies and grants, livestock insurance<sup>43</sup>, payment of ecosystem services<sup>44</sup> and micro financing for small scale producers<sup>45</sup>. These mechanisms could be piloted and the results of these pilots documented and shared.

*Strategy 6.1.3.4: Improve inter-sectoral linkages and collaboration to enhance public funding and ensure infrastructural development to support livestock value chains*

Public funding to the Livestock sector is not only managed by institutions directly in charge of the Livestock sector. It also involves transversal institutions such as the ministries in charge of finance and budgeting institutions in charge of planning where they exist, and even institutions in charge of other related sectors such as roads, infrastructure, agriculture, pastoralism and arid lands. This is a critical constraint and the lack of coordination between these institutions, as well as the disconnect between some of these institutions with the realities of the livestock sector, has led to inadequate public funding for the construction and upkeep of the required infrastructure to support livestock value chains.

It is therefore critical to establish mechanisms that will enhance both the coordination aspects, and the awareness of these institutions concerning the needs of the livestock sector. The inclusion of representatives of these institutions in the National Livestock Policy Hubs is one such opportunity.

---

<sup>43</sup>Index based insurance (73)

<sup>44</sup>Supplying Carbon Sequestration from West African Rangelands: (64)

<sup>45</sup>Livestock and rural finance (72)

**Result 6.1.4: Safeguard mechanisms to minimize the impact of negative externalities on public goods are in place**

It is important to ensure that intensification efforts, development and specialization of livestock value chains do not generate excessive negative externalities that could in turn affect both human and environmental well-being. These negative externalities could impact in different ways: effects on public health, on environment, on social inequities etc. The strategies to be utilised will include the following:

*Strategy 6.1.4.1: Develop and implement policies that safeguard public goods against negative externalities*

It will be critical, in the implementation of this strategy, to ensure that a monitoring mechanism exists for such adverse effects, and that investment policies include response provisions to safeguard public goods<sup>46</sup> that could be affected.



*Creating enabling conditions and incentives is essential to support private sector investment in livestock value chains*

<sup>46</sup>Public goods for economic development (74)

## 6.2 Strategic Objective 2: To enhance animal health and increase production, productivity and resilience of livestock production systems:



*Good animal health and production practice to enhance productivity and strengthen resilience*

### **Result 6.2.1: Improved animal health systems and impact of animal diseases on livestock production, productivity and public health minimized**

The broad core mandate of veterinary services is to safeguard livestock assets (the health and wellbeing of animals), promote access to markets (promotion and enforcement of sanitary measures) and safeguard public health (ensure the safety of foods of animal origin and effective control of zoonoses). This strategic objective will be achieved through systematic efforts to bring Africa's veterinary services to the acceptable standards as set out in the global PVS assessment tool that details the core competences.

The effective control of animal diseases requires consistent action and input of all stakeholders. The transboundary nature of some important trade limiting diseases requires that regional strategies and sustainable cross-border coordination mechanisms are devised for their progressive control. Further, actors in different sectors, institutions and disciplines should aspire to work cooperatively, guided by institutional mandates and in line with the One Health Approach. The following strategies will be employed.

*Strategy 6.2.1.1: Strengthen veterinary governance, animal health systems and service delivery.*

The PVS assessments and subsequent gap analysis<sup>47</sup> have identified weaknesses in veterinary governance and animal health systems that need to be rectified. The VetGov program has laid the foundations for actions at MS and REC level that need to be adopted and expanded to drive systemic capacity building of veterinary services in Africa. The key interventions will focus on the review and modernization of policies and legislation, harmonization to enable cross-border/regional approaches, creation of institutionalized mechanisms and enable multi-sectoral collaboration in line with the one health approach. Investment will also target the enhancement the technical competences of veterinary services as defined in the PVS assessment tool. The key areas of intervention will involve, but not be limited to, the development and modernization of animal health infrastructure through private-public partnerships and other innovative resource mobilization models, improved utilization of private veterinarians for public work through accreditation schemes/programmes, cross-border collaboration and sharing of human and physical resources, strengthening and harmonization of disease surveillance/detection systems through the active involvement of all stakeholders and adoption of ICT, strengthening of laboratory systems through innovative financing for infra-structure development, technology transfer, twinning and public private partnerships (PPP), building capabilities for enhancing compliance with sanitary standards throughout the value chains at national and regional levels strengthening interaction among livestock producers, service providers, traders, regulators and agribusiness players, strengthening Veterinary Public Health (VPH) and food safety systems, improving Animal Welfare (AW) assurance mechanisms and enhancing cross-sectoral collaboration at national and regional levels. The capacity of veterinary services for evidence based decision making and prioritization will be empowered.

---

<sup>47</sup>OIE PVS Gap Analysis (76)

*Strategy 6.2.1.2: Strengthen and harmonize veterinary curricula and training*

The provision of high quality veterinary education is key to equipping future veterinarians with the necessary knowledge to perform efficiently and deliver quality veterinary services. African training curricula need to be harmonized and modernized in line with OIE guidelines through appropriate interventions and investments to enable training institutions to adopt curricula that will produce competent graduates who can be accredited to work in other African countries. Universities will also be facilitated to adopt exchange programmes to expose their students to situations outside their countries of origin. To achieve this training institutions will be facilitated to adapt the OIE guidelines<sup>48</sup>.

*Strategy 6.2.1.3: Harmonize and apply veterinary and drug legislations, animal health and welfare standards*

OIE PVS and Gap Analysis missions have identified actions needed to improve compliance with and harmonisation of animal health and welfare policies, strategies, standards, methods and regulations. Targeted interventions will be instituted to address policy gaps and build enforcement capacities of veterinary services and other stakeholders. Significant efforts should be geared towards mitigation of the rapidly deteriorating control of anti-microbial residues occasioned by inappropriate application and the use of un-regulated veterinary products. Collaboration and awareness of Animal Welfare ethics and standards will be promoted and mechanisms for assuring the welfare of animals at farm level will be encouraged.

*Strategy 6.2.1.4: Strengthen Animal Health data and information systems*

The importance of regular, timely and accurate sanitary information has continued to evolve over the years. The use of accurate animal health data and information has gradually progressed to become an essential tool for planning, policy formulation and legislation, promotion of trade and for advocacy to attract and promote investment and resource allocation to the livestock sub-sector for development

---

<sup>48</sup>Veterinary Education Core Curriculum - OIE Guidelines (62)

purposes. Accurate and reliable data is also essential for research and training purposes. To this end the AU-IBAR will continue in its efforts to develop and improve the Animal Resources Information System 2 (ARIS 2) to enhance the information and knowledge management capacity of AU-IBAR, MS and RECs to swiftly respond to disease emergencies and to properly plan interventions in animal production, marketing and trade as well as to attract investment into the sub-sector.

*Strategy 6.2.1.5: Control and progressive eradication of priority animal diseases and zoonoses*

A systematic effort, including capacity building, will be supported to identify and prioritize diseases across the continent. These efforts will culminate in the formulation of specific control programmes with specific focus on coordinated interventions at MS and REC levels. To promote sustained support, stakeholders will be involved in priority setting and formulation of the control strategies.

*Strategy 6.2.1.6: Support One Health and cross-border/regional coordination mechanisms for harmonization of disease prevention and control approaches aligned to the AU integration agenda*

Linkages with existing One Health<sup>49</sup> and cross-border / regional coordination mechanisms<sup>50</sup>, aligned to the AU integration agenda<sup>51</sup>, should be established and new complementary initiatives deployed for the harmonization of disease prevention and control approaches. These can be operated via on-line platforms and network with existing linkages and collaborative actions to open both horizontal and vertical lines of communication between continental, regional and member state levels.

---

<sup>49</sup>One Health - The FAO-OIE-WHO Collaboration (80)

<sup>50</sup>Integrated Regional Coordination Mechanisms for the Control of TADs and Zoonoses in Africa (IRCM) (81)

<sup>51</sup>Agenda 2063 (1)

### **Result 6.2.2: Genetic potential and performance of animals improved**

Insufficient attention has been paid to the merits of exploiting the resilience and selecting for productivity of local animal breeds<sup>52</sup> with the preference for the quick-fix solution of importing exotic breeds as live animals, semen or embryos. Recent initiatives at conserving and greater utilization of African Animal Genetic Resources (AnGR)<sup>53</sup> should provide lessons learnt and best practice to guide MS in developing and implementing local breed improvement programmes in order to maximise their contribution to production, productivity and value addition. There is therefore a need to identify and promote those indigenous breeds with production potential combined with unique adaptive traits, such as heat, disease and tick-tolerance and ability to utilize meagre amounts of feed of poor quality, to contribute to sustainable improvement in animal production. . Utilisation of the following strategies will be considered.

*Strategy 6.2.2.1: Accelerate genetic improvement and access to appropriate, productive and resilient breeds that best match the production systems/environments mediated by innovative research and development, business, PPP and ICT*

MS should take stock and update existing inventories of local breeds and establish inventories where necessary. Breed characteristics with particular reference to performance parameters should be compiled and PPP mechanisms, that engage the livestock owners themselves, put in place to select for superior traits. Innovative ICT solutions, such as electronic identification linked to a custom-built performance appraisal system, should be piloted.

---

<sup>52</sup>Challenges and opportunities in genetic improvement of local livestock breeds (33)

<sup>53</sup>Strengthening the Capacity of African Countries to Conservation and Sustainable Utilisation of African AnGR (52)

*Strategy 6.2.2.2: Formulate and promote supportive, inclusive and integrated institutional and policy frameworks for the sustainable management of animal genetic resources*

Policy makers should be engaged to promote the formulation and development of supportive, inclusive and integrated institutional and policy frameworks for the sustainable management of animal genetic resources. The development and management of the AnGR programmes could be undertaken by an expert technical task force established by each MS Livestock Policy Hub

*Strategy 6.2.2.3: Conduct inventory, characterization and innovatively utilize indigenous bio-resources (e.g. rumen and milk microbes, genes) with potential industrial and business application in African production systems*

Create an inventory of indigenous bio-resources<sup>54</sup> (e.g. rumen and milk microbes, genes) and characterise each resource listed in terms of its potential for industrial and business application in African livestock production systems. An example outcome could be developing and utilizing the technology to extract and transfer the genetic code for disease resistance/tolerance as evidenced in indigenous domestic animals and wildlife.

*Strategy 6.2.2.4: Design and implement innovative and sustainable breeding and conservation programmes at national and regional level*

With reference to available guidelines<sup>55</sup> and in line with existing programmes<sup>56</sup> and policy frameworks<sup>57</sup> design and implement innovative and sustainable breeding and conservation programmes with a focus on exploiting the genetic potential of breeds especially those with adaptive traits such as disease and heat tolerance, survivability, whilst improving production performance parameters for example, growth rates, meat quality, milk yields, fecundity and conformation.

---

<sup>54</sup>Bio-innovate Africa (82)

<sup>55</sup>Livestock Breeding: - strategies and concerns (83)

<sup>56</sup>Animal Genetic Resources (AnGR) Programme (84)

<sup>57</sup>Global Plan of Action for Animal Genetic Resources (85)



*Strategy 6.2.2.5: Develop appropriate and more effective delivery systems of appropriate and superior genetic material*

Currently, systems for delivering superior genetic material centre primarily on the use of natural service and artificial insemination. Lessons learnt and good practice examples from the use of these methods should be drawn on to design improved approaches. Efficiency in the management of the system employed and the skills of service provider and livestock owner alike is likely to be key factors. Other technologies such as the use of heat synchronisation techniques, embryo transfer and cloning<sup>58</sup> should be considered where appropriate<sup>59</sup>.

*Strategy 6.2.2.6: Develop and support inclusive community-public-private partnerships and business models for generation, implementation and delivery of appropriate genetic resources*

The development, implementation and delivery of appropriate genetic resources can be achieved if appropriate partnerships are established to enable service providers, supported by business interests, to work more closely with the livestock keepers. Particular attention should be paid to those livestock owners who show interest and prowess in breed improvement to serve as agents for change. Delivery systems should be designed to be sustainably supported by the community and tailored to the given production system and location. Where the use of artificial insemination (AI) is appropriate, e.g. for the introduction of Sahiwal or Boran genes into local breeds, then heat synchronisation using synthetic prostaglandin should be employed and serviced from a centrally maintained semen depot. The proven efficacy of electronic identification<sup>60</sup> has major implications for AnGR management – particularly for within breed selection for superior traits.

---

<sup>58</sup>Use of Assisted Reproductive Technologies for Livestock Development (98)

<sup>59</sup>Animal Bio-technology (86)

<sup>60</sup>The Use of Microchips for Livestock Identification in Africa (87)

### **Result 6.2.3: Availability and access to quality feed and water enhanced**

Availability and access to quality feed and water are major requirements for the successful raising of livestock, particularly if superior genetic performance is to be achieved for increased production, and productivity. Therefore, there is need to promote water-harvesting, storage and conservation techniques, conduct research and development into the use of novel/ non-conventional feed resources to increase availability of quality feed resources for the increasing livestock population. Employment of the following strategies will be considered.

*Strategy 6.2.3.1: Re-characterization and assessment of the potential and comparative advantages of the different agro-ecological zones to best match production systems and environments at national and regional levels*

A “one size fits all” livestock development strategy will not work considering the diversity and changes in agro-ecological zones, production systems and environments on the African continent<sup>61</sup>. Therefore, it will be necessary to tailor the development approach to take into account the comparative advantage a given zone might bestow for specific systems of livestock production and the products marketed. This could include promotion of “organic” products derived from indigenous breeds. Intra-regional trade<sup>62</sup> can drive optimal use of areas of high livestock production potential to supply areas which are not suited for livestock production but with high demand for livestock products.

*Strategy 6.2.3.2: Securing access to natural resources (pasture and water) critical for livestock production at national and regional levels*

The AUC policy framework for pastoralism<sup>63</sup> provides guidance on the approaches to be taken to ensure access to natural resources (pasture and water) by pastoral communities critical for livestock production at national and regional levels. An important requirement for the pastoralist livestock production system is mobility,

---

<sup>61</sup>Livestock Production Systems and Livestock Development in Tropical Africa (13)

<sup>62</sup>Border posts, Checkpoints and Intra-African Trade – Challenges and Solutions (54)

<sup>63</sup>Policy Framework for Pastoralism – AUC (10)

a case for which is well argued in the International Institute for Environment and Development (IIED) report “Modern and Mobile”<sup>64</sup>. There is an opportunity for meat produced off rangelands to qualify for high value markets based on its organic and rangeland fed status. Smart labelling and attention to quality could win consumer loyalty of rangeland produce enhancing the economic argument for investing in rangeland improvement. Mobility and holistic resource management and community managed grazing practices<sup>65</sup> will be important features of any such initiatives.

*Strategy 6.2.3.3: Formulate enabling and smart water subsidy, use and management policy frameworks and appropriate partnerships for water harvesting, storage, conservation, business models and reticulation of underground and surface water*

Water harvesting, storage and conservation approaches<sup>66</sup> have the potential to provide sustainable solutions to the perennial quest for water in ASAL areas but they need to be carefully planned. Enabling and smart water subsidies, use and management policy frameworks need to be designed to minimise land degradation and disputes over water rights and access. It is important to have a regional approach where there are shared water resources to enable equitable and coordinated use of these resources.

*Strategy 6.2.3.4: Feed resource inventory and development / revitalization of policies and systems for research and development of feeds*

An inventory of feed resources<sup>67</sup> will provide a knowledge base to inform the design of livestock production programmes that maximise but do not overexploit available feed resources. Policies and systems for research and development of feeds need development / revitalization in order to exploit livestock feed production opportunities whether through conservation techniques, introduction of new forage species or utilisation of crop<sup>68</sup> and food by-products.

---

<sup>64</sup>Modern and mobile - The future of livestock production in Africa's drylands (43)

<sup>65</sup>Science-Methodology-Holistic-Management (44)

<sup>66</sup>Water Harvesting - Guidelines to Good Practice

<sup>67</sup>Conducting National Feed Assessments, FAO (35)

<sup>68</sup>Maize as food, feed and fertiliser in intensifying crop-livestock systems (41)

*Strategy 6.2.3.5: Promote incentives, partnerships and delivery models for enhanced access to, multiplication and utilization of existing feed technologies*

Provide incentives such as tax exemptions, to livestock keepers and feed producers to make use of existing feed technologies to improve livestock production. Partnerships between feed technology researchers and the private sector are essential to generate, promote and make these technologies accessible to livestock keepers. There is also a need to enhance access, multiplication and utilization of existing feed technologies to support the transition from subsistence based livestock keeping to market-orientated systems with improved livestock production and productivity.

*Strategy 6.2.3.6: Create an enabling environment, models and incentives for enhanced commercial feed production, processing, marketing and utilization*

Enhancing commercial feed production, processing, marketing and utilization<sup>69</sup> will be needed to underpin the required and upscaling in livestock production and productivity to meet projected animal source foods requirements over the coming decades. Success models, such as Zambeef<sup>70</sup> in Zambia, should be identified and studied for guidance on the required enabling environment, models and incentives to enhance commercial feed production.

**Result 6.2.4: Intensification of livestock production systems promoted**

If the current and projected increasing shortfall in the supply of animal source foods by African livestock producers is to be met, systems of livestock production must be intensified<sup>71</sup>. This will require a “livestock revolution” where producers progressively shift from low input low output systems to more market orientated high input high output systems. The conditions for this shift must be put in place - including investment incentives, favourable pricing, accessible and updated technical advice and quality livestock services. The following strategies will be considered.

---

<sup>69</sup>Integrated crop-livestock farming systems (38)

<sup>70</sup>Zambeef PLC (89)

<sup>71</sup>Sustainable Intensification of Livestock Production Systems (90)

*Strategy 6.2.4.1: Mapping of high potential zones for intensification and development of appropriate models at national and regional level*

Intensified systems of livestock production need sustained, affordable and adequate supply of good quality inputs, access to quality services and a profitable market<sup>72</sup>. High potential zones for intensification that can meet these requirements need to be mapped<sup>73</sup> in order to prioritize where development efforts should be focused. Intensification systems adopted should be based on existing working models and where new systems are to be introduced, piloting approaches should be adopted to gain experience and information on which to scale up and build sustainable systems.

*Strategy 6.2.4.2: Develop an enabling environment to support, incentivize and build capacity for transition to more intensive production and for management of the external factors*

Livestock producers will require support, incentives and capacity building if they are to increase levels of livestock production and productivity. Good services, attractive market prices and transfer of the required management skills will be key elements in creating an enabling environment and incentives for producers to be encouraged in making this transition

*Strategy 6.2.4.3: Innovative research and development in intensification systems, upscaling and improving dissemination of existing technologies*

National research and international research institutions such as the International Livestock Research Institute (ILRI) need to be resourced to collaborate and undertake, innovative research to develop appropriate systems for the intensification of livestock production<sup>74</sup>. Existing and working technologies should be identified and, where possible, piloted and scaled up. Proven methodologies should be extended through all available means and channels to enable other producers to adopt and replicate more intensive systems of livestock production.

---

<sup>72</sup>Livestock production - recent trends, future prospects (40)

<sup>73</sup>Global livestock production systems (91)

<sup>74</sup>The Global Livestock Research Agenda - Opportunities and challenges (45)

### **Result 6.2.5: Climate change and variability risks managed**

Evidence from the Intergovernmental Panel on Climate Change (IPCC) provides strong and convincing argument that climate change is occurring and that its adverse effects will become more pronounced. Climate change will have far-reaching consequences for dairy, meat and wool production, mainly arising from its impact on grassland and rangeland productivity.<sup>75</sup> The response by livestock keepers to climate change will require appropriate early-warning systems, adaptation to manage variability risks and mitigation to reduce the level of green-house gas emission by their livestock. This will entail the following strategies.

*Strategy 6.2.5.1: Promote mainstreaming of climate change and variability planning and the development and adoption of appropriate technologies*

As the impact of climate change is expected to add significantly to existing constraints affecting livestock production systems it is urgent that climate change and variability planning, employing appropriate technologies, is brought into the mainstream of policy and strategy development

*Strategy 6.2.5.2: Promote early-warning disaster preparedness and response mechanisms for drought, floods and others*

Guidance should be sought on the approaches needed to establish early-warning disaster preparedness and response mechanisms for drought, floods, disease and other emergencies<sup>76</sup>. Comprehensive contingency plans need to be in place and regular simulation exercises should be held to test procedures and the collaborative arrangements in place to deploy those procedures.

---

<sup>75</sup>Livestock and Climate change – IFAD (63)

<sup>76</sup>Good Emergency Management Practices (GEMP) essentials FAO (55)

### **Result 6.2.6: Measures for Social protection established and livelihoods diversified**

Whilst emphasis has been placed on increasing livestock production and productivity it is important to ensure that this is not achieved at an unacceptable cost in terms of lost livelihoods and social deprivation<sup>77</sup>. Measures need to be put in place to protect those communities vulnerable to the impact of transition with support for alternative livelihoods and traditional social safety nets. This calls for the following strategies.

*Strategy 6.2.6.1: Create an enabling environment for strengthening and harnessing social protection mechanisms and traditional social safety nets*

Traditional mechanisms of social support have provided a time honoured and tested approach for assisting distressed community members<sup>78</sup>. These mechanisms need to be recognised with community leaders and traditional authorities empowered and supported to mobilise social support as needed.

*Strategy 6.2.6.2: Create an enabling environment and incentives for diversification of livestock livelihoods and productive and sustainable exit/entry into alternative livelihoods*

There has been a number of initiatives within pastoralist communities for the diversification of livestock livelihoods and productive and sustainable exit/entry into alternative livelihoods from which lessons learnt<sup>79</sup> and best practice guidance can be drawn. Whilst focus should remain on exploiting all opportunities to increase returns from livestock keeping, compatible and complementary livelihood options should be explored such as has been seen with the numerous community based conservancy programmes involving additional income from tourism by practising integrated livestock wildlife management

---

<sup>77</sup>Social protection in pastoral areas -promoting inclusive growth at the margins (92)

<sup>78</sup>Informal and formal social protection systems in SSA (93)

<sup>79</sup>A Review of Good Practice and Lessons Learnt in Pastoralist Programming (94)

### **Result 6.2.7: Environmental health and ecosystem services enhanced**

The emergence of markets for the sequestration of carbon present an opportunity to both improve rangeland productivity, inclusive of the ecosystem services provided, and earn carbon credits for doing so<sup>80</sup>. Payment for ecosystems services also provide opportunities for communities in the ASALs to benefit from their environments and ensure their sustainable management. The following strategies will be employed in this regard:

*Strategy 6.2.7.1: Develop an enabling environment and promote innovation, incentives and partnerships to reduce greenhouse gas emissions, degradation and other negative impacts*

Whilst the term “tragedy of the commons” has been largely discredited in its original intended purpose – the fact remains that rangeland management is seriously challenged in the absence of governance structures controlled by and for the livestock owners. In the presence of an effective governance structure it is possible to introduce a series of innovative measures to reduce greenhouse gas emissions<sup>81</sup>, reverse land degradation and address other negative impacts. The conservancies of Northern Kenya<sup>82</sup>, the “Communal Area Management Programme for Indigenous Resources” (CAMPFIRE) in Zimbabwe<sup>83</sup> and the community managed livestock wildlife areas of Namibia<sup>84</sup> are good examples of the kind of governance structures and partnership arrangements needed to create the required enabling environment for sustainable and progressive management of the rangeland resource.

---

<sup>80</sup>Supplying Carbon Sequestration from West African Rangelands: Opportunities and Barriers (64)

<sup>81</sup>Mitigation of greenhouse gas emissions by livestock (48)

<sup>82</sup>Northern Rangelands Trust (95)

<sup>83</sup>CAMPFIRE Zimbabwe (97)

<sup>84</sup>Integrating Wildlife Land-Use Options into Namibian Communities (96)



*Strategy 6.2.7.2: Create an enabling environment to institutionalize and generate incentives for enhancing livestock ecosystem services including biodiversity services, carbon credits, nutrient recycling and contribution to water recharge systems*

Community managed conservation schemes provide valuable lessons for how to institutionalize and generate incentives for enhancing livestock ecosystem services with particular reference to: conservation and enhancement of flora and fauna biodiversity; approaches to enhancing carbon sequestration that can be used to gain carbon credits<sup>85</sup> ; increased rangeland productivity through nutrient recycling and restoring land cover in support of water recharge systems.



*The market is increasingly demanding a traceability system that reliably provides food safety, quality and provenance assurance*

<sup>85</sup>Supplying Carbon Sequestration from West African Rangelands (64)

### 6.3 Strategic Objective 3: To enhance innovation, generation and utilization of technologies, capacities and entrepreneurship skills of livestock value chain actors



LiDeSA will give particular attention to supporting, innovation, entrepreneurship and extension in the livestock value chain

This strategic objective envisages improved investment in research, extension and shared learning, a robust and relevant education and capacity building system, a skilled labour force, processes and mechanisms for innovation and scaling up technologies. It also envisages innovators from academia, indigenous communities, the informal and private sectors working in close partnership with financial institutions, industry, business communities and government (R&D funding, policy coordination, legislation and regulation)<sup>86</sup> to enhance innovation for the generation and utilization of appropriate technologies. The focus will be on harnessing existing but underutilized technologies and the promotion of innovation and entrepreneurship to improve the performance of livestock value chains in order to facilitate, attract and retain the participation of various actors particularly women and youth in profitable livestock based enterprises.

#### **Result 6.3.1: Existing, relevant technologies adopted**

The livestock sector has already demonstrated capacity to utilize technology to expand output and enhance product development especially in the dairy and monogastric (poultry and pigs) sub-sectors, and to apply innovative use of ICTs

<sup>86</sup>Guchu, S. (2013). Research, Innovation and Entrepreneurship: Essentials for Socio-Economic Transformation. PowerPoint Presentation. Ministry of Higher Education, Science and Technology. Second National Science, Technology and Innovation Week. Kenyatta International Conference Centre

and mobile money<sup>87</sup> transfers to improve functionality, marketing and trade in extensive pastoral and agro-pastoral systems. However, a large number of existing technologies with proven potential to impact positively on the performance of livestock value chains remain unutilized or underutilized. This strategy will promote the adoption and up-scaling of existing technologies that are relevant to improving the performance of the livestock sector within the shortest possible time in order to realize rapid impacts. This will entail the following strategies:

*Strategy 6.3.1.1: Compilation of an inventory of existing technologies*

Inventories of existing appropriate low cost technologies that can be harnessed for quick gains in the livestock sector will be compiled and prioritized within the MS and the regions. The feasibility for their adoption and up-scaling in different livestock production systems and value chains will also be assessed and disseminated to livestock stakeholders for informed decision-making on their adoption and scaling up.<sup>88</sup>

*Strategy 6.3.1.2: Disseminate and promote appropriate technologies through extension services.*

The successful transformation of the livestock sector will require the translation of appropriate technologies into goods or services that create value along livestock value chains. This will be possible through the dissemination and promotion of appropriate technologies by extension services. Improvement of the livestock extension services will, therefore, be critical to achieving success in bringing appropriate technologies to the attention of livestock producers and stakeholders along the livestock value chains. New approaches using e-extension techniques show considerable promise for cost effective dissemination of new technologies to livestock keepers and to receive their feedback on results achieved and lessons learnt<sup>89</sup>.

---

<sup>87</sup>The Economics of M-PESA (99)

<sup>88</sup>Scaling and innovation platforms (100)

<sup>89</sup>Capacity Building of Farmers through e-Extension Model (101)

### **Result 6.3.2: New technologies generated and utilized sustainably**

This result envisages improved public and private sector investments in research and development to enhance innovation for the generation of new technologies that are appropriate to the evolving needs of the livestock sector in Africa<sup>90</sup>. Most investments in the sector are from the private sector, of which the informal private sector dominates and is fast expanding as a source of innovation and local investment. In many countries remittances from the Diaspora have surpassed foreign direct investment<sup>91</sup>, but their potential remains untapped as most funds are relayed for household level investments. There is need for policy, legal and regulatory frameworks supported by incentives to facilitate the organization, accessibility and operationalisation of local resource mobilization mechanisms to support research and development in the livestock sector. These should include incentives for attracting funds from Diaspora remittances and local formal and informal networks of actors in the livestock sector to support research and development.

#### *Strategy 6.3.2.1: Support and build capacity of research institutions*

A key focus for enhancing the capacity for the generation of new technologies for sustainable utilization will be the provision of support to national livestock research institutions to effectively fulfil their mandates<sup>92</sup>. Existing continental and regional centres of excellence in research and development will be further strengthened to enable them play a bigger role in supporting the capacity development of national institutions. Mechanisms will be identified to stimulate innovation for the generation of relevant technologies at the continental, regional and national levels through competitive research grants and award schemes for different categories of researchers (including youth, women and disabled researchers) for research that translates into tangible impacts on livestock production, productivity and trade and marketing of livestock and livestock products in different value chains.

---

<sup>90</sup>The Role of New Technologies in Increasing Livestock Production (97)

<sup>91</sup>The African Diaspora across the World (70)

<sup>92</sup>The Global Livestock Research Agenda - Opportunities and challenges (45)

### **Result 6.3.3: Traditional livestock Sub-sector commercialized**

This result aims to enhance the capacity to organize / harness innovations and entrepreneurial skills to capture a greater share of, and improve access to domestic, intra and inter-regional markets - particularly by the traditional livestock sub-sector that is largely subsistence oriented<sup>93</sup>. In addition, Africa is experiencing a “youth bulge” but has so far been unable to harness youth energy and innovation for creating wealth. Youth, who are critical to the provision of labour, production skills and management of resource conflicts, are fast exiting agriculture, with a marked migration from pastoralism and pastoral areas. Much of this exodus is stress related as most labour in the livestock sector is non-wage earning despite the associated long hours, drudgery and hardships including losses of livestock and human life from conflict and insecurity. This makes disgruntled youth vulnerable to militarization and radicalization as a means to express their discontentment with policy failures related to economic, social and political exclusion and disempowerment. Education and exposure also serve to attract youth away from livestock keeping to activities that pay better or harness youth energy and entrepreneurial desires. In this regard the following strategies will be employed:

#### *Strategy 6.3.3.1: Mainstreaming entrepreneurship and livestock business and industry training into the education system*

Emphasis will be put on inculcating interest and entrepreneurship in the livestock sector among the youth through the mainstreaming of appropriate entrepreneurship training into the education systems particularly in the curricula of tertiary and higher learning institutions. Support will be provided for the review and harmonization of the various academic curricula in institutions across the continent. The promotion of entrepreneurship will be essential for job creation, production of new products and services and the engagement of youth in productive activities thus reducing the potential for involvement in socially disruptive activities. In addition, Livestock Entrepreneurship Incubation Models

---

<sup>93</sup>Commercialization of smallholder livestock production; (102)

will be promoted in order to create reservoirs and generate momentum for fully participating in livestock enterprises.

*Strategy 6.3.3.2: Formal training of livestock producers as farming professionals*

Basic training for farmers is available through the use of farmer field schools<sup>94</sup> and the concept has been adapted to suit more specifically the needs of the livestock sector through the creation of pastoralist field schools. Basic training has also been available to livestock keepers through the various, largely NGO supported, programmes to create community based animal health services. Both systems could be used to enable the selection of suitable candidates to proceed into more advanced levels of training targeted to provide specific skills and knowledge needed at points along the livestock market chain. Existing educational training facilities should be strengthened, and where necessary, new institutions created to provide both residential and distance learning specialist adult education courses to enable selected livestock producers progress to a “farming professional” qualification.

*Strategy 6.3.3.3: Creating awareness on market opportunities and providing for market oriented entrepreneurship.*

Creation of awareness of market opportunities will be continuously promoted through various media to effectively harness the entrepreneurial skills imparted through the education systems, Policy and financing incentives will be provided particularly for young entrepreneurs from smallholder and pastoral production systems to engage in market oriented enterprises in order to enhance the commercialization of the traditional livestock system<sup>95</sup>.

---

<sup>94</sup>Farmer field school approach (104)

<sup>95</sup>Smallholder competitiveness and market-driven technology uptake (103)

*Strategy 6.3.3.4: Promoting attitude / mind-set change to catalyse commercialization of traditional livestock systems*

Whilst various media can be employed to disseminate messages that encourage the adoption of a more commercialised system of livestock production, the most powerful advocate for such a transition will come from working examples from within the communities themselves. To this end this strategy will identify, encourage and support lead producers in a given area to act as change agents from which other community members can learn from seeing. This approach is dependent on the lead producer being able to access current and relevant technical advice that provides useable and useful support for the transition process. Linkage to strategy 6.3.3.3 above will be fostered.



*Fibre production – an ideal crop to add value to livestock production in highland areas*

## 6.4 Strategic Objective 4: To enhance access to markets, services and value addition



A key LiDeSA action will be to enhance market access through improving the quality and availability of inputs and services along the livestock value chains

This strategic objective focuses on enhancing access to markets, services and value addition by addressing the constraints African livestock producer face inclusive of poor transport infrastructure, high transport costs (exacerbated by “informal charges” levied along market channels), poor storage facilities, disequilibrium in access to market information, accessing quality inputs and informed services, the progressively more demanding sanitary standards and competition from imported livestock products<sup>96</sup>.

The following result areas, which have been developed in response to these felt constraints, include attention to needed infrastructure, promotion of the livestock value chain approach, increasing the total value within the value chain, exploiting the leverage of ICT for market information<sup>97</sup>, strengthening sanitary measures and improving the quality and accessibility of inputs and services being provided.

### **Result 6.4.1: Marketing and value addition infrastructure improved**

This result addresses the need to improve market and value addition infrastructure through encouraging the formation of private / public partnerships and increased public sector investment in public goods infrastructure and services and promotion of the build, operate and transfer (BOT) concept.

<sup>96</sup>Value Chains - Linking Livestock Producers to the Markets (65)

<sup>97</sup>ICTs improving the livestock sector in Africa: Case studies from Ethiopia and Kenya (107)



*Strategy 6.4.1.1: Promotion of innovative Private-Public Partnerships for infrastructure development*

The livestock value chains need public sector engagement to make them attractive and secure for private sector investment. Forming private-public partnerships will enable both sectors to better understand each other's needs and concerns. This can lead to the development of collaborative and complementary approaches for creating an enabling investment environment, inclusive of the conditions for private sector investment in infrastructure.

*Strategy 6.4.1.2: Lobby for minimum public sector investment to stimulate public good services and open up marginalized areas*

In line with the CAADP pillar II "Improving Rural Infrastructure and Trade Related Capacities" and with finances provided under the 10% budgetary allocation as agreed under the Maputo Declaration and re-affirmed at Malabo, the public sector should be receptive to targeted lobbying for increased investment in public good services with particular attention to the provision of services to livestock keepers in marginalized and underserved areas.

*Strategy 6.4.1.3: Promote the Build, Operate and Transfer (BOT) Concept*

The "Build and Operate" (BOT) and Design Build and Operate (DBO) concepts provide innovative mechanisms for PPP financing the renovation of existing or construction of new infrastructure e.g. livestock market or slaughter house, as may be required for the operation of a given livestock market chain.

In a BOT concept the public sector grantor grants to a private company the right to develop and the concession to operate a facility or system for a ("Project Period"), in what would otherwise be a public sector project. The Operator finances, owns and constructs the facility or system and operates it commercially for the project period, after which the facility is transferred to the authority

In a DBO concept the public sector owns and finances the construction of a new asset, and the private sector designs, builds and operates the asset to meet certain agreed outputs. The operator takes no or minimal financing risk on the capital and will typically be paid a sum for the design-build of the plant and then an operating fee for an agreed operating period, renewable if mutually acceptable.

**Result 6.4.2: Value chain approach adopted by stakeholder/ total value increased**

Bringing livestock or livestock products (e.g. meat, milk, eggs, leather, fibre, manure) from the point of production to the point of sale can see significant value addition gains if there is a market-focused collaboration among different stakeholders who produce, provide services and market value-added products<sup>98</sup>. The following strategies are designed to create and strengthen these linkages requiring the active championing by livestock authorities and an effective and active livestock policy and strategy forum representative of all stakeholders including apex private sector companies as per the VetGov established Livestock Policy Hubs (LPH). Service providers, particularly from animal health and animal production disciplines need to break-down barriers and wholeheartedly adopt the Livestock Value Chain (LVC) approach working as key members within collaborative multi-disciplinary teams that bring comprehensive and current technical advice to the production, processing and marketing components of the LVC.

*Strategy 6.4.2.1: Adoption and promotion of existing successful value chains development models*

Each MS should undertake an assessment of the livestock value chains as currently being operated in their country to identify and characterise examples of successful models and to determine the reasons constraining less successful models<sup>99</sup>. These findings should be shared within a regionally convened forum in order to sum MS

---

<sup>98</sup>Value Chains - Linking Livestock Producers to the Markets (65)

<sup>99</sup>Designing and Implementing Livestock Value Chain Studies (106)

experience and understanding of livestock market chain dynamics. The output of this consultation will better inform MS in strategies and approaches needed to replicate successful models.

*Strategy 6.4.2.2: Development, piloting and promotion of new evidence based value chains*

Following the same process as in strategy 6.4.2.1 new evidence based value chains can be identified and piloted

*Strategy 6.4.2.3: Support and capacity building to enhance stakeholder organizations (e.g. cooperatives) and coordination*

Each MS should undertake an assessment of their existing in-country livestock stakeholder organisations determining their strengths, weaknesses and capacity building needs. These organisations should be linked to the LPH who should set up a coordination network, via an e-platform, to enable information exchange between organisations, their elected representative(s) and the LPH. The Respective RECs should be actively engaged with these networks through the formation of Regional Livestock Policy Hubs (RLPH) and provide support and links to enable exchange between MS and regional organisations with the same livestock value chain commodity thematic agenda

*Strategy 6.4.2.4: Support and facilitate stakeholder participation in policy processes*

As indicated in strategy 6.4.2.3 above a functional link should be created between each MS stakeholder organisations and the respective in-country LPH. Where such hubs are not functioning the Veterinary Authority should nominate a small task force comprising public, private and stakeholder organisation representatives to set up the platform that enables communication between organisations, their elected representative(s) and the task force. The Respective RECs should be actively engaged with these networks through the RLPH and provide support

and links to enable exchange on policy matters<sup>100</sup> to take place between MS and regional organisations with the same livestock value chain commodity thematic agenda<sup>101</sup>

**Result 6.4.3: Leverage on ICT to improve access to markets and services and value addition enhanced**

Limited access to livestock market information, quality services and informed guidance on value addition puts affected stakeholders in the value chain at a competitive disadvantage. This is particularly true for producers of livestock who rely on the selling price for their animals and produce for their incomes and livelihoods. A study undertaken by the University of Nairobi<sup>102</sup> found that opportunities exist to “apply ICT to facilitate communication and access to information, identify markets, for production of innovative quality products, product promotion, to improve transactions, for market research and analysis, to access international markets, for on-line selling, for networking and to lower transaction costs” This strategy is focussed on enabling livestock producers and service providers make informed choices concerning the use of ICT and guidance on access and will follow the following approaches:

*Strategy 6.4.3.1: Promote partnerships with ICT companies to develop innovations for livestock marketing, information sharing and other services including financial transfers, disease reporting and extension*

Whilst there are many ICT applications relevant for crop production and for human health, there are significantly fewer sustainable initiatives relevant to livestock production and animal health. Actions are needed, in partnership with ICT companies, to identify and scale up existing working models and identify / fill any gaps in services suited to IT solutions.

---

<sup>100</sup> Livestock sector policies and programmes in developing countries – a menu for developing countries (5)

<sup>101</sup> Developing Enabling Policy Environments for the Livestock Sector (108)

<sup>102</sup> Enhancing market access in Kenyan SMEs using ICT (110)

*Strategy 6.4.3.2: Strengthen public sector support and investment to create an enabling environment*

The public sector should be encouraged to adopt and implement a supportive ICT policy that aims at enhancing ICT use, the development of ICT Infrastructure and making ICT hardware and software accessible and affordable to livestock producers and service providers. An enabling ICT policy environment should aim at: achieving universal and affordable access to the full range of communications services; creating strong institutional arrangements and technical capacity and competencies; and a consumer friendly taxation environment.

*Strategy 6.4.3.3: Promote incentives for value addition with commensurate dis-incentives for the export of raw commodities*

The livestock sector has considerable potential to provide gainful and meaningful employment, notably for youth and women, at all points along the value chain. This potential will only be maximally realised if incentives are in place to encourage the conversion of primary products into higher value commodities and for the export of raw products to be actively discouraged.

**Result 6.4.4: Sanitary measures affecting animal health, food safety, public health enforced**

This result is directed at increasing the number of RECs and MS supporting, implementing and enforcing OIE and Codex SPS standards whilst maintaining good inter and intra-institutional collaborative One Health practice

*Strategy 6.4.4.1: Support capacity building and coordination mechanisms for sanitary enforcement at National, Regional, Continental levels*

Support will be provided to enable National, Regional and Continental Institutions enhance compliance with sanitary standards inclusive of disease control, surveillance, laboratory, diagnosis, trade, vaccine production, animal feed, food safety, drug registration, certification and traceability.

*Strategy 6.4.4.2: Support advocacy and lobbying among stakeholders to enhance knowledge of and compliance to standards*

This strategy will focus, on the need for all stakeholders in the livestock sector to be aware of and to comply with SPS standards. This will be achieved by using multiple channels of communication and working through representative livestock sector organisations

*Strategy 6.4.4.3: Support establishment of self-regulation compliance mechanisms through capacity building, cooperative development and public-private partnerships*

This strategy will be aimed at strengthening compliance with SPS standards through the medium of self-regulation mechanisms. The active support of trade associations and working agreements within public-private partnerships will be critical for the success of this approach and will be engendered through targeted capacity building.

### **Result 6.4.5: Access to inputs and services improved**

Under this result increased access to inputs, services and markets will be facilitated for animals and animal products. In order to achieve this result, the following strategies will be employed:

*Strategy 6.4.5.1: Promote innovative public private partnerships enabling private sector participation in the provision of services and inputs*

There is an increasing body of evidence showing the benefits of effective public private partnerships that enable private sector participation in enhancing the quantity and quality of inputs and services required at all points along the livestock value chain. Lessons can now be learnt and innovative best practices scaled up for maximal impact on livestock production, productivity and value addition.

*Strategy 6.4.5.2: Create enabling policy environment and incentives to reduce the cost of inputs and services*

RECs should take a key role in the driving of regional livestock policy targeted at reducing the costs of inputs and services. Key areas will be the creation of a sector friendly taxation environment and a level playing field for service providers

*Strategy 6.4.5.3: Promote local production and intra-regional distribution of essential inputs and supplies*

There will be a significant rise in demand for essential inputs and supplies to support the increases in livestock production, productivity and value addition as envisaged under the LiDeSA. Encouraging local production units to supply this demand and facilitating intra-regional trade in locally produced products will raise income levels along the livestock value chain and create significant employment opportunities particularly for youth and women.



*The Horn of Africa is strategically located in relation to the livestock markets in the Gulf and is subsequently the largest exporter of live animals in Africa*





## 7. Stakeholders

The livestock development strategy for Africa envisages the participation of a wide range of stakeholders in its implementation. Those stakeholders have different roles and responsibilities allocated according to their mandate, comparative advantage and the principle of subsidiarity. Based on these guiding principles, the roles and responsibilities of the various actors in the implementation of this strategy will be defined to avoid implementation gaps and overlapping of interventions.

### 7.1 Private Sector Actors

The term private actors sector refers to an individual or a collective of participants in economic and social life who aim for profit. Effective Private Sector participation is a key driving force which needs to be encouraged and facilitated at all levels through the formation of functional public-private partnerships mediated by appropriate policies and engagement platforms such as the existing livestock policy and strategy hubs.

The private sector actors generally include:

**7.1.1 Producers:** In general, with the exception of a few countries, livestock rearing is mostly household based, with smallholders and pastoralist households constituting the vast majority of producers. In some particular value chains (monogastric) or countries (especially in Southern Africa), industrial and/or commercial farmers exist.

**7.1.2 Service providers:** Provision of services to the Livestock sector had been, until the last decades, under the responsibility of the public sector; in the 80's, this responsibility was partially transferred to the private sector. Service providers in the Livestock sector include, among others, input suppliers, animal health workers and veterinarians, artificial inseminators, feed millers and credit institutions.

**7.1.3 Processing and marketing actors:** Downstream actors in animal value chains (traders, transporters, processors, retailers etc.), follow predominantly traditional working practices. However, this sector is changing rapidly and industrial processors are emerging. Modern marketing channels (supermarkets) are also playing an increasing role.

**7.1.4 Other private value chain actors:** A large number of other actors are indirectly involved in the development of the sector; these include consumers, crop producers, insurance companies and transporters.

## **7.2 Civil Society and Stakeholders Organizations**

The non-state actors and other stakeholders' organizations involved in the implementation of the LiDeSA at different levels will: organize and mobilize actors, ensure the feedback of information from the primary beneficiaries to implementing agencies, conduct advocacy and awareness campaigns, build capacities of their members, deliver services and foster the integration of actors along the livestock value chains. Following the structural adjustment programmes and the transfer of duties from the public sector to the civil society, stakeholder organizations have emerged, and now play a very important role in the development of value chains.

**7.2.1 Local level:** Local organizations are mostly market oriented involved in marketing of products and provisions of services and inputs to their members.

**7.2.2 National level:** National stakeholder organizations are more policy oriented and lobbying and advocacy is often their main activity. A new and promising type of umbrella stakeholder organization is emerging, gathering and representing all categories of stakeholders from the same value chain. They can play a key role in the self-regulation of the value chain, and in terms of vertical integration.

**7.2.3 Regional level:** Regional stakeholder organizations in the livestock sector are still few in number and most of them are not yet fully operational. They have, however, a strong potential in terms of facilitation of regional trade.

**7.2.4 At continental and global level:** Livestock sector continental stakeholder organizations do not as yet exist. There are however existing continental and global farmer federations, but their main focus remains crops. There are also some global stakeholder organizations for specific commodities, but the participation of Africa in these organizations is very weak.

### **7.3 Public Sector Actors**

The public sector supports the development of policies and regulations to assist livestock keepers in managing the basics of livestock production. This allows access to basic services and production inputs, such as land, feed and water for animals, to help them cope with risks and shocks, such as natural disasters and price fluctuations. They also provide financial support to livestock producers.

**7.3.1 Local level:** Many countries in Africa have embarked on a decentralization processes. Livestock public services are also affected and local governance organs are therefore increasingly involved in Livestock development, including disease control, infrastructures, etc.

**7.3.2 National level:** The roles of the Member States will be central to the successful implementation of the strategy; they will be responsible for investing in supportive national infrastructures, delivery of livestock related services, developing and enforcing regulations, developing and monitoring national policies and strategies, supporting non-state actors (NSAs), creating a national environment conducive for private investment and livestock development, conducting research and ensuring academic and continuing education. The quality and efficiency of the

governance of the sector varies from one country to another but a lot of effort has taken place to strengthen this important function, with the support of various organizations.

**7.3.3 Regional level:** Regional organizations play an increasing role in the African institutional landscape and this applies also to the Livestock sector. The Regional Economic Communities (RECs) play an active role in harmonizing the various institutional frameworks, targeted at facilitating trade. The RECs and other regional institutions will be responsible for the regional harmonization of institutional and legal frameworks, facilitation of regional trade, promotion and establishment of regional infrastructure and support to Member States and Regional stakeholders' organizations. Several RECs have created specialized affiliated institutions, such as the IGAD Centre for Pastoral Areas & Livestock Development (ICPALD) under the Intergovernmental Authority for Development (IGAD), Leather Institute and the Alliance for Commodity Trade in East and Southern Africa (ACTESA) under the Common Market for Southern Africa (COMESA) and the Communauté Economique du Bétail, de la Viande et des Ressources Halieutiques (CEBEVIRHA) under the Communauté Économique et Monétaire des États de l'Afrique Centrale (CEMAC), to support the sector which is a very interesting trend. Other regional institutions play an active role in the sector, such as the Comité permanent inter-État de lutte contre la sécheresse au Sahel (CILSS) and the Centre International de Recherche-Développement sur l'Élevage en zones Subhumide (CIRDES) in Western Africa, Regional Research Networks such as the Forum for Agricultural Research (FARA), the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), the Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA), the Congolaise de Raffinage (CORAF), The Institut national de la recherche agronomique (INRA) and the Nile Basin Initiative - Regional Strategic Analysis and Knowledge Support System (ReSAKSS).

**7.3.4 Continental level:** The African Union is the main continental institution involved in the development of the sector. The Department of Rural Economy and Agriculture (DREA) is directly in charge of the sector, but other Departments also indirectly address livestock related issues. DREA has three specialized institutions devoted entirely to the Livestock sector which are the Interafrican Bureau for Animal Resources (AU-IBAR), the Pan African Tsetse and Trypanosomiasis Eradication Campaign (PATTEC), the Pan African Veterinary Vaccine Centre (PANVAC) and the associated African Union institution for Semi-Arid Food Grain Research and Development (AU-SAFGRAD). The African Development Bank (AfDB) is another African institution that plays a critical role in supporting the sector.

The African Union Commission (AUC) comprising of DREA<sup>103</sup>, AU-IBAR<sup>104</sup>, AU-PANVAC<sup>105</sup> and AU-PATTEC<sup>106</sup> and SAFGRAD will be in charge of the overall coordination for the implementation of the strategy and will facilitate the governance body that will be appointed to oversee the process. The AUC will also be responsible for monitoring implementation and reporting to stakeholders. Within the frame of this strategy, the AUC institutions will focus on their core functions of coordination of activities and approaches, harmonization of institutional frameworks, capacity building, technical back-stopping of RECs, Member States and NSA's and coordinating stakeholder resource mobilisation efforts.

**7.3.5 International/Global levels:** A large variety of international and global organizations contribute to the development of the sector and will be involved in the implementation of this strategy, they include FAO, OIE, IAEA, ILRI, WHO and WTO who, in line with their respective mandates and comparative advantages, will provide technical support, expertise, technical information and capacity building for MS, RECs and AUC institutions. Global organizations such as the OIE, FAO, WHO

---

<sup>103</sup>The AU Department of Rural Economy and Agriculture (66)

<sup>104</sup>The African Union Interafrican Bureau for Animal Resources (67)

<sup>105</sup>Pan African Veterinary Vaccine Centre (68)

<sup>106</sup>The Pan African Tsetse and Trypanosomiasis Eradication Campaign (69)

and WTO are also involved in standard setting, global regulation and development of global frameworks for trade. The International research centres, such as ILRI and CIRAD are involved in research activities. International bi-lateral and multi-lateral funding partners such as EU, USAID, WB, Bill and Melinda Gates Foundation (BMGF) and others will support the implementation of the strategy at continental, regional, and national levels in a coordinated and harmonized manner to ensure synergy and coherence of their support at the different levels. International NGOs such as Vétérinaires Sans Frontières (VSF), Care International, Oxfam, Farm Africa, World Animal Protection and Heifer International are mainly active at community level and will also be engaged in the implementation of the strategy according to their mandates and areas of influence.



*The LiDeSA Strategy is to ensure co-ordinated action by all livestock sector stakeholders*

## 8. Risks and Assumptions

### 8.1 Risks and flexibility

Even with careful planning, achieving the expected results in the strategy is not without risks, due to various internal and external factors. The possible risks identified are:

**8.1.1 Institutional and political factors.** These may have an adverse impact on the implementation of the strategy. There is a risk that some MS might not give priority to the strategy to the envisaged level. The effective implementation of the engagement platform and the communication and awareness strategy guidelines will help sensitize the authorities in those countries to enable them give an appropriate level of priority to the LiDeSA;

**8.1.2 Security is a major concern in Africa.** There are a number of hotspots that are insecure and may hinder livestock development. This will be mitigated by complementary programs that address the root causes of insecurity in those areas such as the peace and security interventions been carried out by the African Union;

**8.1.3 Persistent energy inadequacies,** which may have a direct impact on enhancing productivity, processing, storage and marketing. This could be addressed by increased efforts on the use of alternative and renewable sources of energy, to which the livestock sector has a part to contribute;

**8.1.4 The limited capacity of some Governments to attract and retain highly qualified professionals** may hold back implementation of the strategy. Currently a number of MS are in the process of identifying measures aimed at retaining highly qualified professionals, this will reduce this risk. Capacity building will be an integral part in the implementation of LiDeSA to mitigate this risk;



*The impact of climate change on the natural resource is a challenge that LiDeSA must face*

**8.1.5 The impact of slow economic growth** could compromise the availability of funds in Member States. The effective implementation of the engagement platform and the communication and awareness strategy guidelines will help sensitize the authorities in those countries on potential economic benefits and contributions to their economies by LiDeSA. Effective advocacy backed by good evidence based argument will encourage the allocation of sufficient resources for the transformation of the livestock sector;

**8.1.6 There is a growing trend of natural resources degradation in ASAL areas** driven by poor environmental management practice. Aggravating factors include unrestricted access to the resources, ineffective law enforcement, deteriorating role of traditional institutions, poor practices of soil and water conservation and inappropriate use of chemicals in some farms. MS will be encouraged to strengthen local institutions towards promoting soil and water conservation and safe chemical management practices;





*LiDeSA the Lead Strategy for Livestock Development in Africa*

**8.1.7 Inadequate infrastructure in most MS** will make it difficult to facilitate provision of input, services and market access. Current efforts to improve infrastructure on the continent, some of which are led by the AfDB, will assist in addressing this risk. The implementation of the LiDeSA will be undertaken in close collaboration with this lead institution in infrastructure development in Africa. Strategic partnerships, nationally, regionally and continentally will also contribute to mitigation of this risk;

## **8.2 Assumptions**

A key assumption that has been made while preparing this Strategy is that all Member States, as a consequence of their commitments to the Malabo declaration, will be committed to the implementation of the LiDeSA and increase their financial support to and prioritisation of the livestock sector. Other key assumptions include:

8.2.1 That the macro-economic policies continue to improve and that the performance of the economy will continue by showing growth which will have positive impacts on services, infrastructure and employment opportunities;

8.2.2 That LiDeSA will be mainstreamed in existing national and regional livestock strategies and other existing governments' operations and programmes, and the MS and RECs will fully participate in the whole exercise of implementing the strategy;

8.2.3 That there will be peace, security, macroeconomic stability, functioning institutions and rule of law;

8.2.4 That shocks including climate change will not significantly affect the process of implementation of the strategy.



*In line with the Malabo declaration each MS should allocate least 10% of public expenditure to agriculture*

## **PART III IMPLEMENTATION MODALITIES**

### **9. Engagement Platform**

#### **9.1 Introduction**

The Livestock Development Strategy (LiDeSA) should be known, owned and implemented by all stakeholders in the African livestock sector. Stakeholders are individuals, groups, or organizations who may affect, be affected by, or perceive themselves to be affected by a decision, activity, or outcome of LiDeSA. Stakeholders should represent a diversity of perspectives and may be identified along the livestock value chains. As outlined earlier (Chapter 7) these will hail from the public sector at national, regional and continental levels, the private sector, civil society organizations at national, regional and continental levels, livestock keeper' associations at national and regional level, research and academia representatives, consumer associations, international organizations and Non-governmental organisations (NGOs). Each one of these categories of stakeholders has expectations about their interests and the level of input required from them. It will also be important to encourage and foster closer relationships between all stakeholders with an interest in the development of the sector.

To ensure effective implementation of the Livestock Development Strategy (LiDeSA) it will be necessary to create a mechanism through which the stakeholders will report on progress attained in performing their respective roles, and through which they will exchange experiences and ideas in order to learn from each other. It will also serve other functions such as advocacy, resource mobilization, and providing direction to the implementation of the strategy. Such a mechanism should provide for different levels of participation of stakeholders (e.g. technical, executive and policy levels) and for frequent convening of the stakeholders (once or twice per year). The mechanism will be a platform called the “Africa Livestock Development Platform” (ALiDeP).

## 9.2 Objectives of the Platform

The objective the Engagement Platform will be:

1. To provide policy and strategic directions for the transformation of the livestock sector in Africa;
2. To enhance coordination and harmonization of interventions and sharing experiences for effective execution of LiDeSA;
3. To promote advocacy and resource mobilization for the implementation of LiDeSA; and
4. To serve as the link for the Africa's livestock sector with other relevant global and continental livestock/agriculture platforms.

## 9.3 Functions for the Platform

The functions of the Engagement Platform will include the following:

- To provide a forum for policy dialogue and decision-making on the coordination of LiDeSA's implementation;
- To provide a forum for livestock policy analysis and for evidence based advocacy on livestock development in Africa;
- To provide a forum for advocacy for increased investment and policies/strategies in the livestock sector;
- To provide a forum for reporting on progress made in the implementation of the LiDeSA, based on the LiDeSA Monitoring and Evaluation and Results Framework, as well as to provide for peer review, with links to the CAADP-PP and the Biennial Agricultural Review Process detailed in the Malabo declaration;
- To serve as a driver for resource mobilization for the implementation of the LiDeSA;
- To convene panels of relevant technical experts from different stakeholder organisations for the purpose of deliberating on specified technical matters related to the development of the livestock sector in Africa;
- To serve as a forum for sharing information, knowledge and best practices

## 9.4 Membership

The membership of the Platform should include designated representatives of the following:

- Ministries in charge of livestock development;
- Regional Economic Communities;
- Livestock keepers;
- Animal breeders;
- Livestock traders;
- Private practitioners;
- Research organizations;
- Veterinary pharmaceutical industries;
- Training and educational institutions such as Universities;
- Professional / Livestock/ Breeders Associations;
- Regional and international organizations (FAO, OIE, IFAD, ILRI, etc);
- Non-Governmental Organizations;
- Development partners (Regional and international organizations, etc)
- Regional Livestock Producer Organizations;
- DREA Technical Offices (AU-IBAR, AU-PATTEC, AU-PANVAC);
- The office of the Legal Counsel of the AUC;
- Other sectors relevant to implementing the livestock development strategy (on an as needed basis).

## 9.5 Governance Structures of the Platform:

The Governance Structures for the Engagement Platform will be as follows:

### 9.5.1 Patronage

- The Patronage of the Platform will be made up of a maximum of 5 eminent persons, one from each of the five geographical regions of Africa (Central, Eastern, Northern, Southern and Western), to be appointed by the General

Assembly (see below) for such period as the assembly may determine.

- Members of the Patronage will serve as the political and diplomatic face of the Platform
- The Patronage will spearhead advocacy and resource mobilisation initiatives
- The Patronage will meet within the fringes of the General Assembly

### **9.5.2 General Assembly (GA)**

- To be constituted by the Ministers in charge of livestock development and one high level representative of each key stakeholder organization
- Will be the highest policy and decision making body of the Platform
- Will ordinarily meet on a biennial basis
- Will be chaired by the Minister Responsible for Livestock development of the Country hosting the Biennial Meeting of the Assembly, who will hold the Chairmanship until the following meeting of the Assembly
- The African Union Commission (AUC) Commissioner responsible for livestock will be the convener of the Assembly
- AU-IBAR as the Secretariat of the Assembly

### **9.5.3 LiDeSA Business Forum (LBF)**

- To be constituted by representatives of all business players in the livestock sector
- To deliberate on matters related to business operations, development and cooperation in the livestock sector in Africa
- To make recommendations to the General Assembly on matters related to business operations, development and cooperation of the livestock sector
- To have a bureau comprising of one representative of the private sector from each of the RECs
- To meet in the fringes of the Biennial General Assembly Meeting.

#### 9.5.4 Steering Committee (SC)

- To be constituted by:
  - » One representative of each of the REC Secretariats (8)
  - » One representative of AU-IBAR
  - » One representative of AU-PATTEC
  - » One representative of AU-PANVAC
  - » One representative of AU-CTTBD
  - » One representative of FAO
  - » One representative of OIE
  - » One representative of ILRI
  - » One representative of FARA
  - » One representative of each SRO's (ASARECA, CORAF, CCARDESA, NASRO)
  - » Representative Professional / Livestock/ Breeders Associations
  - » Chairperson of the RECs Livestock Networks (eg. SADC-LTC, ICPALD, CEBEVIRHA)
  - » One representative of UNECA
  - » Chairperson Animal Welfare Platform
  - » Funding Partners for the livestock sector in Africa (as observers)
  - » Chairpersons of the Regional Livestock Hubs
  - » Representative of the private sector who is a member of the bureau of the LiDeSA Business Forum
- To be Chaired by the representatives of the RECs on a rotational basis
- AU-IBAR as the Secretariat of the SC
- To be responsible for oversight and governance of the regular operations of the Platform and the implementation of the LiDeSA
- To form and oversee the work of the Thematic Technical Working Groups (see below)
- Will ordinarily meet twice a year

### **9.5.5 Thematic Technical Working Groups (TTWG)**

- To have as many relevant thematic technical working groups as may be required
- To be constituted by competent technical experts identified from within and outside Africa
- Will be responsible for providing technical support and advice to the platform through analysis of technical issues and information
- Will meet as required to address the technical matters at hand
- To be chaired by the most experienced expert of the thematic area

### **9.5.6 Regional (RECs) Livestock Policy and Strategy Hubs**

- To deal with LiDeSA matters at Regional Level)
- To serve among others, as the LiDeSA platform and conduit at Regional level

### **9.5.7 National Livestock Policy and Strategy Hubs**

- To deal with LiDeSA Matters at National Level
- To serve as the LiDeSA Platform and conduit at National level

### **9.5.8. Reporting Relationships**

The LiDeSA Engagement Platform will formally report to the CAADP PP and the AU Sector Technical Committee of Agriculture, Environment and Water

## **9.6 Sustainability Mechanisms**

In order to ensure the sustainability of the Platform, the following strategies will be employed:

- Should be institutionally anchored within AU with the Secretariat at AU-IBAR and linked to existing institutional structures within AUC (PATTEC, PANVAC, CTTBD and CAADP/NEPAD);
- Initially to be funded from contributions from cooperating partners and other Stakeholders and eventually to be a joint venture of the AUC and other Stakeholders;
- Resource Mobilization Strategy – needs commitment from MS, private sector, development partners and trust funds.



## 10. Planning and Alignment Tool

The aims of the Planning and Alignment tool are to:

- identify on-going and pipeline livestock interventions being carried out by the relevant stakeholders, to align them to the LiDeSA Strategic Objectives and Results and map out trends;
- identify stakeholders' activities for better coordination, as well as gaps and overlaps in livestock investments;
- create a baseline to inform future investments in livestock; and
- to summarize the volume of investments in the livestock sector

The tool is designed to capture information from all stakeholders implementing livestock interventions at national, regional and continental levels. It has provisions for entering information for on-going interventions and for confirmed interventions in the pipeline (i.e. approved activities with budgets provided but not yet implemented). For each intervention, the tool will capture information on its results, implementation period and budget in a matrix that evaluates the interventions and their contributions to each of the four strategic objectives of LiDeSA and their respective key results.

**Table 1:** Summary of the LiDeSA Planning and Alignment Tool for On-going Interventions

LiDeSA Strategic Objective (SO)							
On-going Interventions				LiDeSA Result Areas			
Partner	Intervention / Results	Implementation Period	Budget	RI.1	RI.2	RI.3	RI.4
Name of implementing partner(s) showing lead partner	Programme / project title and description of the key results to be achieved	Start year to end year	Total budget (showing individual contributions where multi-donor)				

A particular purpose of the tool is to identify gaps in livestock investments and proposals at Member State and Regional levels. This information will be used to develop strategies and partnerships to bridge the identified gaps creating interventions that take into account both local and regional contributions.

In order to populate the tool, the following actions will be undertaken:

- Nomination of a livestock data collection focal person from each MS livestock ministry or equivalent government authority;
- Utilisation of livestock policy hubs to assist in informing the tool;
- Pre-testing the tool in at least one MS in each of the five regions; and
- Providing a 3 months' time frame for MS to compile and submit the required information to their respective RECs, who will in turn submit the information to AU-IBAR.



*A Livestock Planning and Alignment tool will be important to fill gaps and prevent duplications of effort in the implementation of LiDeSA.*

## **II. Accountability, Monitoring and Evaluation**

### **II.1 Accountability Mechanism**

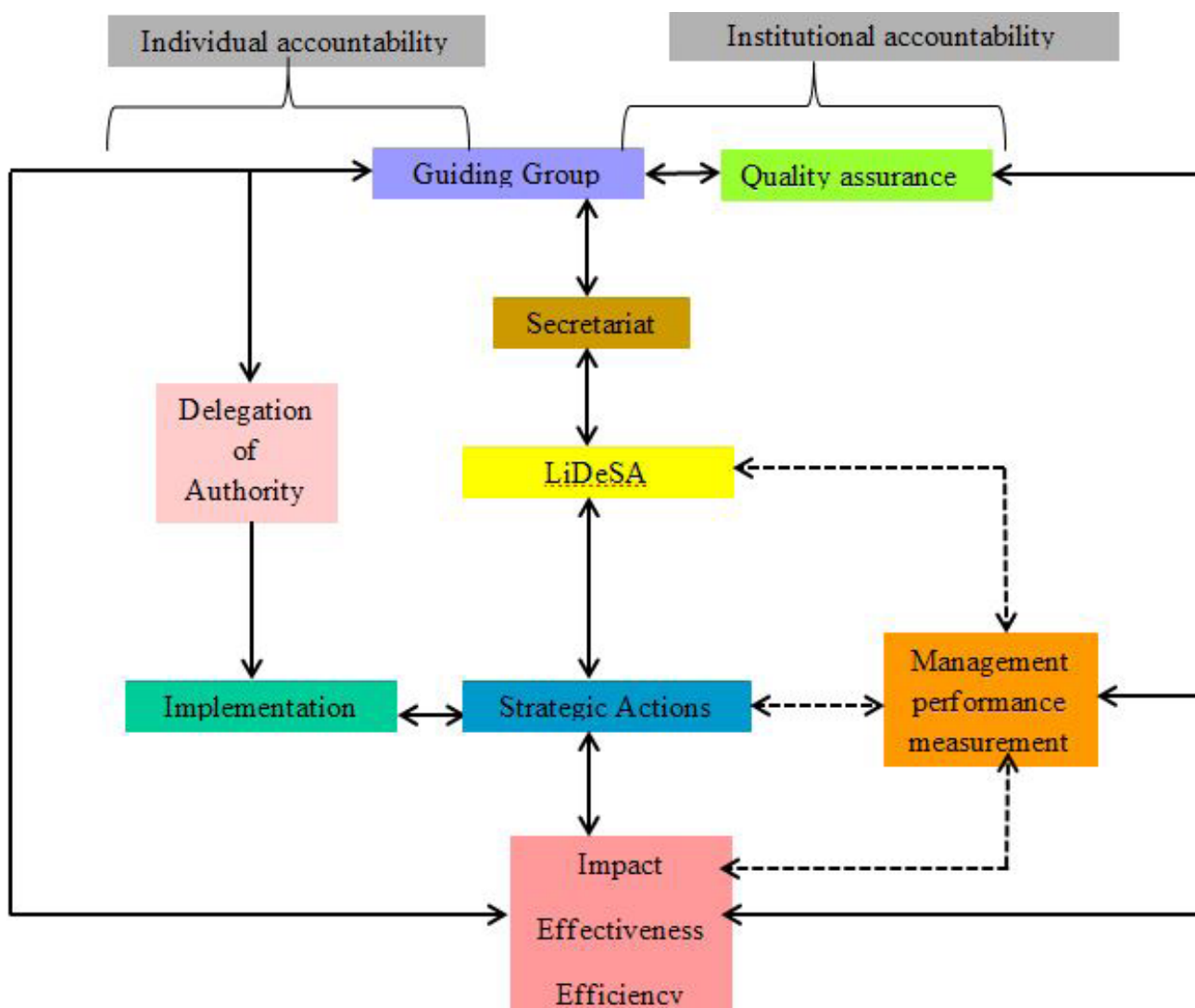
By committing to the implementation of the LiDeSA, the stakeholders in the livestock sector are in essence committing to two key obligations to ensure the successful implementation of the strategy: ownership of responsibilities and the obligation to monitor and report on progress towards achieving those responsibilities. This will mean having the obligation to report on decisions and/or actions taken in line with established indicators for sound livestock sector management practice and performance. Results-based management and decision making will be employed to ensure a clear and logical basis for allocating resources to expected results and their eventual attainment. Reporting on these aspects will encompass activities, outputs, outcomes and impacts, together with the relevant analysis and explanations. The mechanisms will provide three categories of accountability for which the stakeholders will be required to report on:

**II.1.1 Financial accountability:** this will concern tracking and reporting on allocation, disbursement and utilization of financial resources. This will be achieved by using budgeting, accounting and auditing tools. Another aspect of financial accountability will be to provide assurances that resources are used and authority is exercised according to appropriate and legal procedures, professional standards and societal values. The operational basis for financial accountability will begin with internal agency financial systems that will be expected to follow uniform accounting rules and standards.

**II.1.2 Performance accountability:** this will refer to demonstrating and accounting for performance in terms of agreed-upon performance targets in relation to scope, quality and delivery schedule. The focus will be on service delivery, outputs, outcomes, and impacts through feedback and learning.

Performance accountability will be linked to financial accountability in that the financial resources to be accounted for are intended to produce goods, services and benefits for the livestock sector stakeholders. However, it will be distinct in that financial accountability’s emphasis will be on procedural compliance whereas performance accountability will concentrate on results.

**11.1.3 Political accountability:** this will focus on institutions, procedures and mechanisms that will ensure that government delivers on promises made for the realization of this strategy, fulfils public trust, represents stakeholder interests and responds to stakeholder needs and concerns. A central concern will be equity in remedying the livestock performance failures through appropriate and acceptable policy, regulation and resource allocation.



**Figure 6:** Accountability framework

## 11.2 Performance Measurement Framework

The performance measurement framework will provide a consistent approach for systematically collecting, analysing, utilizing and reporting on the performance of LiDeSA. It will be a tool that will enhance the management and reporting of actions by measuring the level of achievement of results. It will enable the selection of more informed and effective choices and decisions regarding programs and activities.

The performance measurement framework will be designed to assist in setting up and managing the process of monitoring, analysing, evaluating and reporting progress towards achieving the outcomes. This framework will enable operating units to collect comparable data over time. It will be a living document that will be developed, used and updated over the course of implementing the strategy. In essence it will:

- a. continuously inform the stakeholders as to whether the strategy hypothesis is correct or needs adjustments while providing the opportunity to make those adjustments as necessary;
- b. support the institutional memory of assumptions, risks, actions and decisions by improving knowledge, transparency of practice and accountability;
- c. alert on imminent tasks such as data collection, data quality assessments and evaluation planning; and provide documentation to inform any audit process providing the required information for those with an oversight role.

**11.2.1 Measurement principles.** In order to measure performance on a consistent basis, the following principles will help to guide the process with clearly defined outcomes and results;

- a. the performance measurement system including data collection will be simple and cost effective;
- b. the performance measurement system will be to facilitate learning for effective strategy implementation

- c. the performance indicators will be simple, valid, reliable, affordable and relevant to the action or process being measured;
- d. the performance indicators will be reviewed and progressively improved

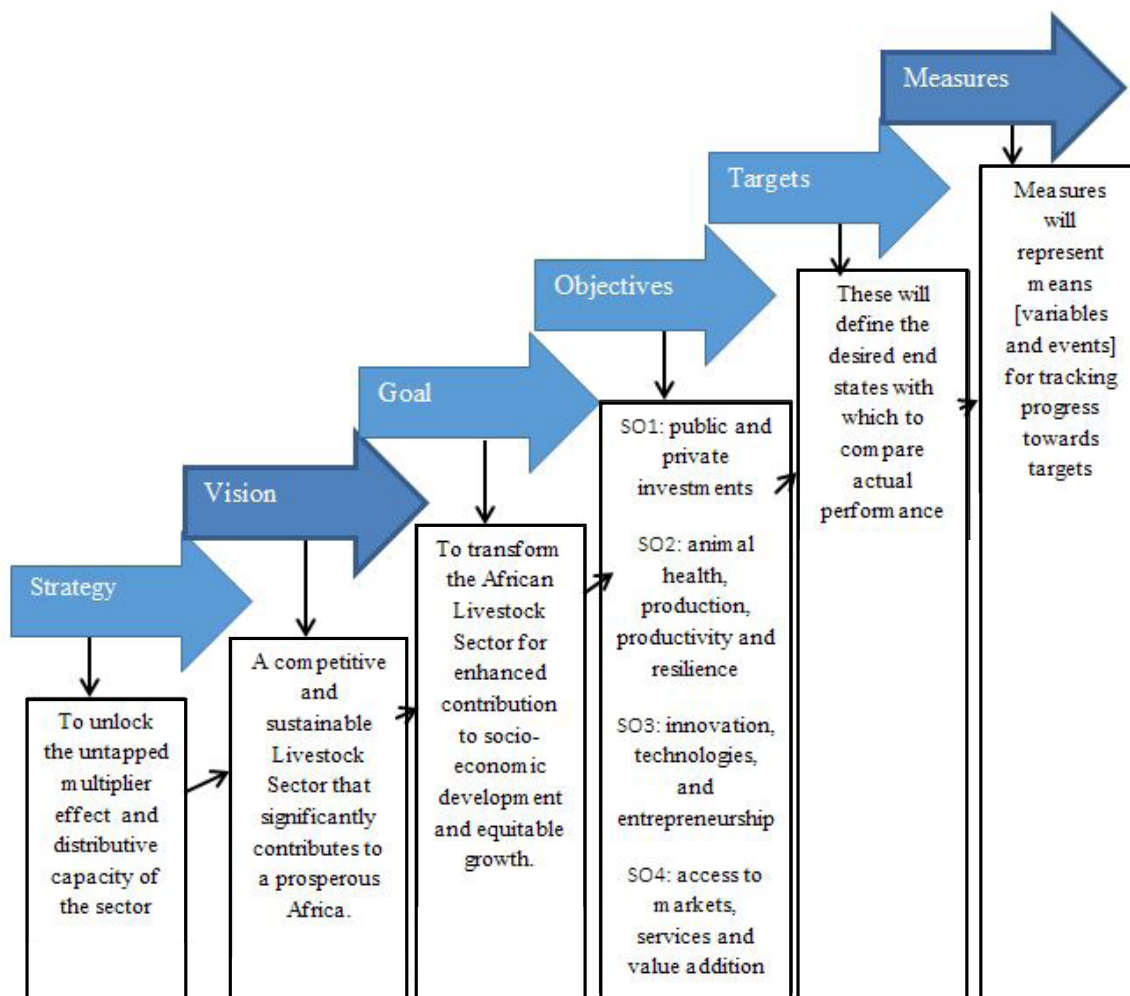


Figure 7: Measurement Framework

### 11.3 Monitoring and Evaluation Framework

**11.3.1 The aim.** The overarching aim of the M&E framework for the LiDeSA is to provide an integrated, encompassing framework of M&E principles, practices and standards. The framework will function as an apex-level information system which will draw from the RECs, MS and other partners to deliver useful information for its users and will be based on the result-based management (RBM) approach.

Effective monitoring and evaluation of the LiDeSA will remain an essential function for providing critical information and evidence regarding the performance of the strategic options implemented at MS, regional and continental levels. The goal will be to provide an evidence base for determining the accomplishment of results and resource allocation decisions and to help identify how challenges will be addressed and successes replicated. The framework will also assist in strengthening programme planning and improving effectiveness of the actions and interventions implemented. The essence of M&E in this process will be to assist stakeholders evaluate performance at all levels and identify factors which contribute towards the desired outcomes.

**11.3.2 The design.** The M&E framework will be designed as a point of reference that will have positive effects both up and downstream. It will provide its users with the ability to draw causal connections between the choice of interventions, their resourcing, their implementation design and their ultimate impact on communities. When analysed, this information will provide critically important guidance to improve policies, strategies and plans, as well as optimizing impact. Tracking the performance of the intervention, indicators will be assessed not just to explain why a situation has changed or failed to change, but also to measure the change itself.

The framework will facilitate critical reflection and informed managerial action in response to an analysis of the relationships between the deployment of inputs, the generation of outputs, and their associated outcomes and impacts. Therefore, emphasis will be placed in linking indicators from different levels of measurement (input, process, output, outcome and impact).

**11.3.3 The objectives.** The objectives of the M&E framework are:

- a. Programme improvement: using M&E results as feedback to implementers to make the programmes function more effectively and efficiently.

- b. Programme accountability and transparency: making stakeholders and funders alike aware of the progress of the programmes; and
- c. Programme scale up: disseminating results to help stakeholders and partners better understand what the programmes have accomplished and to replicate similar approaches.

A detailed Monitoring and evaluation framework complete with indicators and targets will be developed to support this strategy. It will be guided by the following overarching principles

Overarching M&E framework principles:

- a. **RBM Approach:** In the results based management (RBM) approach the framework will primarily focus on the attainment of outcomes and impacts, although the outputs and their associated activities will also be accorded the attention they require in collecting, collating and analysis of data and information.
- b. **REC and MS primacy:** A key objective will be to advance the RECs and MS role in leading, managing and implementing LiDeSA. This not only means investing in actions that help the REC and MS successfully lead and allocate its resources to effective interventions and geographic scope, but also conceiving, developing and executing the strategy itself in partnership with AU-IBAR.
- c. **Tailored approach:** The M&E framework will not presume a one size fits all model. Each REC and MS will be supported further to develop their respective M&E frameworks based on the strategic options they will have selected from the proposed menu of options in this strategy. This will be in acknowledgement of the fact that priorities and consequent investments will differ across RECs and MS. In addition, it is also acknowledged that progress may occur at variable rates depending on individual regional and national circumstances.
- d. **Inclusive planning:** A strong multi-sectoral planning approach will be central and integral to ensuring a sustainable transformed livestock sector. Hence, diverse stakeholders will be engaged in developing the M&E framework.



Subsequently, a forum, prospectively the Livestock Policy Hub, will be utilized through which joint monitoring, reporting, and re-calibrating will be undertaken.

- e. **Alignment with CAADP:** The M&E framework will be aligned with the CAADP results framework. This will lighten REC and MS teams' workloads with data collection that is complementary to CAADP.

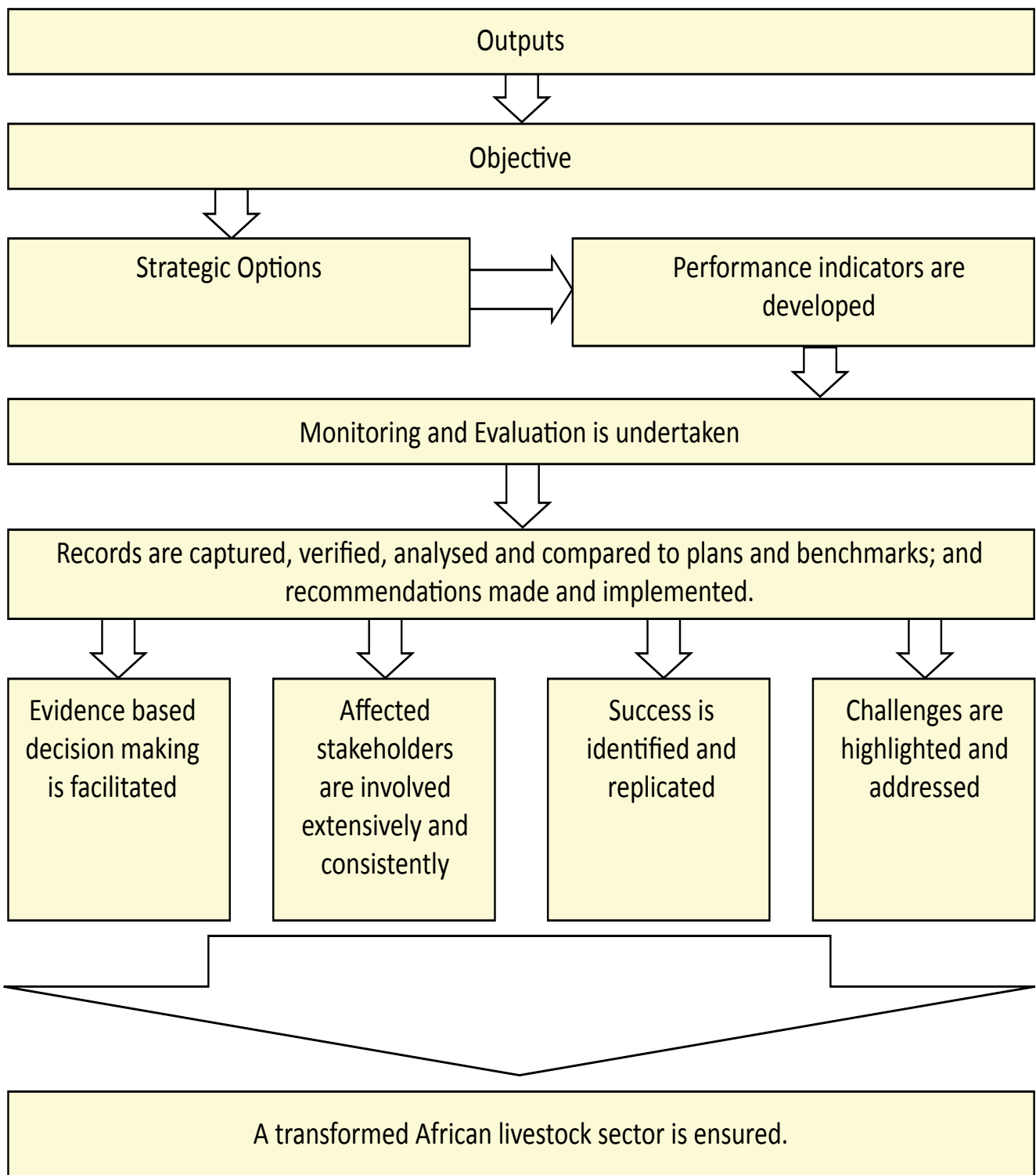


Figure 8: M&E Flow chart

## 11.4 Targets

The achievement of planned results will be at the heart of the LiDeSA's performance measurement system in accordance with the results based management (RBM) approach. In order to understand where we are going, we will first need to understand where we are. Hence, establishing quality baselines and setting ambitious, yet achievable targets will be essential for the successful management of this strategy.

A baseline is the value of performance indicators before the implementation of actions starts, while a target is the specific, planned level of result that the strategy intends to achieve with respect to a given variable within the shelf life of the strategy. Targets will be set at the output, outcome and impact levels.

Performance targets in LiDeSA will be important for the following reasons:

- a. Targets will help to justify the actions by describing in concrete terms what investment in LiDeSA will produce;
- b. Targets will orient stakeholders to the tasks to be accomplished and motivate individuals involved in the strategic actions to strive to meet these;
- c. Targets will help to establish clear and harmonised expectations for all stakeholders;
- d. Targets will serve as benchmarks for monitoring whether progress is being made on schedule, achieving desired quality levels and within budget.;
- e. Targets will help provide information on the relevance, effectiveness, efficiency, impact and sustainability of the interventions; and
- f. Targets will promote transparency and accountability by making information available over time on whether results have been achieved or not.

When setting targets, strategy resources, implementation period and strategy hypothesis will be taken into account to ensure that they are attainable

The extent to which targets are met will not be the only criterion for judging the success of LiDeSA. They will serve as flags for those managing the strategy. If the targets are significantly exceeded or well below expectations, an evaluation of the reasons or factors leading to this state will be carried out. In addition, the Development Assistance Committee (DAC-OECD)<sup>107</sup> criteria, focused on evaluating the relevance, efficiency, effectiveness, impact and sustainability of the interventions will also be applied.

### Types of targets

- a. Final** – this will be the planned value of a performance indicator at the end of the strategy;
- b. Interim** – will be set for key points of time in between baseline and final targets (milestones) in cases where change is expected and data can be collected;
- c. Quantitative and qualitative** – will be numerical or descriptive depending on the nature of the associated indicator.

## 11.5 Theory of Change

Theory of change defines long-term goals and then maps backward to identify necessary preconditions. It explains the process of change by outlining causal linkages in an intervention, i.e., its shorter-term, intermediate, and longer-term outcomes. The identified changes are mapped as the “outcomes pathway” showing each outcome in logical relationship to all the others, as well as chronological flow. The links between outcomes are explained by “rationales” or statements of why one outcome is thought to be a prerequisite for another.

---

<sup>107</sup>DAC-Development Assistance Committee, Organisation for Economic Cooperation and Development (OECD)

In order to clearly determine baselines, targets and milestones, it is necessary to determine the theory of change for the LiDeSA, beginning with the current state of the livestock sector leading all the way to the goal of transforming the livestock sector. Fig 9. below summarises the theory of change for the LiDeSA.

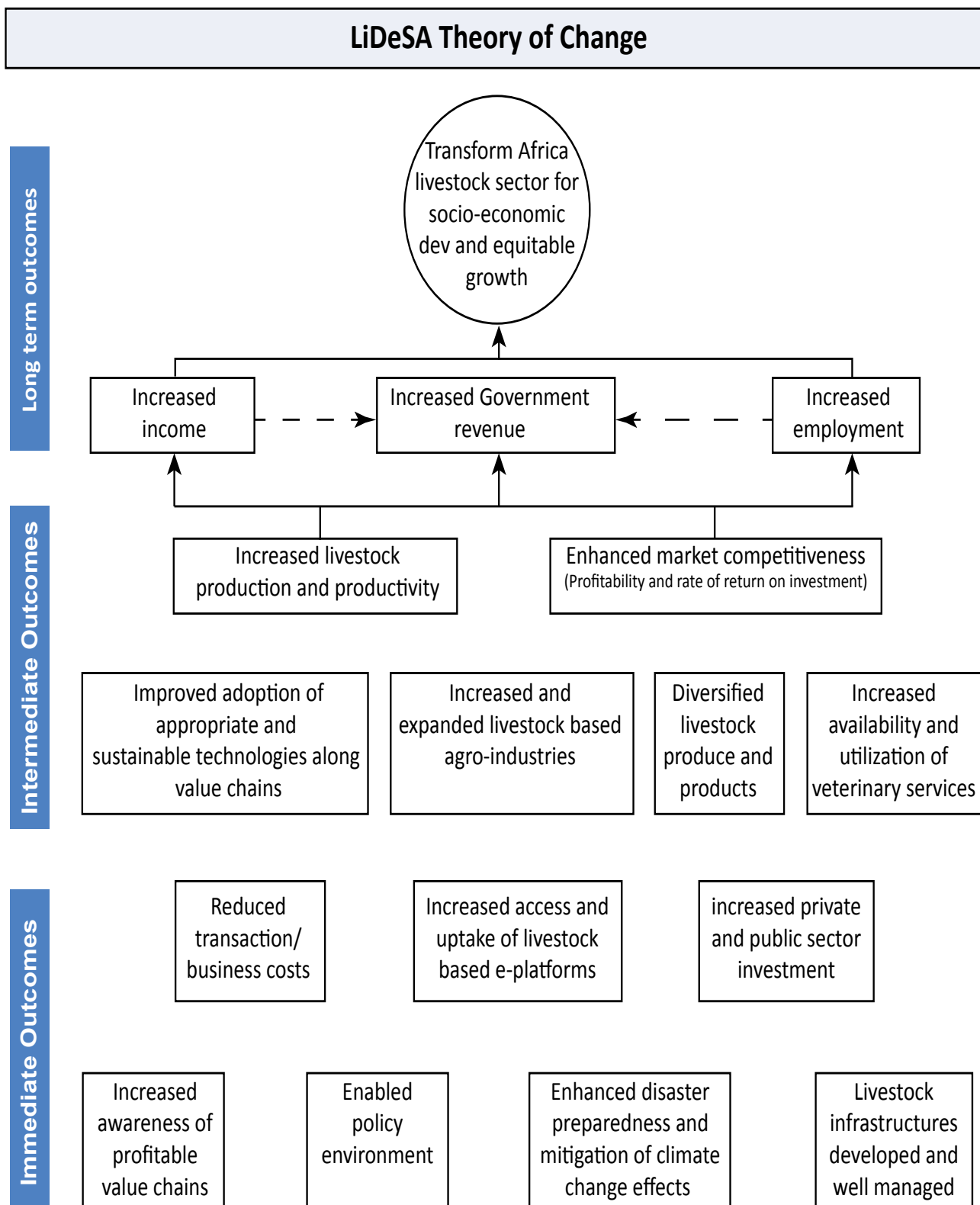


Figure 9: LiDeSA Theory of Change

## 11.6 Milestones

Milestones are significant events or stages in the life, progress, or development of an intervention. They are tools used to mark specific points along a project timeline. Milestones will be defined for important verifiable products, tasks, deliverables or goals. They will be used to measure progress towards a desired outcome by dividing the progress into a series of defined steps. Between the baseline and the target described earlier, several milestones that correspond to the expected performance at periodic intervals will be set.

Milestones will generally have three parts:

- a. A description of the product, task, deliverable or goal to be accomplished;
- b. A description of how completion of the product, task, deliverable or goal will be documented; and
- c. A date indicating when the milestone is expected to be completed.



Each MS should be setting milestones towards full compliance with OIE standards for Livestock Identification and Traceability along all their livestock value chains.

## **12. Communication and Awareness Strategic Guidelines**

The purpose of the Communication and Awareness Strategic Guidelines is to provide a “common framework” for communicating the Livestock Development Strategy (LiDeSA) in order to effectively inform public understanding and awareness on the livestock sector transformation, and the role and responsibilities of the various stakeholders in the implementation of LiDeSA.

### **12.1 Objectives**

Development of programme and project level communication strategies that are aligned to the principles of LiDeSA;

- Promotion of improved livestock production, health and trade practices and advocacy for stronger participation of stakeholders in AU member states;
- Increased awareness, improved knowledge and support provision for livestock sector reforms in Africa among key stakeholders;
- Increased awareness of the viability and profitability of the livestock sector in Africa, particularly by the private sector.

### **12.2 Expected Outcome**

Enhanced awareness amongst stakeholders on the LiDeSA and the livestock sector transformation agenda;

- Enhanced participation of stakeholders in the execution of the LiDeSA;
- Enhanced investments in the livestock sector

### **12.3 Interventions**

**12.3.1 Undertake advocacy** – Advocacy is a means of seeking change in governance, attitudes, power, social relations and institutional functions, on behalf of an interest group, using evidence-based messages. Advocacy includes awareness-

raising; communication for behaviour change; development of partnerships and alliances; lobbying / negotiating; campaigning; resources (financial, human, information); research to generate evidence; publications; social mobilization; conferences and events. This intervention will involve raising awareness and influencing decision makers, stakeholders and relevant audiences to support and implement actions that contribute to livestock reforms. Advocacy messages should be evidence-based and solution-oriented. Advocacy messages will focus on the importance of transforming the livestock sector and increasing investments. Identify pertinent issues affecting the livestock sector and key stakeholders that a communications team can use to draw attention to key messages in the LiDeSA communication strategy. Develop, test and produce information, education and communication (IEC) materials that promote and empower informed participation in the delivery of the LiDeSA. Develop and launch a branded & phased multi-media publicity campaign programme with the dissemination of communication products and regular consultation and review through existing policy hubs. Recognise good communication practice through Media Farmer and Leadership award schemes. The target groups will be as follows:

- Policy makers at RECs & MS;
- Non-state actors, who include private sector, NGOs, CBOs, civil society organizations (CSOs), farmers, traders, livestock associations, media, religious/ community leaders, and “champions” of the reform process;
- Funding and development partners, strategic technical partners;
- Academic/research institutions;
- AU internal policy organs;
- Households, youth, women.

The communication channels and tools that will be employed need to be aligned to their specific target audience and the steps to be taken in the implementation of the strategy. Feedback from stakeholders will be obtained through various channels

including workshops, policy hubs, and questionnaires to assess effectiveness of the communication messages, tools and channels. This will inform revision needed, and gauge awareness and knowledge of LiDeSA and of livestock reforms/governance issues.

Channels/Tools
LiDeSA Launch and Workshops
Press Releases
Visibility publications - Flyers, Posters, Brochures, Factsheets, newspapers
Websites
Mass Media Campaigns, Public Conferences/Meetings/international themed days e.g. World Food Day
Stakeholders' Workshops for capacity building in advocacy
Audio-visual media – Videos, Films
National broadcast and private TV and community radio stations
Existing media programmes that promote livestock
Study Tours
Success Stories
National Agricultural Information Centres
Community events e.g. thematic cultural fairs, edutainment -road shows, drama, folk media, sports
Promotional/Visibility Materials
Social media,
E-platforms



*Good communication skills will be needed make all stakeholders aware of the benefits LiDeSA will bring to the Livestock Value chain*



### **12.3.2 Capacity building**

Empowering implementing partners with advocacy skills for persuasive communication.

### **12.3.3 Corporate Communications**

Informing stakeholders and public of LiDeSA activities and progress

Corporate communication will focus on promotion and visibility of institutions such as AU, RECs, international organisations, and LiDeSA activities (communicating key issues and concepts that LiDeSA seeks to address, expected outcomes and linking with LiDeSA engagement platform and resource mobilization strategy)

### **12.3.4 Monitoring & Evaluation;**

The effectiveness of the communication will be evaluated periodically using appropriate tools and the knowledge and lessons learned used to inform future actions.



*LiDeSA emphasises the importance of supporting women to earn more income from livestock keeping*

## 13. Investment and Financing Framework

The realization of the intended goal of the LiDeSA will depend on the level and quality on the investment that will be allocated to the livestock sector. During the last decade a number of calls have been made to significantly increase funding to agriculture. The traditional sources of funds for agriculture in general and livestock in particular are principally public spending by governments, funds from development partners (bilateral and multilateral), private sector investments including by farmers. New funding opportunities exist which could be beneficial to the livestock sector; they include investments supported by foundations and the African Diaspora.

### 13.1 Public expenditure

Mobilizing public investments (local and foreign) will depend on the capacity in the ministry responsible for livestock development to domesticate the LiDeSA, translate and mainstream its priorities into the national and regional agricultural investment plan through the CAADP process.

**13.1.1 Increasing National Budget allocation** Through the Maputo Declaration of 2003, African Union Heads of State and Government launched the CAADP and committed to invest at least 10 % of their total annual expenditures to agriculture. Since 2003, only 11 countries have surpassed CAADP's 10 % target in any one year and only 7 have surpassed it for more than one year<sup>108</sup>. In the Malabo declaration the African Union Heads of State and Government recommitted to the 10% allocation of their national annual expenditure to agriculture. In doing so they recognized the primary responsibility of governments in the transformation of the agricultural sector and the catalytic role of public spending in unlocking private sector financing to accelerate investment flows into agriculture.

---

<sup>108</sup> CAADP 10 Year Result Framework (2)

The recommitment of increased national public expenditure in the agricultural sector in general should de-facto be a recommitment to allocate to livestock a proportion of at least equivalent to its contribution to the agricultural GDP i.e. 30%. However, for this recommitment to be effective, a number of issues that contribute to the perennial under-funding of the sector in national budgets should be addressed:

- Position of the sector in the domestic politics of resource allocation. FAO notes that “decisions about the sectoral allocation of public expenditure are increasingly made by ministries of Finance and Planning, responding to political imperatives, the relative strength of urban constituencies, and the expressed donor priorities” (FAO, March 2004).
- Capacity of livestock’s stakeholders – farmers’ associations, civil society organizations, parliamentarians, etc. for evidence advocacy and lobby; The role of national livestock policy platforms such as the livestock policy hubs will be crucial in providing a platform for capacity building of stakeholders, evidence based advocacy and lobbying
- Capacity in the ministry to formulate bankable projects and demonstrate value for money/returns on investments
- Effectiveness and efficiency of expenditure: public investments should both support and create an enabling environment for market-oriented or potentially market-oriented producers, as increasing livestock production and productivity of emerging farmers will generate spill-over benefits to employment and consumption; and support livelihood oriented livestock keepers to make full use of their livestock assets, which is an effective way to sustain their livelihoods in the short to medium term while utilizing resources with few alternative uses.
- Classification of public and private goods. The current classification of goods according to their public or private nature is based on their economic value. Taking into consideration the livelihoods dimension of certain goods, the policy

choices and the continent priority development agenda, a reclassification of the goods is in order. This is necessary to strengthen governments role to oversee that the livestock sector evolves in a socially desirable and acceptable way in response to the growing demand for animal source foods (ASF). It will be important to ensure that this essential contribution to food security, nutrition and poverty reduction does not, at the same time, generate negative effects on the environment and public health

**13.1.2 Engaging Development partners for Increased Funding** Both bilateral and multilateral development partners reduced aid to Africa in the 1990s as part of a global trend that saw the share of agriculture in total aid drop from 18 percent in 1981 to 6 percent in 2001<sup>109</sup>. But the drop was sharper for Africa from 22 to 6 percent respectively. However, recent developments show that agriculture has regained momentum, reversing the downward trend of Overseas Development Aid dedicated to agriculture. One pledge contributing to this reversal was the G8 commitment made in L'Aquila Italy, in 2009 to make US\$22 billion available, among others, for countries that have met the criteria set under CAADP and mainly for implementation of National Agriculture and Food Security Investment Plans. Despite this regained momentum, the proportion allocated to livestock remains very low being of the order of <5% of the total donor's investment in the agricultural sector. In keeping with the Paris Declaration on Aid (2005) and as restated in the Accra Agenda for Action (2008), Africa's partners should ensure that their support to the livestock sector is fully aligned to the LiDeSA, non-fragmented and coordinated. Donor funding should also be used in a more innovative manner to stimulate the flow of private sector financing. For example, using loan guarantees schemes that can leverage as much as ten to twenty times the value of the loan guaranteed.

---

<sup>109</sup> Foreign aid and the African Farmer (111)

### **13.2 Attracting Private Foundations and social venture capital**

Private foundations and social venture capital can fill the gap between donors funding and commercial capital. They bring the discipline of an investment approach with a willingness to take risks in exchange for high social impact and can absorb the relatively high transactions costs associated with smaller deals. These attributes means that these sources of financing can play a crucial role in transforming the livestock sector in Africa.

### **13.3 Mobilizing the Private Sector**

Agriculture development in Africa, as elsewhere, needs to be driven by the private sector – small-scale producers, commercial farmers and other upstream investors along the value chain. Spending on agriculture by governments and their partners should target creation of an environment in which agriculture becomes a viable option for private investments. This will be principally achieved through spending on public goods or services such as extension, research, quality and relevant service delivery and infrastructure specifically targeted at enhancing livestock production, productivity and value addition - costs which the majority of producers would be unable to meet.

The major investors will remain small-scale farmers. Therefore, enabling farmers to become more productive and commercially oriented will significantly raise the level of investments made. It is becoming increasingly evident that an expanding number of farmers in Africa are viewing their enterprises as a business and running them as such. This transition in motion is sowing the long awaited seeds for Africa's livestock revolution and needs all the nurturing possible through better supply of a whole range of quality services including health, technical advice and research.

The development of business models that target or involve medium-scale livestock farmers should include two major components: aggregation and technical

assistance. The former aims at reducing transaction costs when delivering / selling inputs (e.g. through setting up a cooperative); the latter at ensuring that the production level has limited variability and products are of a good standard quality. Technical assistance could also be provided through vertical integration, whereby farmers are contracted (and provided technical and/or financial support) to produce and deliver an agreed amount of livestock product of a given quality (so-called contract farming).

**13.3.1 Taking advantage of the opportunities of private sector financing systems** Private financial systems in Africa remain relatively under-developed compared to other regions, with 34 percent of adults having a bank account in 2014, (which is up from 24 percent in 2011).<sup>110</sup> ; Banks and other deposit-taking institutions, such as cooperatives, dominate financial systems in most Africa countries, with Microfinance Institutions playing an increasingly important role in expanding access to financial services by low-income earners. The last decade has witnessed the emergence and rapid expansion of Pan-African banking groups and financial services companies in the region that have benefitted from a significant share of domestic deposits. This has led to increased local competition, while infusing new technologies, products and managerial techniques. Mobile money and other ICT products are playing an increasing role in expanding access to financial services in Africa where 16% of adults reportedly use a mobile phone to pay bills or send or receive money compared to a global average of less than 5%<sup>111</sup> . The use of mobile financial services in Africa could serve as a platform for agricultural transformation

---

<sup>110</sup> Financial Inclusion Data / Global Index – World Bank (112)

<sup>111</sup> Financial Inclusion Data / Global Index – World Bank (112)

### **13.4 The African Diaspora Investment**

The African Diaspora is contributing significant sums of money to the continent's development. It was estimated that the African Diaspora remitted an average of US\$17 billion per year between 2000 and 2003.<sup>112</sup> In the same period, Foreign Direct Investment (FDI) averaged US\$15 billion. Some suggest that the amount transferred by the African Diaspora could be as high as US\$45 billion if remittances through unofficial channels are included. Additionally, the Diaspora has a range of skills<sup>113</sup> and they develop networks that could be put to good use in contributing to the development of the livestock sector. Innovative mechanisms to tap into the huge inflows would need to be developed and implemented.

### **13.5 Coherence, Coordination and Alignment of Investment**

The establishment of a Multi-Stakeholder Partnership Platform (PP) through the creation of a LiDeSA engagement platform or the transformation of the Alive Platform into a PP will provide a framework for alignment, coordination and mutual accountability in order to reduce duplication and increase value for money throughout the whole livestock sector investment

### **13.6 Resource Mobilization for LiDeSA**

Resource mobilization for LiDeSA to be developed at the three levels namely: Continental (AU-IBAR) level, Regional (RECs) level and Member States (MS) Level.

#### **13.6.1 Resource mobilization at Continental (IBAR) level:**

- Increasing funds made available from the AUC budget (IBAR will elicit counterpart or matching funds from the AUC budgetary allocations). These funds will be mainly earmarked to provide the means to finance a team of core staff and operational costs to sustain the coordination system put in place

---

<sup>112</sup>Office of the Special Advisor on Africa, Press Release 7th December 2005.

<sup>113</sup>The African Diaspora Across the World (69)

- Pursuing a broader and more diverse resource base through increasing funds available from current partners towards core funds
- Cooperation with non-traditional development partners (such as foundations).
- Increasing partnerships with research and academic institutions

### **13.6.2 Resource mobilization at Regional (REC) level**

- As countries adopt LiDeSA - Regional Livestock Development Strategies should be clearly spelt out with clear objectives and activities. MSs also need to domesticate and streamline LiDeSA in their priorities and seek to apply similar protocols for funding LiDeSA through CAADP thematic areas already established. MS will develop and submit proposal in line with LiDeSA priorities
- Increasing funds available from current partners towards core funds, as well as increasing funding from MS



*LiDeSA – laying the foundation for the next generation*



### **13.6.3 Resource Mobilization at Member State (MS) Level**

- There is need for advocacy and awareness creation by the minister responsible for livestock, with national bodies that are involved in planning and mobilization for resources to recognize LiDeSA. Due to different comparative advantages among MS, countries should prioritise and budget for what they can do best within LiDeSA and mainstream it in the national planning, and align and domesticate LiDeSA into existing policies for integration in the national planning and financing process (Streamlining livestock policies at national level).
- At REC & MS level, experts will propose/develop projects which individual countries will adopt/domesticate but at the same time each country can develop their own projects
- RECs and the AU will advocate for political support They will negotiate with governments to increase budget allocations within or beyond the national ceiling and also increase national budgets for livestock related activities in line with the Malabo declaration (lobby to have LiDeSA captured in the national budgets)

### **13.6.4 Integration of LiDeSA activities by RECs and MSs into their EDF, AfDB allocations and other envelopes**

- Most of the countries have concluded their application for 11th EDF funding and implementation of activities is already ongoing. In cases where LiDeSA activities were not prioritized in the 11th European Development Fund (EDF) and where possible, reallocation will be made at the regional, sub-regional and national levels to integrate LiDeSA activities. Where this is not possible, implementation of the LiDeSA will need to tap into other funding mechanisms (locally and internationally) e.g. EU, USAID etc. Countries and RECs that have not yet concluded their decision on the 11th EDF will need to align their Livestock Development Plan to the 11th EDF resource envelopment under the agriculture sector. There will be need for creating awareness and advocacy with the European Commission delegates in the countries.

### **13.6.5 Avenues other than bilateral funding and National budgets that MSs can exploit to raise funds for implementing LiDeSA**

Other avenues for fundraising for LiDeSA at local levels will include:

- Creation of special fund for livestock development which the private sector can buy into e.g. dairy development fund and emergency disease control fund
- Pursuing a broader and diverse resource base including creating conducive environments for Public Private Partnerships (Country resource mobilization strategies should seek to establish enabling conditions for private sector involvement besides seeking to mobilize public sector investment). The governments should create conducive environments in the livestock sector including creation of incentives such as availability for land, low interest loans, and tax rebates. The involvement of the private sector in the mobilization of resources for the animal resource sector is an important catalyst in achieving success in the mobilization efforts of MS
- Attracting direct foreign funding including partnership with regional organisations and International NGOs and Donor funding.
- Governments to establish guarantee funds for livestock development with financial institutions such as banks and insurances, facilitating acquisition of loans from specialized banks e.g. for livestock farming e.g. African Development Bank (Bank loans to organized groups – corporative, self-help groups, investment clubs, microfinance institutions) with a focus on youth and women.
- Contract farming (e.g. poultry, pigs)
- Trust funds

AU-IBAR and key partners will develop a relevant framework for resource mobilization that can be easily adapted, built upon and modified to take into account REC and MS specific situations.

## **14. Conclusion**

The livestock sector in Africa has not yet fully realised its full potential and contribution to food and nutrition security, poverty reduction and socio-economic development. This has partly been caused by inadequate investments to spur optimal performance, and the lack of a coherent strategy and supportive policy, institutional and regulatory environment. The Livestock Development Strategy for Africa (LiDeSA) provides a basis for the integration of livestock into national and regional agricultural investment plans within the CAADP framework. It ensures coordinated action, promotes synergy and multi-level partnerships in addressing critical issues in the livestock sector. It provides a coherent long term approach to livestock development through mainstreaming of investments, policy and institutional reforms. These measures aim at enhancing the sector's contribution to Africa's sustainable socioeconomic development while supporting resilience, avoiding environmental degradation and limiting adverse public health impacts.

The strategy supports the private sector to leverage the costs of investment and to provide demand-driven cost-effective services, while focusing the capacity of the public sector towards developing and enforcing policies, legislations and regulations that assure equity, food safety, hygiene and health through sustainable livestock production.

This Livestock Development Strategy provides a broad framework to guide programming, project formulation and activities for unlocking the full potential of the livestock sector in Africa. It calls upon multidisciplinary and inter-professional partnerships at all levels, global, continental, regional, and national and for all actors to mainstream the LiDeSA Vision, Goal and Objectives in their respective policies, strategies, action plans and activities.



## 15. References

No.	Document	Weblink / Reference
	<b>Introduction</b>	
1	Agenda 2063 - the Africa we want	<a href="http://agenda2063.au.int/en/sites/default/files/agenda2063_popular_version_05092014_EN.pdf">agenda2063.au.int/en/sites/default/files/agenda2063_popular_version_05092014_EN.pdf</a>
2	CAADP 10 Year Result Framework	<a href="http://www.nepad.org/sites/default/files/CAADPResultsFramework_English.pdf">www.nepad.org/sites/default/files/CAADPResultsFramework_English.pdf</a>
3	Companion document to CAADP: integrating livestock, forestry and fisheries subsectors into CAADP	<a href="ftp://ftp.fao.org/docrep/fao/009/a0586e/a0586e00.pdf">ftp://ftp.fao.org/docrep/fao/009/a0586e/a0586e00.pdf</a>
4	LiDeSA Executive Brief	<a href="http://www.au-ibar.org/component/jdownloads/finish/77-sd/2156-the-livestock-development-strategy-for-africa">www.au-ibar.org/component/jdownloads/finish/77-sd/2156-the-livestock-development-strategy-for-africa</a>
5	Livestock sector policies and programmes in developing countries – a menu for developing countries	<a href="http://www.fao.org/docrep/012/i1520e/i1520e00.htm">http://www.fao.org/docrep/012/i1520e/i1520e00.htm</a>
6	Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods	<a href="http://pages.au.int/sites/default/files/MalaboDeclaration2014_1126-.pdf">pages.au.int/sites/default/files/MalaboDeclaration2014_1126-.pdf</a>
7	Mapping supply and demand for animal-source foods to 2030, FAO.	<a href="http://www.fao.org/docrep/014/i2425e/i2425e00.pdf">http://www.fao.org/docrep/014/i2425e/i2425e00.pdf</a>
8	The Maputo Declaration on Agriculture and Food Security and the 10 percent national budget allocation to agriculture development.	<a href="http://www.nepad.org/nepad/knowledge/doc/1787/maputo-declaration">www.nepad.org/nepad/knowledge/doc/1787/maputo-declaration</a>
9	Minding the Stock. Bringing Public Policy to Bear on Livestock Sector Development - VVB Review Paper	<a href="http://siteresources.worldbank.org/INTARD/Resources/FinalMindingtheStock.pdf">http://siteresources.worldbank.org/INTARD/Resources/FinalMindingtheStock.pdf</a>
10	Policy Framework for Pastoralism – AUC	<a href="http://rea.au.int/en/sites/default/files/Policy%20Framework%20for%20Pastoralism.pdf">http://rea.au.int/en/sites/default/files/Policy%20Framework%20for%20Pastoralism.pdf</a>
11	Sustainable NRM and land Policy in Africa .pdf	<a href="http://www.au-ibar.org/component/jdownloads/finish/46/1145">http://www.au-ibar.org/component/jdownloads/finish/46/1145</a>
12	AU-IBAR Strategic Plan 2015 – 2017	<a href="http://www.au-ibar.org/strategy-documents">http://www.au-ibar.org/strategy-documents</a>
	<b>Rationale for LiDeSA</b>	
13	Livestock Production Systems and Livestock Development in Tropical Africa. Hans E. Jahnke 1982	<a href="http://pdf.usaid.gov/pdf_docs/PNAAN484.pdf">http://pdf.usaid.gov/pdf_docs/PNAAN484.pdf</a>
14	Livestock Development for Sub-Saharan Africa. Otte J & Knips V	<a href="http://www.fao.org/ag/AGInfo/programmes/en/pp/pi/docarc/rep-0509_growthandpoverty_SSA.pdf">http://www.fao.org/ag/AGInfo/programmes/en/pp/pi/docarc/rep-0509_growthandpoverty_SSA.pdf</a>

No.	Document	Weblink / Reference
15	Livestock sector development for poverty reduction: an economic and policy perspective – Livestock’s many virtues, 2012 Otte J. et al,	<a href="http://www.fao.org/docrep/015/i2744e/i2744e00.pdf">http://www.fao.org/docrep/015/i2744e/i2744e00.pdf</a>
16	Livestock planning, challenges and strategies for livestock development in IFAD	<a href="http://www.ifad.org/lrkm/factsheet/livestockpaper.pdf">http://www.ifad.org/lrkm/factsheet/livestockpaper.pdf</a>
17	Livestock to 2020 The Next Food Revolution (1999) C. Delgado	<a href="https://cgspace.cgiar.org/bitstream/handle/10568/333/dp28.pdf?sequence=2">https://cgspace.cgiar.org/bitstream/handle/10568/333/dp28.pdf?sequence=2</a>
18	Livestock to 2020: The Revolution Continues – Delgado C. et al (2001).	<a href="http://ageconsearch.umn.edu/bitstream/14560/1/cp01de01.pdf">http://ageconsearch.umn.edu/bitstream/14560/1/cp01de01.pdf</a>
19	The Livestock Revolution: A Pathway out of Poverty? (2003)	<a href="http://ageconsearch.umn.edu/bitstream/124023/2/VercoeJ2003.pdf">http://ageconsearch.umn.edu/bitstream/124023/2/VercoeJ2003.pdf</a>
20	The ‘Livestock Revolution’ - rhetoric and reality - Otte and Pica	<a href="http://www.fao.org/Ag/againfo/programmes/en/ppipi/docarc/rep-0905_livestockrevolution.pdf">http://www.fao.org/Ag/againfo/programmes/en/ppipi/docarc/rep-0905_livestockrevolution.pdf</a>
21	African Livestock Futures - Realizing the potential of livestock for food security, poverty reduction and the environment in Sub-Saharan Africa	<a href="https://cgspace.cgiar.org/bitstream/handle/10568/41908/Livestock_Report_en.pdf?sequence=3">https://cgspace.cgiar.org/bitstream/handle/10568/41908/Livestock_Report_en.pdf?sequence=3</a>
22	World agriculture towards 2030 -2050. Alexandratos, N. and J. Bruinsma. 2012.	<a href="http://www.fao.org/fileadmin/templates/esa/Global_perspectives/world_ag_2030_50_2012_rev.pdf">http://www.fao.org/fileadmin/templates/esa/Global_perspectives/world_ag_2030_50_2012_rev.pdf</a>
	<b>Strategic Objective I: To attract public and private investments along the different livestock values chains.</b>	
23	African Capacity Building for Meat Exports: Lessons from the Namibian and Botswanan Beef Industries	<a href="http://kishoregawande.net/wp-content/uploads/2008/12/africabeef.pdf">http://kishoregawande.net/wp-content/uploads/2008/12/africabeef.pdf</a>
24	The Costs of Animal Disease IFAH Oxford Analytica. October 2012	<a href="http://www.bft-online.de/fileadmin/bft/publikationen/IFAH_Oxford-Analytica_The-Costs-of-Animal-Disease_October2012.pdf">http://www.bft-online.de/fileadmin/bft/publikationen/IFAH_Oxford-Analytica_The-Costs-of-Animal-Disease_October2012.pdf</a>
25	Diversification and Sophistication of Livestock Products: the Case of African Countries.	<a href="https://ideas.repec.org/p/adb/adbwps/2148.html">https://ideas.repec.org/p/adb/adbwps/2148.html</a>
26	EXTRAPOLATE - EX-ante Tool for RAnking POLicy AITernatives. FAO	<a href="http://www.fao.org/ag/againfo/programmes/en/ppipi/docarc/extrapolate_userguide.pdf">http://www.fao.org/ag/againfo/programmes/en/ppipi/docarc/extrapolate_userguide.pdf</a>
27	Investing in African Livestock - business opportunities 2030-2050	<a href="http://www.fao.org/docrep/018/a1757e/a1757e.pdf">http://www.fao.org/docrep/018/a1757e/a1757e.pdf</a>
28	Livestock Sector Investment & Policy Toolkit(LSIPT)	<a href="https://agritrop.cirad.fr/569877/1/document_569877.pdf">https://agritrop.cirad.fr/569877/1/document_569877.pdf</a>
29	Policy note-investing in livestock – ALive	<a href="http://www.fao.org/ag/againfo/resources/newsletter/docs/policynote-investinginlivestock.pdf">http://www.fao.org/ag/againfo/resources/newsletter/docs/policynote-investinginlivestock.pdf</a>

No.	Document	Weblink / Reference
	<b>Strategic Objective 2: To enhance animal health and increase production, productivity and resilience of livestock production systems</b>	
30	Transboundary Animal Diseases and Zoonoses Compendium for Africa	<a href="http://www.au-ibar.org/tools/transboundary-animal-diseases-and-zoonoses-compendium-for-africa">http://www.au-ibar.org/tools/transboundary-animal-diseases-and-zoonoses-compendium-for-africa</a>
31	Providing Micronutrients through Food-Based Solutions - A Key to Human and National Development J. Nutr.-2003-Demment-	<a href="http://jn.nutrition.org/content/133/11/3879S.long">http://jn.nutrition.org/content/133/11/3879S.long</a>
32	Carbon sequestration and rangelands.pdf	<a href="http://cesanluisobispo.ucanr.edu/files/136179.pdf">http://cesanluisobispo.ucanr.edu/files/136179.pdf</a>
33	Challenges and opportunities in genetic improvement of local livestock breeds	<a href="http://journal.frontiersin.org/article/10.3389/fgene.2015.00033/abstract">http://journal.frontiersin.org/article/10.3389/fgene.2015.00033/abstract</a>
34	Contribution of animal source foods in improving diet quality and function in children in the developing world	<a href="http://www.sciencedirect.com/science/article/pii/S0271531701003748">http://www.sciencedirect.com/science/article/pii/S0271531701003748</a>
35	Conducting National Feed Assessments, FAO. 2012.	<a href="http://www.fao.org/docrep/016/i3043e/i3043e.pdf">http://www.fao.org/docrep/016/i3043e/i3043e.pdf</a>
36	Galvmed Impetus-Strategy	<a href="http://www.galvmed.org/wp-content/uploads/2012/03/galvmed-impetus-strategy.pdf">http://www.galvmed.org/wp-content/uploads/2012/03/galvmed-impetus-strategy.pdf</a>
37	Global Framework for the Progressive Control of Transboundary Animal Diseases – FAO	<a href="http://www.oie.int/fileadmin/Home/eng/About_us/docs/pdf/GF-TADs_approved_version24May2004.pdf">http://www.oie.int/fileadmin/Home/eng/About_us/docs/pdf/GF-TADs_approved_version24May2004.pdf</a>
38	Integrated crop-livestock farming systems	<a href="http://www.ifad.org/lrkm/factsheet/integratedcrop.pdf">http://www.ifad.org/lrkm/factsheet/integratedcrop.pdf</a>
39	Livestock and Water Interactions in Mixed Crop-Livestock Farming Systems of Sub-Saharan Africa - Interventions for Improved Productivity	<a href="http://www.iwmi.cgiar.org/Publications/Working_Papers/working/WOR133.pdf">http://www.iwmi.cgiar.org/Publications/Working_Papers/working/WOR133.pdf</a>
40	Livestock production - recent trends, future prospects Philip K. Thornton	<a href="http://rstb.royalsocietypublishing.org/content/365/1554/2853.reprint">http://rstb.royalsocietypublishing.org/content/365/1554/2853.reprint</a>
41	Maize as food, feed and fertiliser in intensifying crop–livestock systems in East and Southern Africa - ILRI Study	<a href="https://cgspace.cgiar.org/bitstream/handle/10568/505/MaizeImpactAssessment.pdf?sequence=1">https://cgspace.cgiar.org/bitstream/handle/10568/505/MaizeImpactAssessment.pdf?sequence=1</a>
42	Measuring the potential impacts of improved food-feed crops - methods for ex ante assessment – ILRI	<a href="http://www.researchgate.net/profile/Patti_Kristjanson/publication/257213662">www.researchgate.net/profile/Patti_Kristjanson/publication/257213662</a>
43	Modern and mobile - The future of livestock production in Africa's drylands IIED	<a href="http://pubs.iied.org/pdfs/12565IIED.pdf">http://pubs.iied.org/pdfs/12565IIED.pdf</a>
44	Science-Methodology-Holistic-Management Update	<a href="http://www.savoryinstitute.com/media/42448/Science-Methodology-Holistic-Mgt_Update_March.pdf">www.savoryinstitute.com/media/42448/Science-Methodology-Holistic-Mgt_Update_March.pdf</a>

No.	Document	Weblink / Reference
<b>Strategic Objective 3: To enhance innovation, generation and utilization of technologies, capacities and entrepreneurship skills of livestock value chain actors</b>		
45	The Global Livestock Research Agenda - Opportunities and challenges - ILRI SmithNov2012	<a href="https://cgspace.cgiar.org/handle/10568/33573">https://cgspace.cgiar.org/handle/10568/33573</a>
46	Investing in the livestock sector: Why good numbers matter? A Sourcebook for decision makers on how to improve livestock data	<a href="http://www.fao.org/3/a-i3706e.pdf">http://www.fao.org/3/a-i3706e.pdf</a>
47	Livestock: business and livelihoods in Africa. What do we know? What are the information gaps?	<a href="http://www.fao.org/3/a-i3724e.pdf">http://www.fao.org/3/a-i3724e.pdf</a>
48	Mitigation of greenhouse gas emissions by livestock - FAO Review	<a href="http://www.fao.org/docrep/018/i3288e/i3288e.pdf">http://www.fao.org/docrep/018/i3288e/i3288e.pdf</a>
49	Rangeland and Fodder production AU-IBAR - Best Practices	<a href="http://www.au-ibar.org/component/jdownloads/finish/46-mg/907-rational-use-of-rangelands-and-fodder-crop-development-in-africa">http://www.au-ibar.org/component/jdownloads/finish/46-mg/907-rational-use-of-rangelands-and-fodder-crop-development-in-africa</a>
50	Scaling-Up Successful Practices on Sustainable Pro-Poor Small Ruminant Development.	<a href="http://www.iga-goatworld.com/uploads/6/1/6/2/6162024/scaling-up_successful_practices_(full).pdf">http://www.iga-goatworld.com/uploads/6/1/6/2/6162024/scaling-up_successful_practices_(full).pdf</a>
51	Status and trends of Animal Genetic Resources-2012, Commission on Genetic Animal Resources, item 4.2 of the provisional Agenda Fourteenth Regular session Rome 15-19 April 2013.	<a href="http://www.fao.org/docrep/meeting/027/mg046e.pdf">www.fao.org/docrep/meeting/027/mg046e.pdf</a>
52	Strengthening the Capacity of African Countries to Conservation and Sustainable Utilisation of African Animal Genetic Resources	<a href="http://agtr.ilri.cgiar.org/Documents/events/IBAR.pdf">http://agtr.ilri.cgiar.org/Documents/events/IBAR.pdf</a>
53	Livestock and Rangelands – IFAD Livestock Thematic Papers: Tools for Project Design	<a href="http://www.ifad.org/lrkm/">http://www.ifad.org/lrkm/</a>
<b>Strategic Objective 4: To enhance access to markets, services and value addition</b>		
54	Border posts, Checkpoints and Intra-African Trade – Challenges and Solutions – AfDB	<a href="http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/INTRA%20AFRICAN%20TRADE_INTRA%20AFRICAN%20TRADE.pdf">http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/INTRA%20AFRICAN%20TRADE_INTRA%20AFRICAN%20TRADE.pdf</a>
55	Good Emergency Management Practices (GEMP) essentials - A guide to preparing for animal health emergencies FAO	<a href="http://www.fao.org/3/a-ba0137e.pdf">http://www.fao.org/3/a-ba0137e.pdf</a>
56	Guidelines for Implementation of a Value Chain Approach to Management of Foot and Mouth Disease Risk for Beef Exporting Enterprises in Southern Africa	<a href="http://www.wcs-ahead.org/kaza/150313_guidelines_report_value_chain_final.pdf">www.wcs-ahead.org/kaza/150313_guidelines_report_value_chain_final.pdf</a>



No.	Document	Weblink / Reference
57	Synergies between public and pvt sector veterinarians and paravets – Woodford	<a href="http://web.oie.int/boutique/extrait/9woodford.pdf">http://web.oie.int/boutique/extrait/9woodford.pdf</a>
58	Systemic capacity building: a hierarchy of needs	<a href="http://heapol.oxfordjournals.org/content/19/5/336.full.pdf">http://heapol.oxfordjournals.org/content/19/5/336.full.pdf</a>
59	Toolkit on Mainstreaming Gender Equality in EC Development Cooperation. .	<a href="https://ec.europa.eu/europeaid/toolkit-mainstreaming-gender-equality-ec-development-cooperation_en">https://ec.europa.eu/europeaid/toolkit-mainstreaming-gender-equality-ec-development-cooperation_en</a>
60	Framework for Mainstreaming Livestock in the CAADP Pillars.pdf	<a href="http://www.au-ibar.org/component/jdownloads/finish/59/1226">www.au-ibar.org/component/jdownloads/finish/59/1226</a>
61	Livestock & the Environment - finding the balance De Haan et al 1997	<a href="http://agrienvarchive.ca/bioenergy/download/livestock_env_fao.pdf">http://agrienvarchive.ca/bioenergy/download/livestock_env_fao.pdf</a>
62	Veterinary Education Core Curriculum - OIE Guidelines	<a href="http://www.oie.int/Veterinary_Education_Core_Curriculum.pdf">http://www.oie.int/Veterinary_Education_Core_Curriculum.pdf</a>
63	Livestock and Climate Change - IFAD	<a href="http://www.ifad.org/lrkm/factsheet/cc.pdf">http://www.ifad.org/lrkm/factsheet/cc.pdf</a>
64	Supplying Carbon Sequestration from West African Rangelands: Opportunities and Barriers	<a href="http://www.bioone.org/doi/pdf/10.2111/REM-D-09-00009.1">http://www.bioone.org/doi/pdf/10.2111/REM-D-09-00009.1</a>
65	Value Chains - Linking Livestock Producers to the Markets -IFAD	<a href="http://www.ifad.org/lrkm/factsheet/valuechains.pdf">http://www.ifad.org/lrkm/factsheet/valuechains.pdf</a>
66	The AU Department of Rural Economy and Agriculture (DREA)	<a href="http://rea.au.int/en/about">http://rea.au.int/en/about</a>
67	The African Union Interafrican Bureau for Animal Resources (AU-IBAR)	<a href="http://www.au-ibar.org/">http://www.au-ibar.org/</a>
68	Pan African Veterinary Vaccine Centre (PANVAC)	<a href="http://rea.au.int/en/RO/PANVAC">http://rea.au.int/en/RO/PANVAC</a>
69	The Pan African Tsetse and Trypanosomiasis Eradication Campaign (AU-PATTEC)	<a href="http://pattec.au.int/">http://pattec.au.int/</a>
70	The African Diaspora across the World	<a href="http://www.experience-africa.de/index.php?en_the-african-diaspora">http://www.experience-africa.de/index.php?en_the-african-diaspora</a>
71	Why has Africa Become a Net Food Importer?	<a href="http://www.fao.org/docrep/015/i2497e/i2497e00.pdf">http://www.fao.org/docrep/015/i2497e/i2497e00.pdf</a>
72	Livestock and rural finance	<a href="http://www.ifad.org/lrkm/factsheet/rf.pdf">http://www.ifad.org/lrkm/factsheet/rf.pdf</a>
73	Index based livestock insurance	<a href="http://ibli.ilri.org/">http://ibli.ilri.org/</a>
74	Public goods for economic development - UNIDO	<a href="https://www.unido.org/fileadmin/user_media/Publications/documents/Public%20goods%20for%20economic%20development_sale.pdf">https://www.unido.org/fileadmin/user_media/Publications/documents/Public%20goods%20for%20economic%20development_sale.pdf</a>
75	OIE PVS Tool	<a href="http://www.oie.int/support-to-oie-members/pvs-evaluations/oie-pvs-tool/">http://www.oie.int/support-to-oie-members/pvs-evaluations/oie-pvs-tool/</a>
76	OIE PVS Gap Analysis	<a href="http://www.oie.int/support-to-oie-members/pvs-gap-analysis/">http://www.oie.int/support-to-oie-members/pvs-gap-analysis/</a>
77	Reinforcing of Veterinary Governance in Africa (VET-GOV) (2012-2016)	<a href="http://www.au-ibar.org/vet-gov">http://www.au-ibar.org/vet-gov</a>

No.	Document	Weblink / Reference
78	Day One competencies - OIE	<a href="http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/Vet_Edu_AHG/DAY_1/DAYONE-Bang-vC.pdf">http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/Vet_Edu_AHG/DAY_1/DAYONE-Bang-vC.pdf</a>
79	Veterinary Legislation - OIE	<a href="http://www.oie.int/support-to-oie-members/veterinary-legislation/">http://www.oie.int/support-to-oie-members/veterinary-legislation/</a>
80	One Health - The FAO-OIE-WHO Collaboration	<a href="http://www.oie.int/fileadmin/Home/eng/Current_Scientific_Issues/docs/pdf/FINAL_CONCEPT_NOTE_Hanoi.pdf">http://www.oie.int/fileadmin/Home/eng/Current_Scientific_Issues/docs/pdf/FINAL_CONCEPT_NOTE_Hanoi.pdf</a>
81	Integrated Regional Coordination Mechanisms for the Control of TADs and Zoonoses in Africa (IRCM)	<a href="http://www.au-ibar.org/ircm-objectives">http://www.au-ibar.org/ircm-objectives</a>
82	Bio-innovate Africa.	<a href="http://www.bioinnovate-africa.org/">http://www.bioinnovate-africa.org/</a>
83	Livestock Breeding: - strategies and concerns	<a href="http://www.eseap.cipotato.org/UPWARD/Publications/Agrobiodiversity/pages%20448-455%20(Paper%2056).pdf">http://www.eseap.cipotato.org/UPWARD/Publications/Agrobiodiversity/pages%20448-455%20(Paper%2056).pdf</a>
84	Animal Genetic Resources (AnGR) Programme AU-IBAR	<a href="http://www.au-ibar.org/angr">http://www.au-ibar.org/angr</a>
85	Global Plan of Action for Animal Genetic Resources - FAO	<a href="http://www.fao.org/3/a-a1404e.pdf">http://www.fao.org/3/a-a1404e.pdf</a>
86	Animal Bio-technology	<a href="http://www.aboutbioscience.org/topics/animalbiotechnology">http://www.aboutbioscience.org/topics/animalbiotechnology</a>
87	The Use of Microchips for Livestock Identification in Africa	<a href="http://www.nrt-kenya.org/">http://www.nrt-kenya.org/</a>
88	Zambeef PLC	<a href="https://www.wocat.net/fileadmin/user_upload/documents/Books/WaterHarvesting_lowresolution.pdf">https://www.wocat.net/fileadmin/user_upload/documents/Books/WaterHarvesting_lowresolution.pdf</a>
89	Sustainable Intensification of Livestock Production Systems	<a href="http://www.zambeefplc.com/">http://www.zambeefplc.com/</a>
90	Sustainable Intensification of Livestock Production Systems	<a href="http://agrienvarchive.ca/bioenergy/download/deHaan_sus_intens_livestockprod.pdf">http://agrienvarchive.ca/bioenergy/download/deHaan_sus_intens_livestockprod.pdf</a>
91	Global livestock production systems - FAO	<a href="http://www.fao.org/docrep/014/i2414e/i2414e.pdf">http://www.fao.org/docrep/014/i2414e/i2414e.pdf</a>
92	Social protection in pastoral areas -promoting inclusive growth at the margins	<a href="http://www.future-agricultures.org/policy-engagement/policy-briefs/1878-social-protection-in-pastoral-areas-promoting-inclusive-growth-at-the-margins/file">http://www.future-agricultures.org/policy-engagement/policy-briefs/1878-social-protection-in-pastoral-areas-promoting-inclusive-growth-at-the-margins/file</a>
93	Informal and Formal social Protection Systems in SSA	<a href="http://publications.ossrea.net/index.php?option=com_sobi2&amp;sobi2Task=sobi2Details&amp;catid=3&amp;sobi2Id=2796&amp;Itemid=0">http://publications.ossrea.net/index.php?option=com_sobi2&amp;sobi2Task=sobi2Details&amp;catid=3&amp;sobi2Id=2796&amp;Itemid=0</a>
94	A Review of Good Practice and Lessons Learnt in Pastoralist Programming	<a href="http://www.fao.org/fileadmin/user_upload/drought/docs/Pastoralism%20Good%20Practice%20and%20Lessons%20Learnt%20in%20Pastoralist%20Programming%20-%20DRAFT_2_27_09_2011.pdf">http://www.fao.org/fileadmin/user_upload/drought/docs/Pastoralism%20Good%20Practice%20and%20Lessons%20Learnt%20in%20Pastoralist%20Programming%20-%20DRAFT_2_27_09_2011.pdf</a>
95	Northern Rangelands Trust	<a href="http://www.nrt-kenya.org/">http://www.nrt-kenya.org/</a>

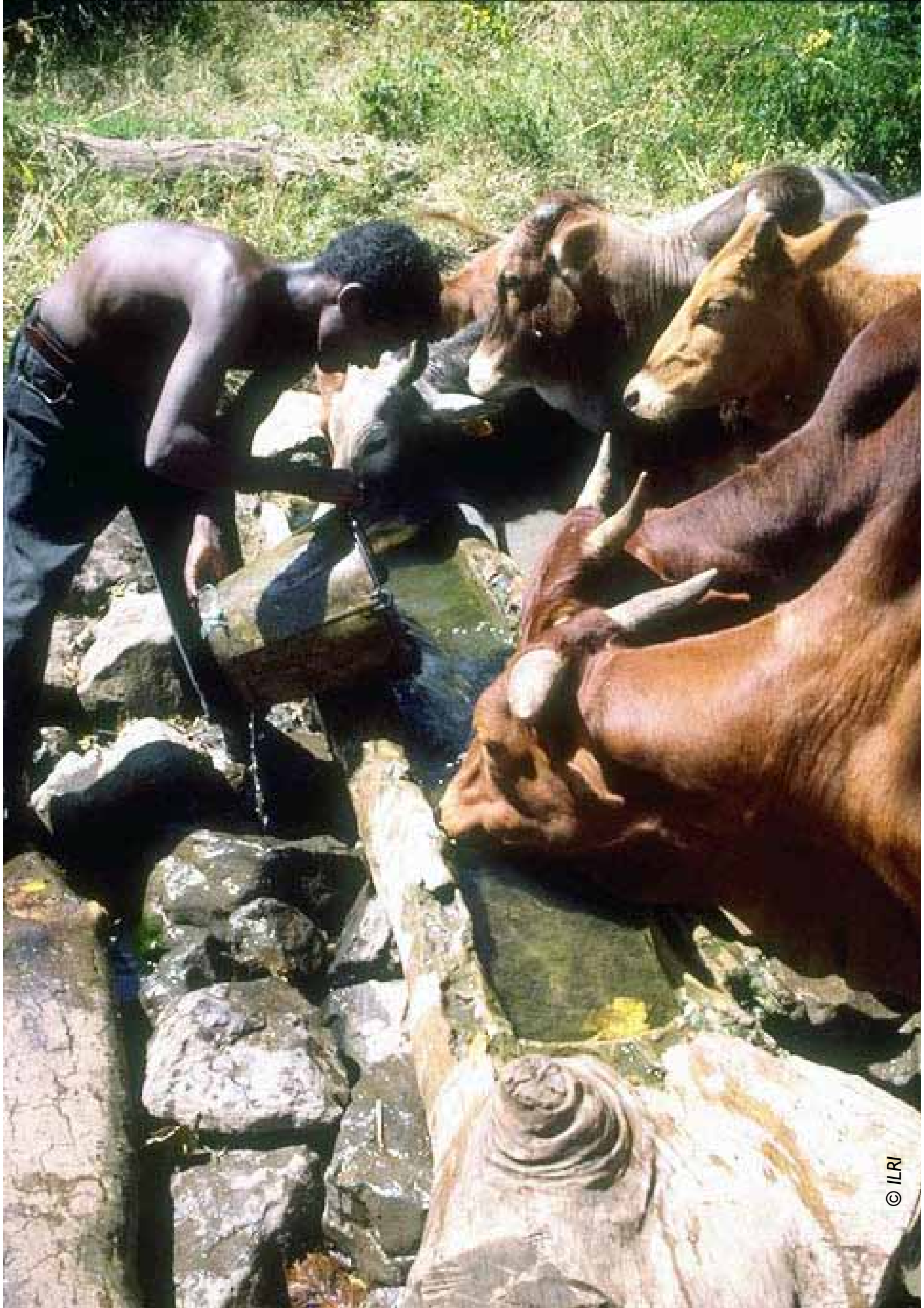
No.	Document	Weblink / Reference
96	Integrating Wildlife Land-Use Options Into the Livelihood, Development, and Conservation Strategies of Namibian Communities	<a href="http://pdf.usaid.gov/pdf_docs/Pnacx280.pdf">http://pdf.usaid.gov/pdf_docs/Pnacx280.pdf</a>
97	The CAMPFIRE Program in Zimbabwe	<a href="https://firstforwildlife.wordpress.com/2015/08/18/the-campfire-program-in-zimbabwel/">https://firstforwildlife.wordpress.com/2015/08/18/the-campfire-program-in-zimbabwel/</a>
98	The Role of New Technologies in Increasing Livestock Production	<a href="http://agrilinks.org/sites/default/files/resource/files/ASAS%202014%20-%20G%20BeVier.pdf">http://agrilinks.org/sites/default/files/resource/files/ASAS%202014%20-%20G%20BeVier.pdf</a>
99	Use of Assisted Reproductive Technologies for Livestock Development	<a href="http://www.veterinaryworld.org/Vol.3/May/Use%20of%20Assisted%20Reproductive%20Technologies%20for%20Livestock%20Development.pdf">http://www.veterinaryworld.org/Vol.3/May/Use%20of%20Assisted%20Reproductive%20Technologies%20for%20Livestock%20Development.pdf</a>
100	The Economics of M-PESA	<a href="http://www.mit.edu/~tavneet/M-PESA.pdf">http://www.mit.edu/~tavneet/M-PESA.pdf</a>
101	Scaling and innovation platforms	<a href="https://cgspace.cgiar.org/bitstream/handle/10568/67884/Brief13.pdf?sequence=3">https://cgspace.cgiar.org/bitstream/handle/10568/67884/Brief13.pdf?sequence=3</a>
102	Capacity Building of Farmers through e-Extension Model	<a href="http://www.un.org/esa/dsd/csd/csd_pdfs/csd-17/followup/presentations/kramer-leblanc-2.pdf">http://www.un.org/esa/dsd/csd/csd_pdfs/csd-17/followup/presentations/kramer-leblanc-2.pdf</a>
103	Commercialization of livestock production; towards a profitable and market-oriented smallholder livestock production system	<a href="http://www.lrrd.org/lrrd26/5/hend26090.html">http://www.lrrd.org/lrrd26/5/hend26090.html</a>
104	Smallholder competitiveness and market-driven technology uptake	<a href="https://cgspace.cgiar.org/bitstream/handle/10568/10632/IssueBrief19.pdf?sequence=1">https://cgspace.cgiar.org/bitstream/handle/10568/10632/IssueBrief19.pdf?sequence=1</a>
105	Farmer field school approach –FAO Guidelines	<a href="http://www.fao.org/ag/ca/ca-publications/farmer_field_school_approach.pdf">http://www.fao.org/ag/ca/ca-publications/farmer_field_school_approach.pdf</a>
106	Building resilience of agro pastoral communities	<a href="http://www.fao.org/docrep/019/i3512e/i3512e.pdf">http://www.fao.org/docrep/019/i3512e/i3512e.pdf</a>
107	Designing and Implementing Livestock Value Chain Studies	<a href="http://www.fao.org/docrep/015/i2583e/i2583e00.pdf">http://www.fao.org/docrep/015/i2583e/i2583e00.pdf</a>
108	ICTs improving the livestock sector in Africa: Case studies from Ethiopia and Kenya	<a href="http://blog.ict4ag.org/2013/11/icts-improving-the-livestock-sector-in-africa-case-studies-from-ethiopia-and-kenya/">http://blog.ict4ag.org/2013/11/icts-improving-the-livestock-sector-in-africa-case-studies-from-ethiopia-and-kenya/</a>
109	Developing Enabling Policy Environments for the Livestock Sector	<a href="http://www.fao.org/ag/againfo/programmes/en/pplpi/docarc/cambodia.pdf">http://www.fao.org/ag/againfo/programmes/en/pplpi/docarc/cambodia.pdf</a>
110	Enhancing market access in Kenyan SMEs using ICT.	<a href="http://www.ku.ac.ke/schools/business/images/stories/research/market_aces.pdf">http://www.ku.ac.ke/schools/business/images/stories/research/market_aces.pdf</a>
111	Foreign aid and the African Farmer	<a href="http://ageconsearch.umn.edu/bitstream/11602/1/sp04-13.pdf">http://ageconsearch.umn.edu/bitstream/11602/1/sp04-13.pdf</a>
112	Financial Inclusion Data / Global Index – World Bank	<a href="http://datatopics.worldbank.org/financialinclusion/region/sub-saharan-africa">http://datatopics.worldbank.org/financialinclusion/region/sub-saharan-africa</a>

## 16. LiDeSA Validation Workshop – List of Participants



Validation of the Implementation Modalities of the Livestock Development Strategy (LiDeSA) Nairobi, Kenya 7th - 8th May 2015

Representing	Participant	Representing	Participant	Representing	Participant
Algeria	Dr. Sabrina Ichou	Kenya	Dr. Kisa Juma Ngeiywa	Uganda	Dr Nicholas Kauta
Angola	Dr Nascimento Ricardo		Rophin Kalela Nyange		Dr Alfred Ge Ococh
Benin	Dr Byll Orou Kperou Gado	Lesotho	Dr. Marosi Molomo	Zambia	Dr Swithine Kabilika
Botswana	Dr. K Philemon-Motsu		Mr. Molapo Hlasoa	Zimbabwe	Dr. Unesu U-Obatolu, Mr Bothwell Makodza
Burundi	Mme. Revocate Bigirimana	Madagascar	Mme Annie Michèle Parson		COMESA
Burkina Faso	Dr. Lassina Ouattara	Malawi	Dr. Bernard Chimera	EAC	Dr Timothy Wesonga
Cameroon	Dr Djonwe Gaston	Mali	Amadou Dembele	ECCAS	Dr Moussa B Demsa
	Dr Hayatou Hamidou	Mauritania	Dr Ahmed Salem Elarbi	IGAD	Dr Agol Kwai
CAR	Dr Emmanuel Namkoisse	Niger	Dr Abdoul Malick Haido	CEBEVIRHA	Dr Toussaint B Ndong
	Mr Simplicite T Binemon	Nigeria	Dr Abdulganiyu Abubakar	OIE	Dr Walter Masiga
Chad	Dr Mahamat Guindé		Dr. Ademola Raji	PANVAC	Dr Nick Nwankpa
Comoros	Dr. Soule Miradji	Rwanda	Dr Theogene Rutagwenda	PATTEC	Dr Hassane M Hassane
	Mme Mariame Anthoy	Sao Tome&Principe	Dr. Natalina LC Vera Cruz	WAP	Tennyson Williams
Congo Brazzaville	Dr Léon Tati	Senegal	Dr Mbargou Lo		Otieno Mtula
Côte D'Ivoire	Dr Cissé E Aman Diarra	Seychelles	Dr Gelaze Jimmy Melanie	ANAW	Samuel Theuri
	Dr Gnanjiri A D Patricia	Somalia	Dr Habiba S Hassan Hamud		ILRI
DRC	Dr. Honoré N'lemba Mabela	South Africa	Dr. Botlhe M Modisane	AU-IBAR	Prof. Ahmed Elsalwaly
Djibouti	Dr Abdi Mahamoud Elmi		Mr. Joel Mamabolo		Dr Bruce Mukanda
		M. Abdo Alawan Isse	South Sudan	Dr Jacob Korok	Dr Simplicite Nouala
Egypt	Dr Ahmed Fathy	Sudan	Dr Kamal T Al Sheikh	Dr Henry Wamwayi	
	Prof. Khaled Mansour	Swaziland	Vinah Thuli Ngozo	Dr. James Wabacha	
Gambia	Dr Duto Sainy Fofana	Tanzania	Dr. Abdu A Hayghaimo	Dr. Samuel Muriuki	
	Lamin Saine		Nelson Blassio Kilongozi	Dr. Annie Lewa-Kigezo	
Ghana	Dr Ben Aniwa	Togo	Dr. Komla B Batawui	Jemima Makanda	
	Mr. Kwamina Arkorful		Mme Wolou Kitouré	Fahim Kremeier	
Guinea Bissau	Dr. Bernardo Cassamá	Tunisia	Prof. Malek Zrelli		





African Union – Interafrican Bureau for Animal Resources  
(AU-IBAR)

Kenindia Business Park  
Museum Hill, Westlands Road  
PO Box 30786  
00100 Nairobi

Kenya

Tel: +254 (20) 3674 000

Fax: +254 (20) 3674 341 / 3674 342

Email: [ibar.office@au-ibar.org](mailto:ibar.office@au-ibar.org)

Website: [www.au-ibar.org](http://www.au-ibar.org)