



AFRICAN UNION  
INTERAFRICAN BUREAU  
FOR ANIMAL RESOURCES



# LIVE2AFRICA BASELINE STUDY REPORT DECEMBER 2020



# Table of Contents

<b>Introduction</b>	<b>I</b>
<b>Purpose and objectives of the baseline</b>	<b>I</b>
<b>Methodology</b>	<b>I</b>
<b>Research Methods used</b>	<b>I</b>
Review of secondary data	I
Primary data collection	2
In-depth value chain analysis	2
Data analysis	2
Limitations of the Study	3
<b>Key Findings</b>	<b>3</b>
Overall Objective: A transformed livestock sector that significantly contributes to Africa's sustainable socio-economic development and equitable growth	3
Growth rates of the Livestock Subsector	3
Comparison of the Agriculture Sector and Livestock Subsector growth rates	4
Contribution of Livestock to Agriculture GDP	4
<b>Result 2: Animal health delivery systems improved</b>	<b>6</b>
<b>Result 1: Investment in livestock value chains are increased.</b>	<b>6</b>
<b>Result 3: Animal production, productivity and ecosystem management systems are enhanced</b>	<b>11</b>
<b>Result 4: Resilience of livestock production systems strengthened</b>	<b>12</b>
<b>Result 5: Technology adoption systems in the LVCs strengthened</b>	<b>12</b>
<b>Result 7: AU-IBAR continental capacities strengthened</b>	<b>14</b>
<b>Conclusions and Recommendations</b>	<b>15</b>



## **Introduction**

In order to establish the baseline status the baseline situation after the approval of rider, AU- IBAR, in addition to the stock taking of the five identified regional value chains, carried out a baseline study for Pan-African Support to the AU-IBAR for a Sustainable Development of Livestock for Livelihoods in Africa (Live2Africa). This study was done over a three months period September – October 2020 in order to establish a basis of measuring the impact of the project. The baseline study was meant to establish the baseline values of key Live2Africa indicators and other important parameters necessary for tracking the impact of livestock interventions.

## **Purpose and objectives of the baseline**

The main purpose of the baseline study was to establish a basis for measuring implementation progress and a basis for measuring the change induced by the implementation of the Live2Africa project. It was the second step to establishing the existing status the livestock sector. The initial efforts were done through the stocktacking of prioritized value chains. The key parameters not established by this baseline will be established by the detailed analysis of each regional value chain, which was in process at the time of compilation of this report.

The specific objectives of study were:

1. To determine the baseline values for some indicators whose figures could not be established by referencing secondary data
2. To establish the status of key livestock parameters

The baselines were collected well into project implementation partly because the project kept on evolving and new indicators of progress that measure the change the project is aims to deliver where developed in line with the improved project. This followed recommendations of the steering committee in 2019 and the outputs of the results oriented monitoring commissioned by the European Union which noted that the indicators were circumscribed hence difficult to track.

## **Methodology**

In order to establish the baseline figures and the baseline status existing in the year 2020, the following methods were used:

## **Research Methods used**

### **Review of secondary data**

Data existing in the public domain and AU-IBAR Priority value chains stock tacking reports and implementation reports were reviewed. Key findings of these reports were noted and gaps were identified. The baseline survey was an attempt to fill the identified gaps.

## *Primary data collection*

A questionnaire was designed with questions aimed at establishing the baseline situation. The questionnaire was uploaded on survey monkey and emailed to directors of animal production. Data for this questionnaire was to be collected from different sources in a country, including but not limited to: the Department of Veterinary Services; National Bureaus of Statistics, National Banks, Customs, National Investment Authorities, Government Departments, Civil society and the private sector actors among others. The Directors of Animal Production were therefore requested to serve as focal persons for data collection by data collection with other relevant offices as appropriate for their countries. Where the national statistical system does not categorically provide the required information, logically derived estimates. The questionnaire was emailed to Directors of Animal production in all the 55 MSs.

## *In-depth value chain analysis*

An in-depth regional value chain analysis is planned for the six prioritized regional value chains. Some of the questions not answered by the baseline are planned to be answered through the in-depth value chain analysis to be carried out for each prioritized regional value chain. The six prioritized regional livestock value that were determined in a highly participatory approach are

1. ECCAS Region - Poultry Value Chain
2. EAC Region - Dairy Value Chain
3. IGAD Region - Meat and Live Animals
4. UMA Region- Dairy Value Chain
5. SADC Region - Meat and Live Animals
6. ECOWAS Region – Poultry Value Chain

## *Data analysis*

Data received was checked for completeness. In situations where two responses were received from one country, the response from the Director of animal production took precedence. In some cases, different individuals from one country would respond to different sections of the questionnaire. Their responses were merged to one. In order to estimate the parameters, a simple average of the responses received was computed. In computation of the simple averages outliers were excluded.

The survey was sent out to all 55MSs and 18 MSs responded to the survey giving a response rate of 33%. This response rate was achieved after extending to three months a survey that was initially planned to be take one month. Several reminders and follow up phone calls were made in an effort to increase the response rate. The low response rate was attributed to lack of livestock disaggregated data at national level and also the fact that data is housed in different offices making collation of this data within a short space of time a great challenge. In light of this challenge AU-IBAR is coordinating efforts to enhance visibility of the Livestock sector through disaggregation of parameters used in the biennial review process to clearly show the livestock component.

The responses received were good enough to provide a basis for measuring the results of Live2Africa project. The responses where mostly from Directors of Animal Production and Principal livestock officers.

**Table 1:** Responses disaggregated by region

	Region	Priority Regional Livestock Value Chain	Number of Countries that responded	Country
1.	ECCAS Region	Poultry Value Chain	2	Chad, Gabon
2.	EAC Region	Dairy Value Chain	2	Ethiopia, Uganda
3.	IGAD Region	Meat and Live Animals	2	Eritrea, Ethiopia
4.	UMA Region	Dairy Value Chain	4	Egypt, Mauritania, Morocco, Tunisia
5.	SADC Region	Meat and Live Animals	3	Comoros, Lesotho, Mozambique
6.	ECOWAS Region	Poultry Value Chain	5	Cote D'Ivoire, Guine-Bissau, Liberia, Mali, The Gambia
	<b>Total</b>		<b>17</b>	

## Limitations of the Study

The following limitations were faced during the study

- The study was carried out during a time the continent was seized with the effects of Covid 19 and adjusting. Therefore coordination of various stakeholders who repositories of some information required to answer some questions was a challenge, hence respondents had to skip so questions.
- Unavailability of livestock disaggregated data in many countries made it difficult for respondents to complete the questionnaire, hence there was a low response rate despite several follow ups through phone calls and email.

## Key Findings

**Overall Objective:** A transformed livestock sector that significantly contributes to Africa's sustainable socio-economic development and equitable growth

At this level, the research team sought to establish the baseline values and situation to the following key indicators/ Parameters.

**Table 2:** Estimated baseline values of Key Indicators / Parameters at overall objective level

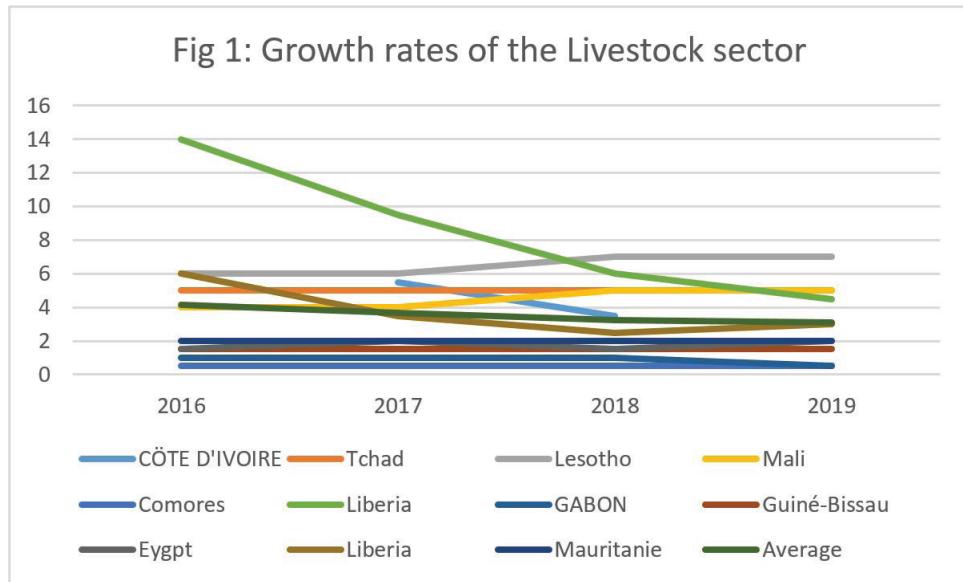
Indicator / Parameter	Estimated value
% contribution of livestock and livestock products to Intra African Trade;	30% (FAO Stats)
Change in poverty gap ratio among livestock dependent communities;	
Livestock Sector growth rate	3.1%
Contribution of Livestock to Agriculture GDP	8.6%

## Growth rates of the Livestock Subsector

Generally the growth rates of the Livestock sectors in 11 sampled countries that responded have declined over a four year period from 4.2% in 2016 to 3.1% in 2019. Lesotho is the only country that registered some growth from an annual growth rate of the Livestock sector 6% to 7%. This was due the policy shift of Lesotho, where the government is deliberately promoting the sector because they have realized its potential and are treating livestock sector as a priority investment sector.

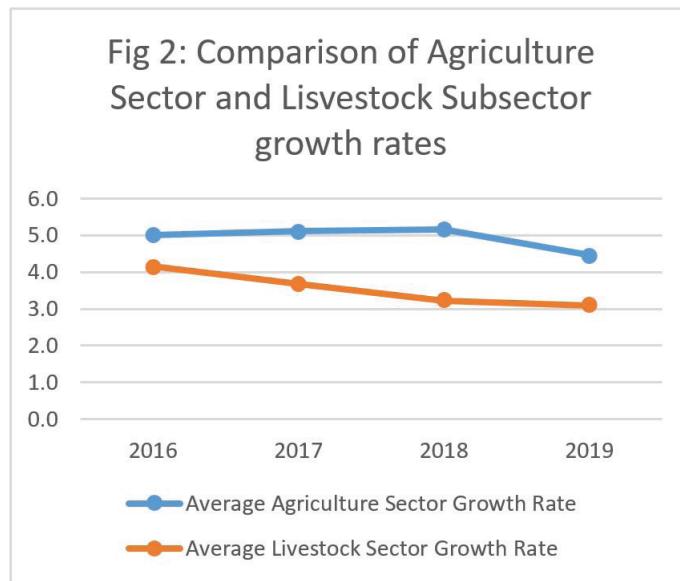
The general decline in the growth of the Livestock sector can be attributed among other factors to limited visibility of the sector's to food and nutritional security, livelihoods and wealth creation at national, regional

and continental levels. This decline if not reversed, may result in the livestock sector sinking further on the continent and the benefits the sector being lost. Fig 1 below shows the trend of growth rates over a four year period, 2016 to 2019.



### *Comparison of the Agriculture Sector and Livestock Subsector growth rates*

The rate of growth of the livestock subsector for the sampled 11 countries was below the growth rates of the Agricultural sector over the four years period declined from 5.0% in 2019 to 4.5% in 2019. The growth rate of the Livestock sector was consistently lower than the Agriculture sector growth rate over the four years period. This could signal less priority accorded to the livestock subsector in many countries due to non-computation of the real contribution of the Livestock sector in many countries.



### *Contribution of Livestock to Agriculture GDP*

Among the 12 Countries that responded to the survey, livestock had an average contribution of 8.6% to Agriculture GDP with Chad and Mauritania. In the rest of the countries Livestock is perceived to have a very low contribution to Agriculture GDP ranging between 6% and 1%. Table 3 shows the average contribution of livestock to Agriculture GDP.

**Table 3: % Contribution of Livestock to Agriculture GDP**

Country	2016	2017	2018	2019	Average
Chad	40	40	40	40	40.0*
Comoros	3	3	2	2	2.5
Côte D'ivoire	6	7	6	5.5	6.1
Egypt	1	1	1.5	1.5	1.3
Gabon	4	4.5	4	4	4.1
Guine-Bissau	5	5	5	5.5	5.1
Lesotho	6.5	6.5	6.5	4.5	6
Liberia	4.5	3	5.5	5	4.5
Liberia	6.5	4	3.5	2.5	4.1
Mali	5.5	5.5	4.5	4.5	5
Mauritania	15	15	18	18	16.5*
The Gambia	4.5				4.5
<b>Average</b>	<b>8.5</b>	<b>8.6</b>	<b>8.8</b>	<b>8.5</b>	<b>8.6</b>

**OUTCOME:** Systemic capacities of continental, regional and national livestock sector stakeholders are strengthened for sustainable transformation of the livestock sector.

	Indicator	Baseline value
1.	% increase in uptake of technologies across LVCs	Basic (33%and Below)
2.	# of MSs attaining level 3 or above Performance Veterinary Services (PVS).	0
3.	% increase in public sector investments in LVCs	Not determined
4.	% increase in private sector investments in LVCs	Not Determined
5.	# of MSs with functional Animal Resources Information management systems	48
6.	# of RECs with functional regional livestock market information systems	0
7.	# of African Common positions on animal health and food safety (animal origin) standards adopted by OIE and Codex	17
8.	Continental Average Livestock Production sector growth rate	4.5%

The key indicators are essential for the measurement of the outcome of the realization of the specific outcome. In terms animal biotechnologies and other livestock related technologies, respondents were asked to respond on the scale of technology adaptation in their countries on the following scale (Basic 30% and below, Average (30% - 60%) and advanced above 60%. 8 out of the 11 Countries that responded to the survey indicated that technology adaptation in their countries was basic. This rating will be tracked to establish how it changes through the course of the project.

On the amount of investments the responses received were inadequate to formulate and opinion. AU – IBAR will peruse these parameter through detailed livestock value chains planned for each region. Also an attempt was made to establish the Net Export Values of Livestock and Livestock Products. Most countries that responded to the survey did not respond this question with the exception of Egypt, Morocco and Chad. The response rate was too low for computation of any meaningful averages. The low response rate could indicate limited availability of Livestock trade disaggregated data in Member States. AU-IBAR has initiated an advocacy process for inclusion of livestock disaggregated data in the CAADP biennial review process.

## *Budget allocation to livestock sector.*

From the eight countries responded to the question, the average budget allocated to Agriculture was 4.5% of the national budget. Out of the budget allocated to agriculture, only 3.1% on average was allocated to livestock. This clearly points to less investment by governments in the livestock sector. With less government investment, private sector investment is also expected to be relatively low as public investment is a major driver of private sector investment.

## **Result 1: Investment in livestock value chains are increased.**

**Table 5:** Indicators under result area 1.1

<b>Output</b>	<b>Indicator</b>	<b>Baseline Value</b>
Output 1.1: Priority and promising new VC showcased.	# of livestock value chains mapped and published	0
	# of priority value chains supported	0
	# of regional and national hubs supported to enhance performance of LVCs	0
Output 1.2: Policies, regulatory frameworks and strategies to enhance LVC performance publicised.	# of RECs and MSs supported to develop policies/regulatory frameworks /strategies to enhance performance of LVCs using models developed by VET-GOV project	0
Output 1.3: Innovative incentives and financing mechanisms for increased investment along the LVC expanded.	# of feasibility studies on the establishment of value addition carried out	0
	# of transformative trainings supported	0
	# cross sectional dialogue mechanisms and partnerships established/ supported	0

As discussed in the outcome section, the value of investment in priority regional livestock value chains were not ascertained in this study, efforts shall continue through detailed regional value chain analysis studies. For the outputs, the baseline values were established to be zero for the parameters to be measured under this result area. Most efforts and activities implemented under this result area are exploratory, AU-IBAR had not implemented projects using an explicit value chain approach before.

## **Result 2: Animal health delivery systems improved**

**Table 6:** Indicators for result area 2.

<b>Output</b>	<b>Indicator</b>	<b>Baseline Value</b>
Output 2.1: PVS competencies strengthened.	# of follow up PVS Missions to selected Member States to determine the current state of play of the NVSs	6
	# of Member States assisted to formulate Investment Plans and resource mobilization to address outstanding gaps in Veterinary Governance and Veterinary Legislation	0
	# of African Experts trained on PVS Gap Analysis and veterinary legislation support	0
	# of MSs supported to develop strategic plans based on PVS Gap analysis	
	Guidelines, inclusive of QRA (Quality risk assessment) developed and published	0
	# of MSs supported to formulate proposals and mobilise resources on emergency preparedness and response	0
	# of countries and RECs in which recommendations of the stocktaking on one health initiatives are piloted	0

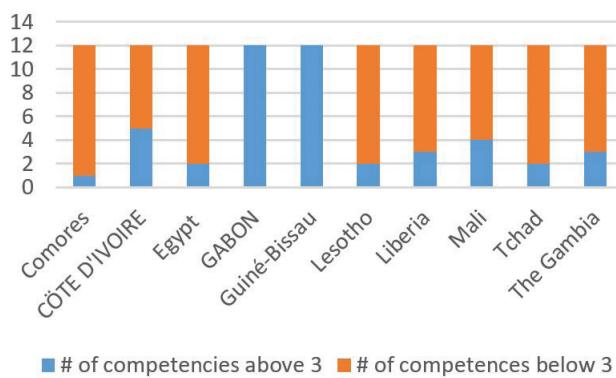
## PVS Critical Core Competencies

In order to determine the status of countries on terms of the Performance of Veterinary Services (PVS), countries were asked to provide information on the core PVS critical competencies that are above three for each category based on the results from PVS Assessment, PVS Self Assessments or PVS follow up evaluation that are facilitated by OIE in collaboration with AU- IBAR. The OIE PVS tool identifies four key categories of the core critical competencies for the effective and efficient functioning of veterinary services and the number of competencies in each category are 1) Human and Physical and Financial Resources-12 core competencies; 2) Technical Authority and Capability- 18 core competencies, 3) Interaction with Stakeholders- 7 core competencies and 4) Access to Markets 8 core competencies. Each category is discussed below:

### Human and Financial Resources

Out of the 12 Critical competencies that fall in this category, Gabon and Guinea Bissau indicated that they had achieved a score of three or above for all the 12 Critical competencies. For the other 8 countries that responded, they had 5 or less critical competencies that were above a score of three. This shows the need for countries to mobilise adequate human and financial resources in the veterinary sector. Fig xx shows the responses from.

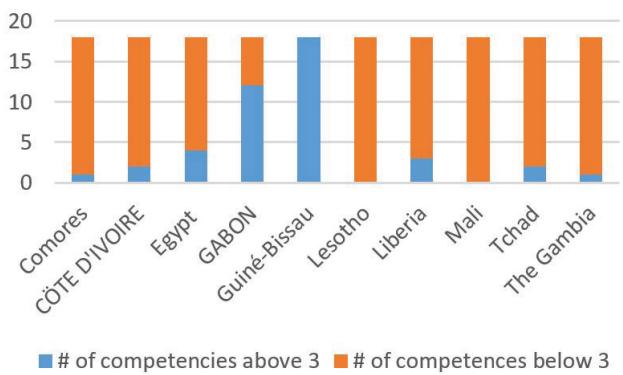
Fig 3: Human Physical and Financial Resources



### Technical Authority and Capability

In Terms of technical authority and capability, our of a total of 18 core critical competencies in this category, only two countries Gabon and Guinea Bissau had more than 10 critical competencies above there. Eight (80%) countries show the need for support as they have four or less critical competencies that were above 3.

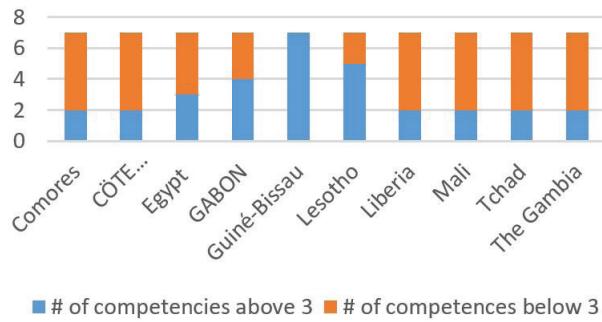
Fig 4: Technical Authority and Capability



## Interact with Stakeholders

In terms of interaction with stakeholders, Gabon, Guinea Bissau and Lesotho had 4 or more critical competencies above 3. The rest of the countries need more support in order to improve multi-stakeholder cooperation.

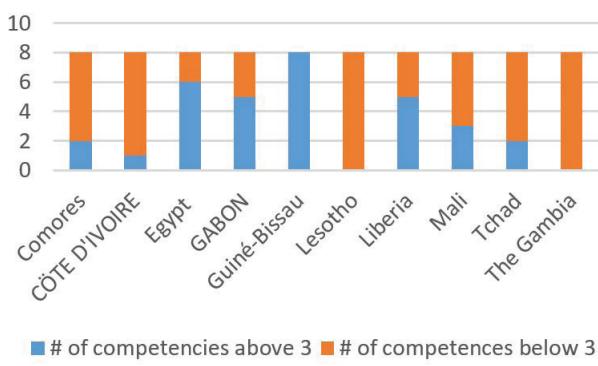
Fig 5: Interaction With Stakeholders



## Access to Markets

Guinea Bissau, Egypt and Gabon fared well in terms of access to markets, they had more than 4 critical competencies above the 3. 60% (6 out of 10) countries need more support in terms of improving the core competencies related to accessing the markets.

Fig 6: Access to Markets



## Strategies Based on PVS Gap Analysis Developed

12 out of 15 (80%) Countries that responded to this question indicated that they had developed strategies and action plans based on PVS gap analysis. It seems appears to common practice for Member States to develop strategies and action plans after a PVS Evaluation. Key Partners supporting Member States in the development of policies, strategies and action plans in animal health included AU-IBAR, OIE and FAO among others. Key benefits realised included having a policy, strategy and action plan to guide animal health action; improved capacities for better animal service delivery and having updated legislation. Key challenges included inadequate political will, limited financial, material and human resources, discontinued support for projects that would have been started and the red tape as a result bureaucratic procedures. It is recommended that this common practice be continued under Live2Africa.

In order to show the strategies and action plans developed, key partners who supported the process and key benefits realized and challenges encountered, Table 7 Below was developed.

**Table 7:** List the strategies developed based on PVS gap analysis, Key Benefits realized and Challenges

Country	Strategy / Action Plan Based on PVS Gap Analysis	Year it was Developed	Partner that Supported	Nature of Support provided	Key Benefits realised	Key Gaps/ Challenges encountered in development and implementation of the strategy
Comoros	Nil	Not developed	No Partnerships	nil	nil	nil
CÔTE D'IVOIRE	Consolidate the project management and governance of the domain,	2013	OIE (organisation mondiale de la santé animale)	Technical Support	- Tool to improve the governance of Veterinary Services, - Strategic vision of the development of the veterinary sector	- Insufficient political will - Non adoption by the Government
GABON	Strategic plan for veterinary services	2017	UA-BIRA/FAO/OIE	Financial and Technical	Now have a strategy document to guide decision-makers	No financial or operational means to date
Guine-Bissau	Livestock Development Policy	2010	Project PRESAR/ finance par BOAD	Financial and Technical	nil	Lack of funding for the implementation of the letter
Lesotho	Livestock Development Policy	2011	OIE, FAO, AU-IBAR	Meetings, stakeholders workshops	1. Strengthening competencies for international trade. 2. Strengthening competencies for animal health. 3. Strengthening competencies for veterinary public health. 4. Strengthening competencies for veterinary laboratories. 5. Strengthening competencies for general management and regulatory services.	The activities are not supported with funding as it was proposed, so it is difficult to implement activities without budget.

<b>Country</b>	<b>Strategy / Action Plan Based on PVS Gap Analysis</b>	<b>Year it was Developed</b>	<b>Partner that Supported</b>	<b>Nature of Support provided</b>	<b>Key Benefits realised</b>	<b>Key Gaps/ Challenges encountered in development and implementation of the strategy</b>
Liberia	Veterinary Public Health And Animal Production	It Was Developed 2016, 2017	OIE, FAO AND AU-IBAR	Partners	Got Us To Know The Importance Of The PVS Tools And Its Development	Assess To Market Veterinary Law
Mali	Veterinary services capacity building action plan	2012-2016	OIE	Support for upgrading to international standards	Upgrading to standards and skills	Discontinuity of support for upgrading
The Gambia	Animal Health Bill as an outcome of the Gambian Veterinary Legislation review and update process	2019	AU-IBAR	Financial and technical to develop the document and get it validated	Possibility of getting an updated veterinary legislation	Too much delay in getting through the enactment process

MSs that responded to the survey concurred that PVS evaluations are beneficial in that they have provided a basis for sound animal resources policy, strategies and action plans development. Some have managed to mobilise resources for projects in response to identified gaps.

Key challenges included limited human, financial and material resources as a result of low budget allocations from the national treasury, limited institutional and human resources capacities and limited availability of timely and accurate livestock data to support decision making. Table 8 below shows the key benefits and key challenges of the PVS evaluations.

**Table 8:** PVS evaluation benefited your country?

<b>Country</b>	<b>How has PVS evaluation benefited your country</b>	<b>What are the key challenges that your country has encountered with PVS evaluations, and how are they being addressed?</b>
Comoros	<ul style="list-style-type: none"> <li>Resulted in the formulation of:</li> <li>national livestock policy,</li> <li>national animal health strategy and</li> <li>national veterinary legislation</li> </ul>	<ul style="list-style-type: none"> <li>None highlighted</li> </ul>
CÔTE D'IVOIRE	<ul style="list-style-type: none"> <li>The PVS evaluations have shown the strengths and weaknesses of the Veterinary Services made suggestions for improvement</li> </ul>	<ul style="list-style-type: none"> <li>Systems to have timely and accurate animal health data still need to be instituted</li> </ul>
GABON	<ul style="list-style-type: none"> <li>PVS evaluations allowed us to know what is required to make our veterinary services functional</li> </ul>	<ul style="list-style-type: none"> <li>The implementation of the recommendations of the PVS evaluation because of limited resources;</li> </ul>
Guinea-Bissau	<ul style="list-style-type: none"> <li>It made it possible to obtain funding with the REDISSE II project;</li> </ul>	<ul style="list-style-type: none"> <li>Training, rehabilitation and equipment of veterinary services infrastructure as part of the REDISSE II project;</li> </ul>

Country	How has PVS evaluation benefited your country	What are the key challenges that your country has encountered with PVs evaluations, and how are they being addressed?
Lesotho	<ul style="list-style-type: none"> <li>It has identified the gaps, competences and incompetence's that are available in veterinary services,</li> <li>Has developed the strategies and actions that need to be taken by the country in order to improve the performance of the mentioned area of veterinary services</li> </ul>	<ul style="list-style-type: none"> <li>The urgent need to increase veterinary staffing and supervision of field activities. For this challenge staff is being increased.</li> <li>The review of staff roles and the revision of the job description. Not yet attempted but is in the pipeline.</li> <li>The provision of training to enable staff to undertake the defined roles. This challenged is being addressed by constantly training staff.</li> <li>Strengthening of veterinary para-professionals training, associated courses and apprenticeships. This challenge is partially being addressed as paraprofessionals are being trained.</li> </ul>
Liberia	<ul style="list-style-type: none"> <li>It has helped us to improve on the Veterinary Public Health Animal Production;</li> </ul>	<ul style="list-style-type: none"> <li>There no Finance To Implement The PVS Recommendation And Other Activities Related to PVS movement forward;</li> </ul>
Mali	<ul style="list-style-type: none"> <li>The evaluation made it possible to analyze the differences. Support for legislation;</li> </ul>	<ul style="list-style-type: none"> <li>Capacity building of veterinary services. The development of a five-year capacity building plan;</li> </ul>
Tchad	<ul style="list-style-type: none"> <li>PRAPS-Chad, through its animal health component, supported the veterinary services in the framework of the implementation of the PPR eradication program and the control of PPCB, The initial and continuing training of several executives;</li> </ul>	<ul style="list-style-type: none"> <li>the low budget allocation to the livestock sector;       <ul style="list-style-type: none"> <li>- Insufficient qualified human resources;</li> <li>- The lack of a chain of command;</li> </ul> </li> </ul>
The Gambia	<ul style="list-style-type: none"> <li>Prompted the re-organization of the Gambian Veterinary Services as recommended in the PVS evaluation report; prompted the review of the Gambian veterinary legislation.</li> </ul>	

### ***Result 3: Animal production, productivity and ecosystem management systems are enhanced***

**Table 9:** Indicators for result area 3

Result	Indicator	Baseline Value
Output 3.1: Genetic potential and performance of animals improved.	# of MSs/ RECs supported to formulate/ update and implement their AnGR policies/ legislation	23
Output 3.2: Sustainable best practice in NRM adopted;	# of scoping studies in each region to identify interventions for upscaling in natural resources management	0
	# RECs and MSs supported to implement climate smart technologies and practices	0
Output 3.3: Access to quality feed and water enhanced.	A scoping study of pastoral systems to identify gaps carried out	0
	# of proven water harvesting and feed conservation technologies promoted	0

The baseline values for this section where established by making reference to the Animal Genetic Resources project

## **Result 4: Resilience of livestock production systems strengthened**

**Table 10:** Indicators for resilience and livestock production

<b>Result</b>	<b>Indicator</b>	<b>Baseline value</b>
Output 4.1: Livestock Early Warning Systems (LEWS) strengthened.	# of MSs and RECs supported to strengthen LEWS	0
	# of African experts trained in collecting, analyzing and application of LEWs data.	0
Output 4.2: Disaster Risk Management (DRM) enhanced.	# of African Experts trained on disaster risk reduction	0
	# of MS and RECs supported to formulate proposals for enhancing resilience of livestock production systems	0

The baseline values for this area were established by making reference to AU-IBAR Implementation reports When it comes to emergency preparedness and response mechanism, Three (3) out of the eight (8) countries (37.5%) indicated that they had a functional an emergency preparedness and response mechanism in their countries. They were supported to develop these disaster preparedness and response mechanisms by FAO, USAID, UNDP and EU among other partners

## **Result 5: Technology adoption systems in the LVCs strengthened**

**Table 11:** Indicators for outputs on technology

<b>Result</b>	<b>Indicator</b>	<b>Baseline value</b>
Output 5.1: Adoption of modern technology to enhance production, productivity, value addition and competitiveness publicised;	# of Studies on existing technologies across priority regional livestock value chains carried out and appropriate publications produced and disseminated	0
	# of assessments of gender-sensitive technologies across priority LVCs undertaken	0
	# of regional Technology and Innovation Incubation hubs in Africa (A-TiChubs) and centres of excellence established and operationalised	0
	# National extension and REFIL services, technical and infrastructure capacities strengthened	
Output 5.2: Animal resources knowledge enhanced;	# of African Experts from MSs and RECs trained on new ARIS Modules and on ARIS operations	0
	# of data working groups established and strengthened within National Policy Hubs	0

### *Status of technology development, transfer and adoption in the livestock sector within your country?*

Countries where asked to provide in general the status of technology development, transfer and adoption in the livestock sector, 73% (8 out of 11 MSs that responded) indicated that the status was basic, 1 Country rated it as average and two countries rated it as advanced.

This shows that there are huge opportunities to promote technology development, transfer and adaption in the livestock sector across the continent.

**Table 12:** Status of technology development, transfer and adoption

	Country	Response
1.	Comoros	Basic
2.	CÔTE D'IVOIRE	Advanced
3.	Egypt	Basic
4.	GABON	Basic
5.	Guinée-Bissau	Basic
6.	Lesotho	Basic
7.	Liberia	Basic
8.	Mali	Average
9.	Morocco	Advanced
10.	Tchad	Basic
11.	The Gambia	Basic

### **Key factors affecting technology development, transfer and adoption in countries**

MSs were asked to rank the different categories of elements that affect technology transfer and adaptation in their countries. Average scores were computed and it was observed that all the identified causes where scored three and above which means the identified causes are real issues which needs to be addressed.

**Table 13:** Causative factors of technology development, transfer and adaptation

Country	Technology accessibility related causes	Institution/government systems related causes	Policy related causes	End users (farmers, co-operatives, etc.) related causes
Comores	2		3	4
CÔTE D'IVOIRE	4	1	3	
Egypt	2	3	4	5
GABON	2	4	3	5
Guiné-Bissau	5	4	2	1
Lesotho	4	3	2	5
Liberia	1		5	
Mali	3	2	1	4
Maroc	3	4		5
Tchad	5	3		2
The Gambia			3	4
<b>Average</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>4</b>

Prioritize interventions that should be supported to encourage/prompt technology transfer and uptake in the livestock sector (Rank between 1 (least priority) to 5 (highest priority)

**Table 14:** Prioritization of interventions

Country	Formulation of Continental Action plan for technology transfer and uptake	Strengthening of national extension services	Establishment of regional knowledge hubs for networking and information dissemination	Identification of centers of excellence to model best practices	Development and adoption of technology led business models	Strengthening of Private Public Partnerships
Comoros	5	4	2	3	1	
Côte D'Ivoire		5	2	4	3	1
Egypt	2		4	5	1	3
GABON	5	4	3	1		2
Guinée-Bissau	1	5	2	3		4
Lesotho		5	3	2	4	1
Liberia	1					5
Mali	4	3	2	1	5	
Morocco	4	2	3	1		5
Tchad			4		3	5
The Gambia		5	4			
<b>Average</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>

**Outcome 6:** Access to inputs, services, markets and value addition increased.

**Table 15:** Indicators for this result

Result	Indicator	Baseline Value
Output 6.1: Harmonised livestock marketing information systems showcased;	# of African Experts trained on livestock market Information systems trained	0
	# of MSs supported in formulating proposals for enhancing market infrastructure, policies and legislation	0
Output 6.2: Post harvest losses reduced;	A continental LVC inputs and services value addition strategy developed	0
	# of technologies on post-harvest losses reduction identified and promoted	0
Output 6.3: Access to quality affordable inputs and services expanded.	# of policy frameworks on affordable inputs and services formulated and implemented	0
	# of African Experts trained on enforcement of quality standards	0

The baseline values for this section were established by making reference to AU-IBAR reports

## Result 7: AU-IBAR continental capacities strengthened

**Table 16:** Indicators for result 7

Result	Indicator	Baseline Value
Output 7.3 capacities for project coordination strengthened	Number of staff engaged disaggregated by function	13

The Baseline value for this section was establish by reference to AU –IBAR reports

## **Conclusions and Recommendations**

1. The livestock sector continues to decline and to grow at a rate that below the overall agriculture sector growth rate. Therefore interventions that can stimulate the agriculture sector growth rate to reverse the trend should be prioritized.
2. Investment data may exist in countries but not disaggregated to livestock sub sector level. It is therefore recommended that the efforts AU-IBAR working with other partners have started to ensure the inclusion of livestock disaggregated data in the CAADP Biennial review be extended to include trade and investment statics at national level
3. The value of investment in regional livestock value chains could not be ascertained through this study, it is therefore recommended that an attempt be made to estimate investment values in priority regional livestock value chains through the detailed livestock value chain analysis studies which are planned for each identified priority regional livestock value chain. AU- IBAR should also continue with efforts they started in 2016 to support countries with tools to make it easier to get livestock disaggregated statistics.
4. Technology development and uptake was rated as basic in about 80% of African Member States. This calls for a deliberate attempt to implement interventions aimed at promoting technology development, uptake and usage.



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)