WEST AFRICA LIVESTOCK INNOVATION CENTRE (WALIC)

WALIC OPERATIONAL PLANS

SHORT-TERM 2013-2014

MEDIUM-TERM 2015-2017

LONG-TERM 2018-2022

IMPLEMENTING THE WALIC STRATEGIC PLAN 2013-2022

Submitted to the FAO West Africa Sub-Regional Office (SFW)

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Summary

This Operational Plan is based on the WALIC Strategic Plan for the period 2013-2022. This document outlines the steps that are needed to put into operation the ideas and aspirations articulated in the WALIC's 10-year (2013-2022) Strategic Plan finalized in January 2013 after a series of stakeholder consultations during 2012. The Objectives for the preparation of the Operational Plan include the development of Activities, Outputs and Outcomes that will contribute to the achievement of the goals stated in the Strategic Plan; development of Programmes and Sub-Programmes/Projects based on the four Themes developed and outlined in the Strategic Plan; providing estimates of operation and staff costs to the various Programmes in a robust manner; development of Logical Frameworks for the four Programmes; and development of a M&E Framework for WALIC. It is intended that the Operational Plan will serve as a source handbook or reference book from which other institutional documents such as Business Plans and Medium Term Plans will be developed.

Based on the Goals stated for the four Themes developed in the Strategic Plan, four corresponding Programmes were developed, each with a suggested name and a broad Objective. The four suggested programmes are the Livestock Genetic Improvement and Conservation (LIGIC) Programme for Theme 1; Value Chain Actors Capacity Building (VACACAB) Programme for Theme 2; the Knowledge Management (KNOWMAN) Programme for Theme 3; and the Advocacy and Partnership (ADVOPART) Programme for Theme 4. Activities, Outputs and Outcomes were developed for each of the four Programmes. Logical Frameworks were developed for each Programme. Activities and outputs were phased into three periods, short (2013-14), medium (2015-2017) and long term (2018-2022). Staff requirements for the first five years were estimated for each Programme. The cost of each research and innovation in terms of staff costs and inputs costs for Programmes (Themes) 1, 2, 3 and 4 for the first 5 years of implementation were estimated to be 4.99, 3.12, 3.19 and 3.06 million USD, respectively.

Three funding scenarios were developed. In summary the Optimistic Scenario, taken as the projected cost in the WALIC Strategic Plan for research for the first five years (2013-2017) amounted to US\$12.81 million. The slightly over-Optimistic Scenario was taken as the projection made in this Operational Plan which amounted to US\$14.35 million. For the slightly less Optimistic Scenario, a conservative figure of 80% of the Optimistic Scenario funding was applied, resulting in an amount of US\$10.25 million. It is assumed that the

amounts stated for the various scenarios will be revised once a newly appointed Governing Council examines the funding environment and make recommendations to WALIC Management accordingly.

It is recommended that the infrastructural and refurbishment of the ITC (WALIC) facilities, including the purchase of equipment and livestock and, and the limited activities associated with the anticipated grant from the Islamic Development Bank be carried out starting in the middle of 2013, if funding is received in the course of 2013. The full WALIC Agenda should then be initiated in January 2014. However, the recruitment processes for the CEO, Research Managers and key Researchers should be initiated in the last quarter of 2013, for staff to be at post in January 2014. The first WALIC Medium Term Plan, drawing on the Operational Plan should then be completed by the key staff under the directions of the CEO by the end of the first quarter of 2014.

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CHAPTER 1- Introduction, Objectives, Approaches and Methodologies

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1.1 Introduction and Background

This document outlines the steps that are needed to put into operation the ideas and aspirations articulated in the WALIC's 10-year (2013-2022) Strategic Plan finalized in January 2013 after a series of stakeholder consultations during 2012.

The WALIC Strategic Plan (SP) provides the Vision, Mission and development Goals of the new Centre which builds on the achievements of the now about-to-be-phased-out International Trypanotolerance Centre (ITC). The SP also provides four Strategic Themes (STs), each with a number (3-4) of Key Results Areas (KRAs). In order to effectively contribute to the development goals and to realize the desired changes in the livestock sectors and those dependent on the sectors for livelihoods and food security, as well as changes in the production environment and habitats of ruminant livestock (outcomes) certain outputs and associated activities need to be delivered. Resources (human, material and financial) needed to undertake the activities and deliver the outputs need also to be identified and quantified. The processes and steps through which the resources are brought together to generate the outputs also need to be described. The work described herein was undertaken within a Consultancy arrangement with the Terms of Reference in Appendix 1.

1.2 Key Elements from the WALIC Strategic Plan

The Vision

The **vision** for WALIC is that of a vibrant West African livestock sector boosting food security and wealth creation while safeguarding the environment.

The Mission

The **mission** for WALIC is to unlock the potential of West Africa's ruminant livestock sector through innovative partnerships and knowledge-based solutions that empower stakeholders along value chains.

The Strategic Themes and Goals

1. Genetic improvement, conservation and enhanced use of West African ruminant livestock

Goal: To catalyze and facilitate regional actions for coordinated efforts for the conservation of indigenous ruminant livestock genetic resources and their improved use in response to changing production and market circumstances.

2. Capacity development of actors along livestock value chains

Goal: To strengthen the capacities of livestock keepers and public and private sector actors to effectively perform their core roles in order to facilitate market-oriented livestock development

3. Knowledge management

Goal: To facilitate livestock stakeholders' access to reliable and up-to-date information and knowledge to inform timely decision-making.

4. Advocacy and Partnership brokerage

Goal: To elevate the profile of livestock, generate more support for the sector and promote collaboration among livestock development stakeholders to address systemic industry-wide bottlenecks at national and regional levels.

1.2.1 Implied Development Outcomes

From the considerations of the mandate of WALIC as a livestock technical arm of ECOWAS, a regional integrating organization with deep commitment for economic development and regional food security, and WALIC's own stated vision of a vibrant West African livestock sector boosting food security and wealth creation while safeguarding the environment, it can be deduced that WALIC's ultimate expectations from its work lie in the development outcomes of food security, poverty reduction and environmental sustainability. In order for WALIC's work to make major changes in the conditions of the intended beneficiaries (Outcomes), concrete Outputs from its innovative activities that contribute to the achievement of the goals associated with the four strategic themes need to be generated and be used by beneficiaries. Outputs take forms such as knowledge, technologies, methods, products (e.g. improved breeds), policy advise, and capacities strengthened. Outputs are typically generated from Programmes and Projects. Hence the ideas and aspirations in the various Strategic Themes would need to be concretized in Programmes and Projects.

1.2.2 Objectives

The Objectives for the preparation of the Operational Plan based on the WALIC Strategic Plan 2013-2022 include the development of Activities, Outputs and Outcomes that will contribute to the achievement of the goals and aspirations articulated in the Strategic Plan; develop Programmes and Sub-

Programmes/Projects based on the four Themes developed and outlined in the Strategic Plan; provide estimates of operation and staff costs to the various Programmes in a robust manner; develop Logical Frameworks for the four Programmes; and develop a M&E Framework . It is intended that the Operational Plan will serve as a source handbook or reference book from which other institutional documents such as Business Plans and Medium Term Plans will be developed.

1.3 Approaches and Methodologies

In line with the ToR (Appendix 1), analyses of the Strategic Themes and the associated goals, as well as the Key Results Areas (KRAs) to identify activities that would yield outputs necessary to make changes in conditions of beneficiaries (welfare and livelihoods, environment and policies) were undertaken. The Activities identified are considered the minimum to contribute to the realization of the particular Output. The Outputs proposed for each KRA are the minimum required to achieve the stated Outcomes for the Objective established under the KRA. Activities and Outputs (prioritized within each Strategic Theme and KRAs) are to be classified as to how early within the 10 years they could be implemented or realized, that is in short term (in 2013-2014), medium term (2015-2017) or in the long term (2018-2022). Outputs-linked Outcomes and Outcomes-related Objectives and the Goals they contribute are generated, and with indicators and assumptions placed in a Logical Framework for each Strategic Theme.

1.3.1 Prioritization of the Outputs within Strategic Themes organized around the various KRAs

Given the extensive stakeholder consultations in the selection of the four Strategic Themes, it was not considered necessary to prioritize among the four themes at this stage. Rather, prioritization of Key Results Areas within each Theme was undertaken.

Several priority setting approaches were considered for prioritizing the Key Results Areas identified within each Strategic Theme. The approaches reviewed included the Precedence (where level of funding of previous year is used as a basis for the current year), the Congruence (ranking alternative research themes or areas on a basis of a single measure), the Scoring (ranking alternative research programmes, themes, projects, on multiple criteria), the Benefit-Cost ratio, the Economic Surplus, Consultation and Peer Review, Participatory and Expert Judgment. Given the short duration of the assignment and data requirements, the Scoring method was chosen to be augmented by some Consultation and Expert Judgment information. With a view to "convert" each KRA into a Sub-Programme or a Project to operationalize the Strategy (see below) six criteria were identified, namely, 1) researchability, 2) innovation potential, 3) current alternative suppliers, 4) comparative advantage, 5) impact potential, and 6) immediate practicability for application to each of the future potential Sub-Programme/Project. Each criterion was given the same weight. The scores ranged from 1 (lowest) to 5 (highest). The KRA with the highest total score was ranked as the most priority within the Theme.

1.3.2 Phasing of Outputs and Activities

Further to the prioritization of the Key Results Areas (KRAs) within Themes, some prioritization was undertaken on Outputs and Activities within KRAs, based mainly on expert judgment criterion but also on the ease and practicability in initiating activities that contribute to the particular output and the rough

estimation of funds needed to complete the minimum of activities. Depending on the priority assigned, Outputs are to be put in one of three phases, Short term (2013-2014), Medium term (2015-2017), or Long term (2018-2022). Outputs and associated Activities from various KRAs of same phase class were gathered together to form the population of Outputs/Activities for a particular phase.

1.3.3 Costing of Outputs/Activities as part of determination of operational cost and human resources requirements

Approximate costs were assigned to the generation of one or a group of related Outputs identified under each KRA as part of the process to establishing the operational cost and human resources requirements of implementing the Strategic Plan under three funding availability scenarios. The three funding scenarios to be constructed around the resource requirements projected in the Strategic Plan, will provide the Optimistic Funding scenario, the Less Optimistic Funding scenario and the Slightly Over Optimistic Funding scenario.

1.3.4 Mapping of Strategic Themes into possible Programmes, and KRAs into possible Sub-programmes/Projects

In order to practicalize the ideas embodied in the four Themes and KRAs and to create opportunities for carrying out activities in the field and to be able to develop detailed Medium Term Plans (MTPs) and rolling MTPs in the future, consideration was given to the mapping of the Strategic Themes into future possible Programmes and the KRAs into Sub-Programmes/Projects. The resultant Programmes are further elaborated in Logical Frameworks with appropriate indicators.

1.3.5 Monitoring and Evaluation Framework

The WALIC Strategy calls for a framework for tracking the progress of the Strategic Themes. An adaptive M&E approach was adopted for this assignment that is capable of tracking progress at the institution (WALIC), programme (Strategic Theme) and Sub-Programme/Project (KRA) levels. The 3 X 6 Matrix Framework defines different levels of indicators, methods of data collection, sources of data collection and frequency of measurement (Table 7.1).

1.3.6 Risk Analysis and Management for the implementation of the Strategic Plan

The WALIC Strategic Plan calls for a more detailed risk management plan as part of the operationalization of the Strategy, including a detailed risk register. The major steps in developing the plan were identified in the Strategy as: identify critical and non-critical risks; document each risk in depth through a standard risk analysis form; log all risks and identify their severity; take action to reduce the likelihood of risks occurring and; propose action to reduce the likely impact should the risks occur. The present assignment takes an approach of re-visiting the risks identified during the stakeholder consultations and identify additional risks and elaborate on these risks and to establish a monitoring and review mechanism as part of the risk management plan.

1.3.7 Presentation and Organization of Results from analyses

Results from the analysis of the Strategic Plan and the formulation of the operational plans will be organized around the four Strategic Themes and presented as Chapters. Elements of each of the four Chapters will include results on Results Chain, Prioritization of KRAs within Theme, Phasing of outputs,

Costing of a group of Outputs, Aggregation of Outputs into phases, Mapping Strategic Themes/KRAs into Institutional Programmes/Sub-Programmes, Theme Logframes. Additional Chapters will cover Monitoring and Evaluation Framework, Risk Analyses and Management, and Next Steps.

CHAPTER 2: Results on Strategic Theme 1: Genetic improvement, conservation and enhanced use of West African ruminant livestock

2.1 Result Framework

Goal: To catalyze and facilitate regional actions for coordinated efforts for the conservation of indigenous ruminant livestock genetic resources and their improved use in response to changing production and market circumstances

KRA 1: Regibnal Strategy & Framework for conservation and use of livestock resources Objective 1: A more coherent strategy and implementation framework for indigenous livestock resources conservation and use in West Africa

Outcomes

Improved consultations and coordination among stakeholders in formulating livestock resources strategies and frameworks

Enhanced and more rigorous analyses and characterization of production and market systems and producer objectives, in support of indigenous livestock resources conservation and use

Increased availability and extended use of improved genetic materials from on-going WALIC (ITC) ONB schemes

Outputs

Stakeholder analyses on constraints and opportunities in livestock genetic resource sectors undertaken

Institutions and programmes audits in potential partner organizations for livestock conservation and use undertaken

Planning meetings/workshops on strategies and frameworks for livestock value chains and actors conducted

Tools, options and approaches to conservation and use of livestock genetic resources identified jointly with stakeholders

Additional inputs and partners sought to participate in ongoing WALIC (ITC) breeding programmes

KRA 2: Enhancing use of livestock resources

Objective 2: Enhanced and better use of indigenous livestock resources matched with production-marketing systems and environmental conditions in West Africa

Outcomes

Improved capacity of partner national/ regional institutions in identifying opportunities in incorporating livestock into new/on-going projects

Improved breeding designs and better implemented livestock genetic resource projects in the West Africa region

Increased number of livestock conservation and use projects in the West Africa region

Outputs

Synthesis of experiences /results of recent genetic improvement, animal genetic resources (AnGR) and conservation projects and responsible institutions in the region and elsewhere undertaken

Guidelines on design and implementation of genetic improvement programmes developed and disseminated

Studies on national and regional opportunities and challenges to better use of AnGR undertaken/facilitated

Field surveys/Studies on the assessment of status of threatened livestock breeds facilitated

Priority project proposals to conserve endangered breeds developed On-going ITC ONB scheme continued and with biotechnology tools with testing

Activities

- Facilitate with other key institutions at regional and national levels a series of stakeholder analysis on livestock resources and their conservation and use
- Field consultant teams to undertake institutional audits on livestock resources matters to identify partners with complementary strengths
- Facilitate planning meetings and workshops to develop or update livestock resources strategies, implementation and M&E frameworks
- Develop capacity in institutions to contribute to identification of tools, options for AnGR conservation
- Develop communication tools to reach stakeholders
- Explore biotechnology tools for ongoing (ITC) ONB work
- Continue breeding work to generate superior sires

Activities:

- Commission work on the compilation and synthesis of results and experiences of successful AnGR schemes and projects
- Develop and adapt guidelines on livestock genetic improvement schemes for West Africa situations/conditions
- Undertake or facilitate field studies to identify and document ruminant livestock breeds at risks, and status of their habitats
- Undertake analyses of new and on-going livestock and (NRM)related projects and investments to identify opportunities for the inclusion of livestock resources
- Facilitate/develop livestock genetic resources improvement proposals in collaboration with other regional and international centres and national systems, including civil societies
- Continue breeding work of ITC with biotechnology tools
- Provide technical and management inputs to Conservation projects

WALIC STRATEGIC THEME 1: Genetic improvement, conservation and enhanced use of West African ruminant livestock

Result Framework (continued)

Goal: To catalyze and facilitate regional actions for coordinated efforts for the conservation of indigenous ruminant livestock genetic resources and their improved use in response to changing production and market circumstances

KRA 3: Development of a multi-language genetic resources database for West Africa Objective 3: Improved generation of, and better use of information on livestock genetic resources among stakeholders using major international languages in West Africa

Outcomes

Enhanced repository capacity of WALIC for information on livestock and related sectors

Improved access to livestock databases and use by diverse stakeholders in the livestock value chains

Improved linkages of West Africa livestock-related data- bases with continental/global databases.

Outputs

Impact assessment study on on-going WALIC (ITC) ONBS undertaken and results disseminated

Data collection, storage, retrieval and dissemination infrastructure created/installed

Cadre of technical personnel in data collection, management and dissemination recruited and trained at WALIC and partner' institutions Formal agreements on collaboration and partnerships with national, regional and global institutions with relevant databases established Personnel in databases domain in national systems trained

Activities

- Conduct impact assessment on ITC's ONBS programmes
- Undertake need assessment of key NARS with interest in livestock resources database management as basis for future collaboration
- Train WALIC and NARS personnel in AnGR data collection, management, analyses and communication
- Initiate and finalize agreements with national, regional and global institutions with database facilities
- Install/upgrade data gathering, management and dissemination infrastructure at WALIC
- Develop/adapt on-farm data recording protocols and approaches appropriate for the selected production systems

KRA 4: International evaluation of selected breeds Objective 4: Increased opportunities and enhanced capacity for enlarging West Africa's genetic base through international evaluation and comparisons of selected breeds and crossbreds

Outcomes

Increased knowledge base and skills at WALIC and partner NARS in international breed evaluation and comparisons

Enhanced partnership and collaboration with forerunner institutions and service providers in the domain of international breed evaluation

Improved opportunities to increase livestock productivity

Outputs

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A framework for undertaking strategic pilot international evaluation and comparisons developed

A pilot evaluation scheme with West African ruminant breeds started Collaborative and partnerships with lead international institutions and those in Africa established

Potential sites for international breed evaluation and comparisons in Africa identified and agreements signed

Proposals developed to seek funding for evaluations and application of molecular approaches in the breeding schemes

Viable/sustainable evaluation programmes established and running at selected sites

Activities:

- Convene workshops/expert meetings to develop frameworks for international evaluation and comparisons
- Initiate collaboration/partnerships discussions with lead institutions
- Finalize MoUs with selected institutions for collaboration
- Analyse partner institutions for suitability for undertaking breeding and management activities required for breed evaluation and comparisons
- Develop proposals for funding of international breed comparisons
- Facilitate improvement of facilities at partner breeding sites
- Develop strategies/plans to link evaluation/comparison exercise at partner sites with selected production systems
- N'Dama cattle, WAD goats and Djallonke sheep and other West African breeds included in evaluation as a pilot

2.2 Prioritization of Key Results Areas within Theme 1.

From the analyses of the four KRAs within Theme 1, five (5), six (6), five (5) and five (5) Outputs were generated for KRA 1, KRA 2, KRA 3 and KRA 4, respectively. Scoring of each KRA according to the six criteria developed, composite scores were developed for each KRA. Table (2.1) presents the results from the scoring exercise.

Table 2.1 Prioritization of Key Result Areas within Strategic Theme 1- Genetic improvement, conservation and enhanced use of W. Africa ruminant livestock

Criteria	KRA 1- Regional Strategy & Framework for conservation and use of livestock resources	KRA 2- Approaches for enhancing use of livestock resources	KRA 3- Development of multi-language livestock genetic resources databases for West Africa	KRA 4- International evaluation and comparison of selected breeds
Researchability 1	5	4	3	5
Innovation potential ²	3	4	3	4
Current alternative suppliers ³	4	3	2	3
Comparative advantage of WALIC	5	4	3	2
Impact Potential ⁴	3	4	3	3
Immediate practicability in application	5	3	5	1
TOTAL SCORE PRIORITY	25	22	19 3	18
RANKING				

¹ The extent to which the research problem is in fact researchable and the problem can be resolved through the consideration of data derived

The Scoring exercise indicated that among the four KRAs within Theme 1, the topmost priority KRA is the development of a Regional Strategy and Framework for conservation and use of livestock resources,

² The extent to which initiatives and information generated from the KRA may lead to useful outputs or products

³ The extent to which other institutions in the region are already providing same or similar service (1=many suppliers; 5=nil or few, leaving WALIC to step in to provide the service)

⁴ The extent to which the research or innovation can have direct and indirect "influence" or "effect" on individuals, community, the development of policy or the creation of a new product, service or technology.

followed by the development of Approaches for enhancing use of livestock resources. The third priority KRA is the Development of multi-language livestock genetic resources databases for West Africa, followed closely by the fourth priority KRA, International evaluation and comparison of selected breeds.

2.3 Ranking of Outputs within KRAs

The 4-6 Outputs ranked according to ease/practicability of initiating the relevant activities and on estimated cost of developing the Output, arranged by rank (rank A is easiest and/or cheapest to accomplish whereas D or E is the most difficult/most expensive to accomplish) are as follows

KRA 1- Regional Strategy & Framework for conservation and use of livestock resources

Stakeholder analyses on constraints and opportunities in livestock genetic resource sectors undertaken (B) Institutions and programmes audits in potential partner organizations for livestock conservation and use undertaken (B)

Planning meetings/workshops on strategies and frameworks for livestock value chains and actors conducted **(B)** Tools, options and approaches to conservation and use of livestock genetic resources identified jointly with stakeholders **(B)**

Additional partners sought to participate in ongoing WALIC (ITC) breeding programmes (A)

KRA 2- Approaches for enhancing use of livestock resources

Synthesis of experiences /results of recent genetic improvement, animal genetic resources (AnGR) and conservation projects and responsible institutions in the region and elsewhere undertaken (A)

Guidelines on design and implementation of genetic improvement programmes developed and disseminated **(B)** Studies on national and regional opportunities and challenges to better use of AnGR undertaken/facilitated **(A)**

Field surveys/Studies on the assessment of status of threatened livestock breeds facilitated (C)

Priority project proposals to conserve endangered breeds developed (A)

On-going ITC ONB scheme continued and with biotechnology tools with testing at other sites outside of The Gambia (A)

KRA 3- Development of multi-language livestock genetic resources databases for West Africa

Impact assessment study on on-going WALIC (ITC) ONBS undertaken and results disseminated (A)

Data collection, storage, retrieval and dissemination infrastructure created/installed (B)

Cadre of technical personnel in data collection, management and dissemination recruited and trained at WALIC and partner' institutions (B)

Formal agreements on collaboration and partnerships with national, regional and global institutions with relevant databases established **(B)**

Personnel in databases domain in national systems trained (A)

KRA 4-International evaluation and comparison of selected breeds

A framework for undertaking strategic pilot international evaluation and comparisons developed (A)

A pilot scheme of evaluations and comparisons with West African breeds (B)

Collaborative and partnerships with lead international institutions and those in Africa established (B)

Potential sites for international breed evaluation and comparisons in Africa identified and agreements signed (B)

Proposals developed to seek funding for evaluations and application of molecular approaches in the breeding schemes (C)

Viable/sustainable evaluation programmes established and running at selected sites (D)

2.4. Phasing of Outputs/Activities within Theme 1

Outputs ranked A in Section 2.4. were considered as those that should be included in the Short Term operations of WALIC, that is Year 1-2. Those ranked B should be included in the Medium Term operations (Year 3-5) and those ranked C or D should be included in the Long Term operations (Year 6-10). As the WALIC Strategic Plan calls for a biannual rolling medium-term planning process, some selected Year 2 Outputs may be rolled into Year 3, Year 3 Output into Year 4, and so forth. Depending on availability of funding and staff some Year 3 activities may be initiated in Year 2.

Tentative Outputs for Year 1-2 (2013-2014) within Theme 1:

KRA 1

Additional partners sought to participate in ongoing WALIC (ITC) breeding programmes (A)

KRA 2

On-going ITC ONB scheme continued and with biotechnology tools (A)

Synthesis of experiences /results of recent genetic improvement, animal genetic resources (AnGR) and conservation projects and responsible institutions in the region and elsewhere undertaken (A)

Studies on national and regional opportunities and challenges to better use of AnGR undertaken/facilitated (A) Priority project proposals to conserve endangered breeds developed (A)

KRA3

Impact assessment study on on-going WALIC (ITC) ONBS undertaken and results disseminated (A) Personnel in databases domain in national systems trained (A)

KRA 4

A framework for undertaking strategic pilot international evaluation and comparisons developed (A)

Tentative Outputs for Year 3-5 (2015-2017) within Theme 1:

KRA 1

Institutions and programmes audits in potential partner organizations for livestock conservation and use undertaken (B)

Tools, options and approaches to conservation and use of livestock genetic resources identified jointly with stakeholders (B)

Stakeholder analyses on constraints and opportunities in livestock genetic resource sectors undertaken (B) Planning meetings/workshops on strategies and frameworks for livestock value chains and actors conducted (B)

KRA 2

Guidelines on design and implementation of genetic improvement programmes developed and disseminated **(B)** On-going ITC ONB scheme continued and with biotechnology tools **(A)**

KRA 3

Data collection, storage, retrieval and dissemination infrastructure created/installed (B)

Cadre of technical personnel in data collection, management and dissemination recruited and trained at WALIC and partners' institutions (B)

Formal agreements on collaboration and partnerships with national, regional and global institutions with relevant databases established **(B)**

KRA 4

Collaborative and partnerships with lead international institutions and those in Africa established (B)
Potential sites for international breed evaluation and comparisons in Africa identified and agreements signed (B)
A pilot evaluation scheme with West African ruminant breeds started (B)

Tentative Outputs for Year 6-10 (2018-2022) within Theme 1:

KRA 2

Field surveys/Studies on the assessment of status of threatened livestock breeds facilitated (C)

KRA 4

Proposals developed to seek funding for evaluations and application of molecular approaches in the breeding schemes **(C)**

A viable/sustainable evaluation programme established and running (D)

Mapping Strategic Theme into Programme and KRAs into Sub-Programmes/Projects

In order to achieve the innovation and research agenda of WALIC the four Strategic Themes corresponding to four Institutional Programmes (IPs) will be created. The first IP, corresponding to Strategic Theme 1- Genetic improvement, conservation and enhanced use of West Africa ruminant livestock, will be called the Livestock Genetic Improvement and Conservation (LIGIC) Programme. The Goal of the LIGIC Programme will be the same as that identified for the Theme in the WALIC Strategy: To catalyze and facilitate regional actions for coordinated efforts for the conservation of indigenous ruminant livestock genetic resources and their improved use in response to changing production and market circumstances. The overall suggested Objective of the Programme is: Improved regional strategy, tools and coordination aimed at achieving better management, utilization, conservation and value addition for increased benefits from indigenous livestock resources of West Africa.

Four Sub-Programmes/Projects corresponding to the four KRAs within Theme 1 with their formulated Objectives and expected Outcomes are in Table 2.3 below.

Table 2.3 Proposed Sub-Programmes/Projects from Theme 1 and Key Outcomes

KRA	Sub-Programme/ Project Name	Objective	Key Expected Outcomes
KRA 1: Regional Strategy & Framework for conservation and use of livestock resources	Livestock Resources Visioning Project	A more coherent strategy and implementation framework for indigenous livestock resources conservation and use in West Africa	-Improved coordination among stakeholders in formulating livestock resources strategies and frameworks -Enhanced and more rigorous analyses and characterization

			of production and market
			systems and producer
			objectives
			-Increased availability and
			extended use of improved
			genetic materials from on-going
			WALIC (ITC) ONB schemes
KRA 2: Enhancing use of	Livestock	Enhanced and better use of	-Improved capacity of partner
livestock resources	Resources	indigenous livestock resources	national/ regional institutions in
	Enhancement	matched with production-	identifying opportunities in
	Project	marketing systems and	incorporating livestock into
		environmental conditions in	new/on-going projects
		West Africa	-Improved breeding designs
			and better implemented
			livestock genetic resource
			projects
			-Increased number of livestock
			conservation and use projects
KRA 3: Development of a	Livestock	Improved generation of, and	-Enhanced repository capacity
multi-language genetic	Resources	better use of information on	of WALIC for information on
resources database for	Database-WALIC	livestock genetic resources	livestock and related sectors
West Africa	Project	among stakeholders using	-Improved access to livestock
		major international languages in	databases and use by diverse
		West Africa	stakeholders in the livestock
			value chains
			-Improved linkages of West
			Africa livestock-related data-
			bases with continental/global
1/2 1 1 1 1			databases.
KRA 4: International	Livestock	Increased opportunities and	-Increased knowledge base
evaluation of selected	Resources	enhanced capacity for enlarging	and skills at WALIC and
breeds	International	West Africa's genetic base	partner NARS in international
	Evaluation	through international evaluation	breed evaluation and
	Project	and comparisons of selected	comparisons
		breeds and crossbreds	-Enhanced partnership and
			collaboration with forerunner institutions and service
			providers in the domain of
			international breed evaluation
			-Improved opportunities to
			increase livestock productivity
			morease investock productivity

Examples of Partners needed to implement Programme 1:

The WALIC Strategic Plan provided examples of partners and categorized them as follows:

National: relevant Government Ministries, NARIs, farmer organizations and local NGOs, and tertiary education institutions

Regional: ECOWAS CIRDES, CORAF, international NGOs working in the region

International: AU-IBAR, ILRI, FAO/IAEA

The formulation of a Programme with Projects as presented in the above Table should make it easier for pin-pointing the partners who may be interested in a particular Project area.

CHAPTER 3: Results on Strategic Theme 2: Capacity development of actors along livestock value chains

3.1 Result Framework

Goal: To strengthen the capacities of livestock keepers and public and private sector actors to effectively perform their core roles in order to facilitate market-oriented livestock development

KRA1: Facilitating economies of scale and link to higher value markets

Objective 1: Improved facilitation of value chain actors and other stakeholders to achieve economies of scale in their businesses

KRA2: Improving smallholder access to inputs, advisory services and finances

Objective 2: Improved small scale livestock producers/processors access to inputs, advisory services and finance (credit)

Outcomes

Improved capacity at WALIC to facilitate stakeholder and value chain actors fora and business related meetings

Increased training and organizational capacity at WALIC and partner institutions to train stakeholders to acquire better livestock-related business skills

Improved organizational, communication and marketing skills of livestock products value chain actors

Outcomes

Enhanced knowledge and awareness of producers/processors on availability and accessibility to inputs, services and credit Improved business capacity of livestock producers/processors and other value chain actors

Improved efficiency in livestock sector activities, including production, processing from timely access to inputs and services,

Outputs

Studies on skills and performance of livestock value chain actors, markets, institutions, policies and economic environments undertaken

Livestock value chain actors' and stakeholders' linkages to livestock and products markets mapped

Organizational and training structures/programmes in support of livestock value chain actors established

Training and mentoring workshops for livestock value chains and stakeholders undertaken

Outputs

Training of livestock producers and other value chain actors in agri-business and markets related matters facilitated

Creation of platforms for value chain actors' engagements, business transactions and value chain development facilitated

Innovative financing arrangements linking producers/processors and associations to credit institutions through donor-funded projects/programmes facilitated

Studies on livestock businesses facilitated through ITC-inspired farmer organization, GILMA, conducted

Activities

Conduct studies on performance of livestock value chain actors, markets and market access, policy environments for livestock production and products development

Develop frameworks for mapping value chain actors' linkages to markets and credit institutions

Facilitate the training of key WALIC and partner institutions staff in organizing of stakeholder activities and mentoring of sector players

Organize training sessions and workshops for value chain actors in organizing and running associations Introduce and mainstream livestock value chains development and agribusiness concepts and approaches in WALIC's work programmes

Activities:

Map out value chain actors in the livestock sector and training providers and document constraints and opportunities

Select actors and service providers with organizational structures to be involved in capacity training and mentoring

Facilitate training of livestock producers and other value chain actors in agri-business

Facilitate producer/processor and marketing organizations seeking to create district and regional level platforms as well as apex body platforms Map out financing institutions, donor funded projects, NGOs and government agencies with activities in credit and smart subsidy programmes

Conduct studies among GILMA members on their livestock businesses

WALIC STRATEGIC THEME 2: Capacity development of actors along livestock value chains

Results Framework (Continued)

Goal: To strengthen the capacities of livestock keepers and public and private sector actors to effectively perform their core roles in order to facilitate market-oriented livestock development

KRA 3: Attracting youth and 'new entrants' to Livestock farming as a business

Objective 3: Increased youth and "new entrants" participation in livestock business

KRA 4: Facilitating development of specialist national institutes to address regional challenges

Objective 4: Enhanced facilitation of the development of national institutes charged with regionally relevant tasks in the domain of livestock

Outcomes

Improved educational policies that promote holistic training and that link with other policies that promote equal opportunities and equitable reward systems for diverse categories of workers in all sectors of the economy

Enhanced second and tertiary cycle institutions' agriculture curricula with larger content for livestock business, agribusiness, value chain analysis and development Increased numbers of West African youth taking employment in

Increased numbers of West African youth taking employr livestock agriculture sectors

Outcomes

Improved financial resources and capacity at WALIC for engaging national and sub-regional institutions to upgrading facilities/programmes in support of livestock-based research and development

Improved collaboration and partnership between WALIC and national institutes and regional/international laboratories

Improved leadership and management at national institutions

Outputs

Sensitization and advocacy programmes on youth training and employment in agriculture/livestock directed at policy and law makers developed

Strategies and guidelines for the revision/update of existing educational curricula on livestock facilitated/prepared for educational systems/policy makers

Career counseling strategy/programmes aimed at graduating high school, diploma and degree students developed and executed in collaboration with partners

Development of inducement packages/incentives for youth facilitated

Outputs

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A framework for networking of national, regional and international institutes for AnGR activities developed

Strategies/Action Plans for joint resource mobilization with specialized partner institutions for strengthening facilities developed

Capacity building at WALIC and specialized partner institutes' leadership and technical personnel developing and delivering technological/policy options of regional relevance undertaken

Proposals developed to seek funding for refurbishment /upgrade of facilities at partner institutions

Activities

Field consultancies to develop sensitization/awareness programmes directed at policy makers

Facilitate the review of educational curricula at secondary and tertiary institutions offering livestock agriculture as core subject or as an option Develop strategies/guidelines for facilitating the revision of curricula Develop career counseling strategies/programmes

Organize workshops targeting educational system heads/policy makers on incentive and reward systems

Facilitate discussions among national government agencies responsible for developing incentive programmes for youth careers and employment

Activities:

Form task force to develop frameworks for networking institutions Map up potential national, regional and international institutes for networking on AnGR technologies/policies

Identify and select potential institutes for collaboration

Develop resource mobilization plans

Develop proposals for funding for upgrading identified facilities by identified donors

Facilitate training of partner institutes staff to cope with new/additional tasks

Train key WALIC staff in coordination of network facilitation Develop agreements with identified institutes on modalities of operation, including ownership and intellectual property right

3.2 Prioritization of Key Results Areas within Theme 2.

From the analyses of the four KRAs within Theme 2, four (4), four (4), four (4) and four (4) Outputs were generated for KRA 1, KRA 2, KRA 3 and KRA 4, respectively. Scoring of each KRA according to the six criteria developed, composite scores were developed for each KRA. Table (3.1) presents the results from the scoring exercise.

Table 3.1 Prioritization of Key Results Areas within Strategic Theme 2- Capacity development of actors along livestock value chains

Criteria	KRA 1- Facilitating economies of scale and link to higher value markets	KRA 2- Improving smallholder access to inputs, advisory services and finances	KRA 3- Attracting youth and 'new entrants' to Livestock farming as a business	KRA 4- Facilitating development of specialist national institutes to address regional challenges
Researchability 1	4	5	3	4
Innovation potential ²	5	5	3	4
Current alternative suppliers ³	4	3	3	4
Comparative advantage of WALIC	3	3	2	4
Impact Potential ⁴	4	4	4	5
Immediate practicability in application	4	3	2	4
TOTAL SCORE	24	23	17	25
PRIORITY RANKING	2	3	4	1

¹ The extent to which the research problem is in fact researchable and the problem can be resolved through the consideration of data derived

² The extent to which initiatives and information generated from the KRA may lead to useful outputs or products

³ The extent to which other institutions in the region are already providing same or similar service (1=many suppliers; 5=nil or few, leaving WALIC to step in to provide the service)

⁴ The extent to which the research or innovation can have direct and indirect "influence" or "effect" on individuals, community, the development of policy or the creation of a new product, service or technology

The Scoring exercise indicated that among the four KRAs within Theme 2, the topmost priority KRA is on Facilitating development of specialist national institutes to address regional challenges followed closely Facilitating economies of scale and link to higher value markets. The third priority KRA is the Improving smallholder access to inputs, advisory services and finances followed distantly by the fourth priority KRA, Attracting youth and 'new entrants' to Livestock farming as a business.

3.3 Ranking of Outputs within KRAs

The 4 Outputs ranked according to ease/practicability of initiating the relevant activities and on estimated cost of developing the Output, arranged by rank (rank A is easiest and/or cheapest to accomplish whereas D or E is the most difficult/most expensive to accomplish) are as follows

KRA 1- Facilitating economies of scale and link to higher value markets

Studies on skills and performance of livestock value chain actors, markets, institutions, policies and economic environments undertaken (B)

Livestock value chain actors' and stakeholders' linkages to livestock and products markets mapped (A) Organizational and training structures/programmes in support of livestock value chain actors established (B)

Training and mentoring workshops for livestock value chains and stakeholders undertaken (B)

KRA 2- Improving smallholder access to inputs, advisory services and finances

Training of livestock producers and other value chain actors in agri-business and markets related matters facilitated (B)

Creation of platforms for value chain actors' engagements, business transactions and value chain development facilitated **(B)**

Innovative financing arrangements linking producers/processors and associations to credit institutions through donor-funded projects/programmes facilitated **(C)**

Studies on livestock businesses facilitated through ITC-inspired farmer organization, GILMA, conducted (A)

KRA 3- Attracting youth and 'new entrants' to Livestock farming as a business

Sensitization and advocacy programmes on youth training and employment in agriculture/livestock directed at policy and law makers developed (A)

Strategies and guidelines for the revision/update of existing educational curricula on livestock facilitated/prepared for educational systems/policy makers (B)

Career counseling strategy/programmes aimed at graduating high school, diploma and degree students developed and executed in collaboration with partners (C)

Development of inducement packages/incentives for youth facilitated (C)

KRA 4- Facilitating development of specialist national institutes to address regional challenges

A framework for networking of national, regional and international institutes for AnGR activities developed (A)

Strategies/Action Plans for joint resource mobilization with specialized partner institutions for strengthening facilities developed (B)

Capacity building at WALIC and specialized partner institutes' leadership and technical personnel developing and delivering technological/policy options of regional relevance undertaken (C)

Proposals developed to seek funding for refurbishment /upgrade of facilities at partner institutions (C)

3.4 Phasing of Outputs/Activities within Theme 2.

Outputs ranked A in Section 3.4 were considered as those that should be included in the Short Term operations of WALIC, that is Year 1-2. Those ranked B should be included in the Medium Term operations (Year 3-5) and those ranked C and D should be included in the Long Term operations (Year 6-10). As the WALIC Strategic Plan calls for a biannual rolling medium-term planning process some selected Year 2 Outputs may be rolled into Year 3, Year 3 Output in Year 4, and so forth. Depending on availability of funding and staff some Year 3 activities may be initiated in Year 2.

Tentative Outputs for Year 1-2 (2013-2014) within Theme 2:

KRA 1

Livestock value chain actors' and stakeholders' linkages to livestock and products markets mapped (A)

KRA 2

Studies on livestock businesses facilitated through ITC-inspired farmer organization, GILMA, conducted (A)

KRA3

Sensitization and advocacy programmes on youth training and employment in agriculture/livestock directed at policy and law makers developed (A)

KRA 4

A framework for networking of national, regional and international institutes for AnGR activities developed (A)

Tentative Outputs for Year 3-5 (2015-2017) within Theme 2:

KRA 1

Organizational and training structures/programmes in support of livestock value chain actors established **(B)**

Training and mentoring workshops for livestock value chains and stakeholders undertaken (B)

Studies on skills and performance of livestock value chain actors, markets, institutions, policies and economic environments undertaken (B)

KRA 2

Training of livestock producers and other value chain actors in agri-business and markets related matters facilitated (B)

Creation of platforms for value chain actors' engagements, business transactions and value chain development facilitated **(B)**

KRA3

Strategies and guidelines for the revision/update of existing educational curricula on livestock facilitated/prepared for educational systems/policy makers (B)

KRA 4

Strategies/Action Plans for joint resource mobilization with specialized partner institutions for strengthening facilities developed (B)

Tentative Outputs for Year 6-10 (2018-2022) within Theme 2:

KRA 2

Innovative financing arrangements linking producers/processors and associations to credit institutions through donor-funded projects/programmes facilitated **(C)**

KRA 3

Innovative financing arrangements linking producers/processors and associations to credit institutions through donor-funded projects/programmes facilitated (C)

Development of inducement packages/incentives for youth facilitated (C)

KRA 4

Capacity building at WALIC and specialized partner institutes' leadership and technical personnel developing and delivering technological/policy options of regional relevance undertaken (C) Proposals developed to seek funding for refurbishment /upgrade of facilities at partner institutions (C)

Mapping Strategic Theme into Programme and KRAs into Sub-Programmes/Projects

In order to achieve the innovation and research agenda of WALIC the four Strategic Themes corresponding to four Institutional Programmes (IPs) will be created. The second IP, corresponding to Strategic Theme 2- Capacity development of actors along livestock value chains will be called the Value Chain Actors Capacity Building (VACACAB) Programme. The Goal of the VACACAB will be the same as that identified for the Theme in the WALIC Strategy: To strengthen the capacities of livestock keepers and public and private sector actors to effectively perform their core roles in order to facilitate market-oriented livestock development. The overall suggested Objective of the Programme is: Enhanced capacity of institutions, organizations and individuals in achieving successes in wealth creation, food and nutrition security from livestock business.

Four Sub-Programmes/Projects corresponding to the four KRAs within Theme 2 with their formulated Objectives and expected Outcomes are in Table 3.3 below.

Table 3.3 Proposed Sub- Programmes/Projects from Theme 2 and Key Outcomes KRA	Sub-Programme/ Project Name	Objective	Key Expected Outcomes
KRA1: Facilitating economies of scale and link to higher value markets	Economies of Scale and Markets Project	Improved facilitation of value chain actors and other stakeholders to achieve economies of scale in their businesses	- Improved capacity at WALIC to facilitate stakeholder and value chain actors fora and business related meetings -Increased training and organizational capacity at WALIC and partner institutions to train stakeholders to acquire better livestock-related business skills -Improved organizational, communication and marketing skills of livestock products value chain actors
KRA2: Improving smallholder access to inputs, advisory services and finances	Inputs, Services and Credit Project	Improved small scale livestock producers/processors access to inputs, advisory services and finance (credit)	-Enhanced knowledge and awareness of producers/processors on availability and accessibility to inputs, services and credit — -Improved business capacity of livestock producers/processors and other value chain actors Improved efficiency in livestock sector activities, including production, processing from timely access to inputs and services.
KRA 3: Attracting youth and 'new entrants' to Livestock farming as a business	Youth and New Entrants to Livestock Project	Increased youth and "new entrants" participation in livestock business	Improved educational policies that promote holistic training and that link with other policies that promote equal opportunities and equitable reward systems Enhanced second and tertiary cycle institutions' agriculture curricula with larger content for livestock business, agribusiness and development Increased numbers of West African youth taking employment in livestock agriculture sectors
KRA 4: Facilitating development of specialist national institutes to address regional challenges	National Institutes Capacity Project	Enhanced facilitation of the development of national institutes charged with regionally relevant tasks in the domain of livestock	Improved financial resources and capacity at WALIC for engaging national and sub-regional institutions to upgrading facilities/programmes in support of livestock-based research and development Improved collaboration and partnership between WALIC and national institutes and

regional/international laborator Improved leadership and management at national institutions
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Examples of Partners needed to implement Programme 2:

The WALIC Strategic Plan provided examples of partners and categorized them as follows:

National: relevant Government Ministries; NARIs; tertiary education institutions; farmer organizations and local CSOs and NGOs

Regional: ECOWAS CORAF, CIRDES; APESS, ROPPA

International: AU-IBAR;CTA, ILRI, FAO

The formulation of a Programme with Projects as presented in the above Table should make it easier for pin-pointing the partners who may be interested in a particular Project area.

CHAPTER 4: Results on Strategic Theme 3: Knowledge Management

4.1 Result Framework

Goal: To facilitate livestock stakeholders' access to reliable and up-to-date information and knowledge to inform timely decision-making

KRA 1: Facilitate testing of ICT options for improvement of workings of value chains

Objective 1: Increased facilitation of partners and stakeholders in testing options on the use of ICT for value livestock chain development and use.

Outcomes

Increased testing of ICT options and improved adaptation of viable options for livestock value chain improvement

Enhanced usage of ICT by livestock value chain actors in production, processing and marketing activities as well as in organization of associations and stakeholder engagements

Outputs

- Potential ICT options and their sources mapped
- Contractors and out-sourced facilities mapped
- Contracts developed with companies/institutions to test and adapt viable ICT options
- WALIC in-house capacity to monitor and capture progress/change in information and knowledge use among stakeholders secured
- Developed training for stakeholders in the use of ICT-based information and knowledge uptake facilitated

KRA 2: Development of specific knowledge products

Objective 2: Enhanced development of information and knowledge products in support of stakeholders' access and use.

Outcomes

Increased number of quality livestock- related databases developed for easy access and use by value chain actors.

Improved development and use of market information systems to enable producers and other value chain actors increase their shares of market benefits

Increased analysis of links between livestock sector activities and climate change as basis for policy making and education of stakeholders

Outputs

Development of quality databases by partner institutions and through contracts facilitated

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- Training of key stakeholder and livestock value chain actors in the use of databases and associated summaries to improve productivity and marketing facilitated/undertaken
- Training of key WALIC staff and partner institutions staff in analysis of linkages between livestock/sectors and climate change undertaken
- Communication tools on knowledge uptake targeting key stakeholders in policy arena developed.

Activities

- Map up potential ICT options
- Map out institutions/companies for potential out-sourcing
- Identify from the mapped up institutions/companies those that can be contracted
- Develop contracts with selected companies/institutions
- Conduct training for relevant WALIC staff on monitoring/capturing ICT progress in the field
- Facilitate training of groups of stakeholders to serve as ' trainers of trainers' in livestock related ICT use of information and knowledge uptake

Activities:

- Undertake stakeholders database needs assessment
- Map out stakeholder/value chain actors likely to use databases and related process
- Identify from the mapped stakeholders/actors those that need immediate and medium term use of database/information
- Facilitate training of selected stakeholders/actors on use/uptake of databases and associated summaries for decision-making
- Train WALIC staff and Partner Institutional Staff in climate change and impacts on agriculture
- Develop specific communication tools for policy makers and educators to inform livestock policy and strategy development

WALIC STRATEGIC THEME 3: Knowledge Management

Result Framework (continued).

Goal: To facilitate livestock stakeholders' access to reliable and upto-date information and knowledge to inform timely decision-making

KRA 3: Facilitate development of weather and climate database

Objective 3: Improved facilitation of partners and stakeholders in the development of weather and climate databases for livestock keepers and other information users

Outcomes

Increased use of weather and climate information by livestock keepers in making decision on livestock management Improved weather and climate events forecasting to aid producers' decision making and to alert or warn of impending climate related events

Enhanced weather related data collection/assemble and database creation by WALIC and partner institutions/private sector Improved linkages among local warning systems and Global Early Warning Systems.

Outputs

- All weather/climate forecasting organizations mapped
- All existing databases that can be used for weather/climate forecasting mapped
- Gaps in database required for effective forecasting of weather/climate events identified
- WALIC and partner institutions staff trained in weather data collection and database creation and export to forecasting organizations
- Linkages between local forecasting systems and regional/global early warning systems facilitated

KRA 4: Economic and policy analysis Objective 4: Enhanced economic and

Objective 4: Enhanced economic and policy analyses that support the case for higher public/private investments in livestock sectors in West Africa states.

Outcomes

- Increased use of evidence-based statements and facts that support the argument for higher public investments in livestock sectors
- Improved demonstration of viability economic and financial profitability in investment in livestock enterprises
- Improved livestock policy making approaches that utilize broadbased data generated and aggregated from livestock value chain activities

Outputs

- Studies on the economic contribution of livestock to national GDPs and Agricultural GDPs in West Africa states undertaken facilitated
- Economic and financial analysis of public and private sector livestock investments to ascertain viability and profitability undertaken in selected regions/countries undertaken
- Mechanisms to aggregate farm level opportunities and constraints for policy makers to inform livestock policy formulation are identified
- Policy Briefs based on livestock research and development activities of WALIC and partner institutions for policy makers

Activities

- Map all weather forecasting organizations
- Map existing databases in use or potentially can be used for weather forecasting
- Analyze map-out databases to identify gaps
- Propose strategies/plans to close gaps
- Train WALIC and partner institution staff in database creation, management and export
- Create forum to bring actors in forecasting/early warning system experts and institutions together

Activities:

- Map out livestock or livestock-related investment projects in regions/countries
- Identify investments projects with adequate production and financial data for further analysis
- Undertake multi-country economic and policy studies on livestock contribution to GDPs
- Produce and disseminate Policy Briefs that target policy makers and governments
- Map out livestock projects in public and private sector domains
- Identify projects in the documented constraints, opportunities and other socio-economic information/data
- Analyze constraints, opportunities, output, outcomes, impact for best practices and policy implications of results.

4.2 Prioritization of Key Results Areas within Theme 3.

From the analyses of the four KRAs within Theme 3, five (5), four (4), five (5) and four (4) Outputs were generated for KRA 1, KRA 2, KRA 3 and KRA 4, respectively. Scoring of each KRA according to the six criteria developed, composite scores were developed for each KRA. Table (4.1) presents the results from the scoring exercise.

Table 4.1 - Prioritization of KRAs for Theme 3- Knowledge Management

Criteria	KRA 1- Facilitate testing of ICT options for improvement of workings of value chains	KRA 2- Development of specific knowledge products	KRA 3- Facilitate development of weather and climate database	KRA 4- Economic and policy analysis
Researchability 1	5	5	3	5
Innovation potential ²	4	5	3	4
Current alternative suppliers ³	2	3	3	3
Comparative advantage of WALIC	3	4	3	4
Impact Potential ⁴	4	4	4	4
Immediate practicability in application	3	4	3	4
TOTAL SCORE	21	25	19	24
PRIORITY RANKING	3	1	4	2

¹ The extent to which the research problem is in fact researchable and the problem can be resolved through the consideration of data derived

The Scoring exercise indicated that among the four KRAs within Theme 3, the topmost priority KRA is on the Development of specific knowledge products, followed closely by Economic and policy analysis. The

² The extent to which initiatives and information generated from the KRA may lead to useful outputs or products

³ The extent to which other institutions in the region are already providing same or similar service (1=many suppliers; 5=nil or few, leaving WALIC to step in to provide the service)

⁴ The extent to which the research or innovation can have direct and indirect "influence" or "effect" on individuals, community, the development of policy or the creation of a new product, service or technology

third priority KRA is the Facilitate testing of ICT options for improvement of workings of value chains followed closely by the fourth priority KRA, Facilitate development of weather and climate database.

4.3 Ranking of Outputs within KRAs

The 4-5 Outputs for the KRAs ranked according to ease/practicability of initiating the relevant activities and on estimated cost of developing the Output, arranged by rank (rank A is easiest and/or cheapest to accomplish whereas D or E is the most difficult/most expensive to accomplish) are as follows:

KRA 1- Facilitating economies of scale and link to higher value markets

- Potential ICT options and their sources mapped (A)
- Contractors and out-sourced facilities mapped (A)
- Contracts developed with companies/institutions to test and adapt viable ICT options (B)
- WALIC in-house capacity to monitor and capture progress/change in information and knowledge use among stakeholders secured **(C)**
- Developed training for stakeholders in the use of ICT-based information and knowledge uptake facilitated (D)

KRA 2- Improving smallholder access to inputs, advisory services and finances

- Development of quality databases by partner institutions and through contracts facilitated (A)
- Training of key stakeholder and livestock value chain actors in the use of databases and associated summaries to improve productivity and marketing facilitated/undertaken (A)
- Training of key WALIC staff and partner institutions staff in analysis of linkages between livestock/sectors and climate change undertaken (A)
 - Communication tools on knowledge uptake targeting key stakeholders in policy arena developed (B)

KRA 3- Attracting youth and 'new entrants' to Livestock farming as a business

- All weather/climate forecasting organizations mapped (A)
- All existing databases that can be used for weather/climate forecasting mapped (A)
- Gaps in database required for effective forecasting of weather/climate events identified (A)
- WALIC and partner institutions staff trained in weather data collection and database creation and export to forecasting organizations (B)
- Linkages between local forecasting systems and regional/global early warning systems facilitated (C)

KRA 4- Facilitating development of specialist national institutes to address regional challenges

- Studies on the economic contribution of livestock to national GDPs and Agricultural GDPs in West Africa states undertaken facilitated (B)
- Economic and financial analysis of public and private sector livestock investments to ascertain viability and profitability undertaken in selected regions/countries undertaken (B)
- Mechanisms to aggregate farm level opportunities and constraints for policy makers to inform livestock policy formulation are identified (A)
 - Policy Briefs based on livestock research and development activities of WALIC and partner institutions for policy makers (B)

4.4. Phasing of Outputs/Activities within Theme 3.

Outputs ranked A in Section 3.4.3 were considered as those that should be included in the Short Term operations of WALIC, that is Year 1-2. Those ranked B should be included in the Medium Term operations (Year 3-5) and those ranked C and D should be included in the Long Term operations (Year 6-10). As the WALIC Strategic Plan calls for a biannual rolling medium-term planning process some selected Year 2 Outputs may be rolled into Year 3, Year 3 Output in Year 4, and so forth. Depending on availability of funding and staff some Year 3 activities may be initiated in Year 2.

Tentative Outputs for Year 1-2 (2013-2014) within Theme 3:

KRA 1

- Potential ICT options and their sources mapped (A)
- Contractors and out-sourced facilities mapped (A)

KRA 2

- Development of quality databases by partner institutions and through contracts facilitated (A)
- Training of key stakeholder and livestock value chain actors in the use of databases and associated summaries to improve productivity and marketing facilitated/undertaken (A)
- Training of key WALIC staff and partner institutions staff in analysis of linkages between livestock/sectors and climate change undertaken (A)

KRA3

- All weather/climate forecasting organizations mapped (A)
- All existing databases that can be used for weather/climate forecasting mapped (A)
- Gaps in database required for effective forecasting of weather/climate events identified (A)

KRA 4

- Mechanisms to aggregate farm level opportunities and constraints for policy makers to inform livestock policy formulation are identified (A)

Policy Briefs based on livestock research and development activities of WALIC and partner institutions for policy makers (A)

Tentative Outputs for Year 3-5 (2015-2017) within Theme 3:

KRA 1

- Contracts developed with companies/institutions to test and adapt viable ICT options (B)

KRA 2

Communication tools on knowledge uptake targeting key stakeholders in policy arena developed (B)

KRA3

- WALIC and partner institutions staff trained in weather data collection and database creation and export to forecasting organizations (B)

KRA 4

- Studies on the economic contribution of livestock to national GDPs and Agricultural GDPs in West Africa states undertaken facilitated (B)

- Economic and financial analysis of public and private sector livestock investments to ascertain viability and profitability undertaken in selected regions/countries undertaken (**B**)

Tentative Outputs for Year 6-10 (2018-2022) within Theme 3:

KRA 1

- WALIC in-house capacity to monitor and capture progress/change in information and knowledge use among stakeholders secured (C)
- Developed training for stakeholders in the use of ICT-based information and knowledge uptake facilitated (D)

KRA3

- Linkages between local forecasting systems and regional/global early warning systems facilitated (C)

Mapping Strategic Theme into Programme and KRAs into Sub-Programmes/Projects

In order to achieve the innovation and research agenda of WALIC the four Strategic Themes corresponding to four Institutional Programmes (IPs) will be created. The third IP, corresponding to Strategic Theme 3- Knowledge Management will be called the Knowledge Management (KNOWMAN) Programme. The Goal of the KNOWMAN will be the same as that identified for the Theme in the WALIC Strategy: To facilitate livestock stakeholders' access to reliable and up-to-date information and knowledge to inform timely decision-making. The overall Objective of the Programme is: Improved stakeholders' capacity and skills for accessing and using information and knowledge for decision-making on organization, management and adaptation to climatic events.

Four Sub-Programmes/Projects corresponding to the four KRAs within Theme 3 with their formulated Objectives and expected Outcomes are in Table 4.3 below.

Table 4.3 Proposed Sub-Programmes/Projects from Theme 4 and Key Outcomes

KRA	Sub-Programme/ Project Name	Objective	Key Expected Outcomes
KRA 1:Facilitate testing of ICT options for improvement of workings of value chains	ICT for Livestock Value Chains Project	Increased facilitation of partners and stakeholders in testing options on the use of ICT for value livestock chain development and use.	Increased testing of ICT options and improved adaptation of viable options for livestock value chain improvement Enhanced usage of ICT by livestock value chain actors in production, processing and marketing activities as well as in organization of associations and stakeholder engagements.
KRA 2: Development of specific knowledge products access and use.	Knowledge and Information Support Project	Enhanced development of information and knowledge products in support of stakeholders' access and use	Increased number of quality livestock- related databases developed for easy access and use by value chain actors. Improved development and

			use of market information systems to enable producers and other value chain actors increase their shares of market benefits Increased analysis of links between livestock sector activities and climate change as basis for policy making and education of stakeholders
KRA 3: Facilitate development of weather and climate database	Livestock resources and Climate Project	Improved facilitation of partners and stakeholders in the development of weather and climate databases for livestock keepers and other information users	Increased use of weather and climate information by livestock keepers in making decision on livestock management Improved weather and climate events forecasting to aid producers' decision making and to alert or warn of impending climate related events Enhanced weather related data collection/assemble and data-base creation by WALIC and partner institutions/private sector Improved linkages among local warning systems and Global Early Warning Systems.
KRA 4: Economic and policy analysis	Livestock Policy and Economics Project	Enhanced economic and policy analyses that support the case for higher public/private investments in livestock sectors in West Africa states.	Increased use of evidence- based statements and facts that support the argument for higher public investments in livestock sectors Improved demonstration of viability economic and financial profitability in investment in livestock enterprises Improved livestock policy making approaches that utilize broad-based data generated and aggregated from livestock value chain activities

Examples of Partners needed to implement Programme 3:

The WALIC Strategic Plan provided examples of partners and categorized them as follows:

National: relevant Government Ministries, NARIs, tertiary education institutions, and national apex organizations

Regional: ECOWAS; UEMOA; CIRDES; CILSS (INSAH, AGHRYMET); CORAF, FRAO, and regional apex organizations.

International: AU-IBAR, FAO, ILRI, OIE, CTA

The formulation of a Programme with Projects as presented in the above Table should make it easier for pin-pointing the partners who may be interested in a particular Project area.

CHAPTER 5: Results on Strategic Theme 4: Advocacy and Partnership Brokerage

5.1 Result Framework

Goal: To elevate the profile of livestock, generate more support for the sector and promote collaboration among livestock development stakeholders to address systemic industry-wide bottlenecks at national and regional levels.

KRA 1: Creating enabling policy and investment environment for livestock

Objective 1: Improved enabling policy and investment environment for dynamic livestock sectors

KRA 2: Partnerships for sharing and coordinating use of livestock resources

Objective 2: Increased partnerships among stake-holders that ensure greater coordination and expertise and resource sharing

KRA 3: Partnerships for facilitation of value chains development

Objective 3: Enhanced partnerships among stakeholders that ensure better facilitation of livestock value chains' development and functioning

Outcomes

Increased stakeholders' awareness of their roles and participation in "bottom-up" policy making

Increased evidence-based policy formulation process used by policy makers Improved policies in livestock agriculture, marketing and trade favourable for public and private sector investment in livestock

Outcomes

Increased stakeholders and value chain actors' awareness on benefits from partnerships and partnering Enhanced possibilities for sharing expertise, technologies, knowledge and information products Improved articulation of livestock sector needs and achievements

Outcomes

Increased value chain actors' aware-ness on benefits in gaining access to lucrative markets from partnerships Improved linkages of local organizations to regional, national and apex bodies Improved performance of livestock value chains actors and businesses

Outputs

Livestock-related, marketing, trade and input policies mapped.

Policies "un-friendly" to livestock businesses, trade and investments identified

Dialogue on "bad" policies facilitated Studies on livestock contribution to economies and growth undertaken Stakeholders, chain actors, investors and policy makers' fora convened

Outputs

Livestock-based institutions, associations and consortia, their capacities and facilities mapped Institutions, organizations with similar objectives and with potentials for engagement with partners identified Consultations with identified organizations and institutions on partnerships undertaken

Frameworks for stakeholder partnerships and exchanges developed

Outputs

Existing livestock value chains set within organizations or associations mapped

Value chains linked with organizations and associations with capacity to partner higher level or broader base institutions identified

Consultations among institutions, organizations and associations with wider stakeholder communities facilitated

Frameworks for value chain actors' partnerships and mechanisms for innovations developed and promoted

Activities

Map out livestock-related, trade, marketing and investment policies

Analyze and identify "un-friendly" policies in the livestock domain

Facilitate dialogue among stakeholders and policy makers

Conduct Studies on livestock roles and contribution to economic growth, GDPs Conduct Studies on public and private sector investments and livestock-related enterprises Convene key stakeholder, value chain actors, donor/investor and policy makers fora

Activities:

Map up livestock-based institutions and organizations and their capacities/facilities Select institutions with similar objectives for further consultations

Facilitate consultations among organizations, associations and institutions for partnering Develop Frameworks for partnerships and mechanisms for exchanges of expertise/resources

Conduct Studies on the state of livestockbased institutions and performance in partnerships and partnering.

Activities:

Map up livestock value chains set within organizations and associations

Select value chains with capacity and facilities to partner with higher level or broader base institutions

Facilitate consultations among value chain associations

Develop Frameworks for partnerships and mechanisms for exchanges of knowledge, expertise and resources

Conduct Studies on the state of livestockbased institutions and performance in partnerships and partnering

5.2 Prioritization of Key Results Areas within Theme 4.

From the analyses of the four KRAs within Theme 4, five (5), four (4), and four (4) Outputs were generated for KRA 1, KRA 2 and KRA 3, respectively. Scoring of each KRA according to the six criteria developed, composite scores were developed for each KRA. Table (5.1) presents the results from the scoring exercise.

Table 5.1 – Prioritization of KRAs for Theme 4- Advocacy and Partnership Brokerage

Criteria	KRA 1- Creating enabling policy and investment environment for livestock	KRA 2- Partnerships for sharing and coordinating use of livestock resources	KRA 3- Partnerships for facilitation of value chains development
Researchability 1	5	5	4
Innovation potential ²	4	4	3
Current alternative suppliers ³	4	3	3
Comparative advantage of WALIC	3	4	3
Impact Potential ⁴	4	3	3
Immediate practicability in application	4	3	3
TOTAL SCORE	24	22	19
PRIORITY RANKING	1	2	3

¹ The extent to which the research problem is in fact researchable and the problem can be resolved through the consideration of data derived

² The extent to which initiatives and information generated from the KRA may lead to useful outputs or products

³ The extent to which other institutions in the region are already providing same or similar service (1=many suppliers; 5=nil or few, leaving WALIC to step in to provide the service)

⁴ The extent to which the research or innovation can have direct and indirect "influence" or "effect" on individuals, community, the development of policy or the creation of a new product, service or technology

The Scoring exercise indicated that among the four KRAs within Theme 4, the topmost priority KRA is on Creating enabling policy and investment environment for livestock, followed closely by the Partnerships for sharing and coordinating use of livestock resources. The third priority KRA is the Partnerships for facilitation of value chains development.

5.3 Ranking of Outputs within KRAs

The 4-5 Outputs for the KRAs ranked according to ease/practicability of initiating the relevant activities and on estimated cost of developing the Output, arranged by rank (rank A is easiest and/or cheapest to accomplish whereas D or E is the most difficult/most expensive to accomplish) are as follows:

KRA 1- Creating enabling policy and investment environment for livestock

Livestock-related, marketing, trade and input policies mapped (A).

Policies "un-friendly" to livestock businesses, trade and investments identified (B)

Dialogue on "bad" policies facilitated (B)

Studies on livestock contribution to economies and growth undertaken (B)

Stakeholders, chain actors, investors and policy makers' for aconvened (C)

KRA 2- Partnerships for sharing and coordinating use of livestock resources

Livestock-based institutions, associations and consortia, their capacities and facilities mapped (A) Institutions, organizations with similar objectives and with potentials for engagement with partners identified (B)

Consultations with identified organizations and institutions on partnerships undertaken (C)

Frameworks for stakeholder partnerships and exchanges developed (B)

KRA 3- Partnerships for facilitation of value chains development

Existing livestock value chains set within organizations or associations mapped (B)

Value chains linked with organizations and associations with capacity to partner higher level or broader base institutions identified **(B)**

Consultations among institutions, organizations and associations with wider stakeholder communities facilitated (A)

Frameworks for value chain actors' partnerships and mechanisms for innovations developed and promoted (C)

5.4 Phasing of Outputs/Activities within Theme 4.

Outputs ranked A in Section 5.3 were considered as those that should be included in the Short Term operations of WALIC, that is Year 1-2. Those ranked B should be included in the Medium Term operations (Year 3-5) and those ranked C and D should be included in the Long Term operations (Year 6-10). As the WALIC Strategic Plan calls for a biannual rolling medium-term planning process some selected Year 2

Outputs may be rolled into Year 3, Year 3 Output in Year 4, and so forth. Depending on availability of funding and staff some Year 3 activities may be initiated in Year 2.

Tentative Outputs for Year 1-2 (2013-2014) within Theme 4:

KRA 1

Livestock-related, marketing, trade and input policies mapped (A).

KRA 2

Livestock-based institutions, associations and consortia, their capacities and facilities mapped (A)

KRA3

Consultations among institutions, organizations and associations with wider stakeholder communities facilitated (A)

Tentative Outputs for Year 3-5 (2015-2017) within Theme 4:

KRA 1

Policies "un-friendly" to livestock businesses, trade and investments identified **(B)** Dialogue on "bad" policies facilitated **(B)** Studies on livestock contribution to economies and growth undertaken **(B)**

KRA 2

Institutions, organizations with similar objectives and with potentials for engagement with partners identified **(B)**

Frameworks for stakeholder partnerships and exchanges developed (B)

KRA3

Existing livestock value chains set within organizations or associations mapped **(B)**Value chains linked with organizations and associations with capacity to partner higher level or broader base institutions identified **(B)**

Tentative Outputs for Year 6-10 (2018-2022) within Theme 4:

KRA 1

Stakeholders, chain actors, investors and policy makers' for aconvened (B)

KRA 2

Consultations with identified organizations and institutions on partnerships undertaken (B)

KRA3

Frameworks for value chain actors' partnerships and mechanisms for innovations developed and promoted (C)

Mapping Strategic Theme into Programme and KRAs into Sub-Programmes/Projects

In order to achieve the innovation and research agenda of WALIC the four Strategic Themes corresponding to four Institutional Programmes (IPs) will be created. The fourth IP, corresponding to Strategic Theme 4- Advocacy and Partnership Brokerage will be called the Advocacy and Partnership (ADVOPART) Programme. The Goal of the ADVOPART will be the same as that identified for the Theme in the WALIC Strategy: To elevate the profile of livestock, generate more support for the sector and promote collaboration among livestock development stakeholders to address systemic industry-wide bottlenecks at national and regional levels. The overall suggested Objective of the Programme is: Improved partnering and partnerships for brokering advocacy and awareness initiatives that support favourable public policies and public-private investments in livestock sectors in West Africa.

Three Sub-Programmes/Projects corresponding to the three KRAs within Theme 4 with their formulated Objectives and expected Outcomes are in Table 5.3 below.

Table 5.3 Proposed Sub-Programmes/Projects from Theme 4 and Key Outcomes

KRA	Sub-Programme/ Project Name	Objective	Key Expected Outcomes
KRA 1: Creating enabling policy and investment environment for livestock	Enabling Policy and Investment Project	Improved enabling policy and investment environment for dynamic livestock sectors	-Increased stakeholders' awareness of their roles and participation in "bottom-up" policy making Increased evidence-based policy formulation process used by policy makers Improved policies in livestock agriculture, marketing and trade favourable for public and private sector investment in livestock
KRA 2: Partnerships for sharing and coordinating use of livestock resources	Partnerships and Resource Sharing Project	Increased partnerships among stake-holders that ensure greater coordination and expertise and resource sharing	Increased stakeholders and value chain actors' awareness on benefits from partnerships and partnering Enhanced possibilities for sharing expertise, technologies, knowledge and information products Improved articulation of livestock sector needs and achievements
KRA 3: Partnerships for	Partnerships for	Enhanced partnerships among	Increased value chain actors'

facilitation of value chains development	Livestock Value Chains Project	stakeholders that ensure better facilitation of livestock value chains' development and functioning	awareness on benefits in gaining access to lucrative markets from partnerships Improved linkages of local organizations to regional, national and apex bodies Improved performance of livestock value chains actors and businesses

Examples of Partners needed to implement Programme 4:

The WALIC Strategic Plan provided examples of partners and categorized them as follows:

National: relevant Government ministries, NARIs; tertiary education institutions, local NGOs and CSOs

Regional: ECOWAS CORAF, CIRDES, UEMOA, CILSS, ROPPA, farmer organizations, other CSOs and international NGOs working in the region

International: AU-IBAR, ILRI, FAO, OIE, WHO, CTA

The formulation of a Programme with Projects as presented in the above Table should make it easier for pin-pointing the partners who may be interested in a particular Project area

Chapter 6: Estimation of Operational Cost and Human Resources requirements

1.0 Introduction

The WALIC Strategy 2013-2022 provided a financing plan which estimated a Year 1 (2013) starter budget of US\$2.80 million with a projected annual growth of about 10%, reaching US\$4.1 million by Year 5 (2017). The estimated annual budgets for Theme 1, 2, 3 and 4 activities are 0.84, 0.42, 0.42 and 0.42 million US\$, respectively for Year 1. The corresponding amounts in Year 5 are 1.230, 0.615, 0.615 and 0.615 million US\$ (Table 6.1). The Strategy also forecasted an annual budget of US\$ 8 million in Year 10, assuming an annual growth of about 20% from Year 6. The detail operation costs and human resources requirements were to be worked out at least for the initial years, during the development of Operational Plans. It is anticipated that the final funding limits and distribution various programmes and projects would be done when various Medium Term Plans (with inbuilt rolling programming) are being developed.

Table 6.1 Resource requirements (US\$'000) to finance the first half (2013-2017) of the strategic planning period as presented in the WALIC Strategic Plan (2013-2022).

Thematic Area	Key investors/donors	Anticipated Budget (US\$ '000)				
		2013	2014	2015	2016	2017
1. Genetic improvement, conservation and enhanced use	ECOWAS Region, Belgium, AfDB, FAO, IDB, AU-IBAR, USAID, Aus-Aid, EU, Germany	840.0	924.0	1,016.4	1,118.0	1,229.8
2. Capacity development along value chains	ECOWAS Region, Belgium, Germany, DANIDA, Swiss Cooperation, AfDB, FAO, IDB, IFAD, AU-IBAR, USAID, Aus- Aid, EU, B&MGF, World Bank, CORAF/WECARD, CTA, bilateral donors, private sector	420.0	462.0	508.2	559.0	614.9
3. Knowledge management	ECOWAS Region, Belgium, AfDB, FAO, IDB, IDRC, AU- IBAR, IFAD, USAID, Aus-Aid, EU, private sector, B&MGF, bilateral donors, EMBRAPA, CTA	420.0	462.0	508.2	559.0	614.9
4. Advocacy and partnership	ECOWAS Region, Belgium, AfDB, FAO, IDB, , AU-IBAR,	420.0	462.0	508.2	559.0	614.9

brokerage	USAID, Aus-Aid, EU, B&MGF,					
	DFID					
Programme Support	ECOWAS Region, Belgium,					
(30%)	Germany, AfDB, FAO, IDB, ,					
	AU-IBAR, USAID, Aus-Aid,					
	EU	700.0	770.0	847.0	931.7	1,024.9
Total		2,800.0	3,080.0	3,388.0	3,726.8	4,099.5

Objective: The main Objective of this section of the Operational Plan is to gather the outputs grouped under various phases (short, medium and long) for each KRA (Sub-Theme/Project) and Theme (Programme), and bring them together under respective Themes (Programmes) and apply some costs to the Activities identified in the Results Frameworks together with costs associated with personnel responsible for carrying out the activities.

Methodology: The Expert Judgment approach of prioritization was used to separate Outputs and associated Activities into specific Years (1 to 5) corresponding to 2013-2017. Activities in the Long Term (Year 6-10 or 2018-2022) were not be costed as factors of input costs and inflation rates cannot be predicted with any reliability. Outputs and corresponding Activities are presented in Table 6.2. However, an assumption of 20% annual growth from Year 6 to Year 10 made in the Strategic Plan can be applied in developing cost in the long term (Year 6-10).

Table 6.2 Grouping of Expected Outputs by Year of Operation

Year	Programme/Theme Outputs	Summary Activities	
2013	KRA 1 Additional inputs and partners sought to participate in ongoing WALIC (ITC) breeding programmes (A)	Continue ITC breeding work and explore biotechnology tools for ongoing (ITC) ONB work;	
	KRA 2 Studies on national and regional opportunities and challenges to better use of AnGR undertaken/facilitated (A) KRA 2	Commission work on the compilation and synthesis of results and experiences of successful AnGR schemes and projects	
	Synthesis of experiences /results of recent genetic improvement, animal genetic resources (AnGR) and conservation projects and responsible institutions in the region and elsewhere undertaken (A)	Undertake analyses of new and on-going livestock and (NRM)-related projects and investments to identify opportunities for the inclusion of livestock resources	

Undertake need assessment of key NARS with interest in KRA 3 Personnel in databases domain in national livestock resources database management as basis for systems trained (A) future collaboration Develop/adapt on-farm data recording protocols and approaches appropriate for the selected production systems KRA 4 A framework for networking of national, regional Form task force to develop frameworks for networking and international institutes for AnGR activities institutions developed (A) KRA 2 Conduct studies among GILMA members on their livestock Studies on livestock businesses facilitated businesses through ITC-inspired farmer organization, GILMA, conducted (A) KRA 4 Analyze constraints, opportunities, output, outcomes, Mechanisms to aggregate farm level impact for best practices and policy implications of results. opportunities and constraints for policy makers to inform livestock policy formulation are identified **(A)** KRA 1 Livestock-related, marketing, trade and input Map out livestock-related, trade, marketing and investment policies mapped (A). policies KRA 3 Consultations among institutions, organizations Facilitate consultations among value chain associations and associations with wider stakeholder communities facilitated (A) KRA 2 Continue breeding work of ITC with biotechnology tools On-going ITC ONB scheme continued and with and initiate testing actions at sites outside of The Gambia biotechnology tools with testing at other sites (A) Priority project proposals to conserve Facilitate/develop livestock genetic resources improvement endangered breeds developed (A) proposals in collaboration with other regional and international centres and national systems, including civil Impact assessment study on on-going WALIC societies (ITC) ONBS undertaken and results Conduct impact assessment on ITC's ONBS programmes disseminated (A) KRA 4

ivestock value chain actors' and stakeholders'

A framework for undertaking strategic pilot

international evaluation and comparisons

developed (A)

KRA 1

2014

Convene workshops/expert meetings to develop

frameworks for international evaluation and comparisons

Develop frameworks for mapping value chain actors'

linkages to markets and credit institutions

	linkages to livestock and products markets mapped (A) KRA 3 Sensitization and advocacy programmes on youth training and employment in agriculture/livestock directed at policy and law makers developed (A)	Field consultancies to develop sensitization/awareness programmes directed at policy makers	
	 Fotential ICT options and their sources mapped (A) Contractors and out-sourced facilities mapped (A) 	Map up potential ICT options Map out institutions/companies for potential out-sourcing Identify from the mapped up institutions/companies those that can be contracted	
	Pevelopment of quality databases by partner institutions and through contracts facilitated (A) Training of key stakeholder and livestock value chain actors in the use of databases and associated summaries to improve productivity and marketing facilitated/undertaken (A) KRA 2 Training of key WALIC staff and partner institutions staff in analysis of linkages between livestock/sectors and climate change undertaken (A) KRA 3 All weather/climate forecasting organizations mapped (A) KRA 3 - All existing databases that can be used for weather/climate forecasting mapped (A) - Gaps in database required for effective forecasting of weather/climate events identified (A) KRA 2 Livestock-based institutions, associations and consortia, their capacities and facilities mapped (A)	Undertake stakeholders database needs assessment Map out stakeholder/value chain actors likely to use databases and related process Identify from the mapped stakeholders/actors those that need immediate and medium term use of database/information Facilitate training of selected stakeholders/actors on use/uptake of databases and associated summaries for decision-making Train WALIC staff and Partner Institutional Staff in climate change and impacts on agriculture Map all weather forecasting organizations Map existing databases in use or potentially can be used for weather forecasting Analyze map-out databases to identify gaps Propose strategies/plans to close gaps Map up livestock-based institutions and organizations and their capacities/facilities Select institutions with similar objectives for further	
		consultations	
2015	KRA 1 Institutions and programmes audits in potential partner organizations for livestock conservation and use undertaken (B)	Field consultant teams to undertake institutional audits on livestock resources matters to identify partners with complementary strengths	

Tools, options and approaches to conservation and use of livestock genetic resources identified jointly with stakeholders (B)

Develop capacity in institutions to contribute to identification of tools, options for AnGR conservation Develop communication tools to reach stakeholders

Stakeholder analyses on constraints and opportunities in livestock genetic resource sectors undertaken (B)

Facilitate with other key institutions at regional and national levels a series of stakeholder analysis on livestock resources and their conservation and use

Planning meetings/workshops on strategies and frameworks for livestock value chains and actors conducted **(B)**

Facilitate planning meetings and workshops to develop or update livestock resources strategies, implementation and M&E frameworks

KRA₃

Install/upgrade data gathering, management and dissemination infrastructure at WALIC

Data collection, storage, retrieval and dissemination infrastructure created/installed (B)

N'Dama cattle, WAD goats and Djallonke sheep and other West African breeds included in evaluation as a pilot

KRA 4

A pilot evaluation scheme with West African ruminant breeds started (B)

KRA 1

Studies on skills and performance of livestock value chain actors, markets, institutions, policies and economic environments undertaken (B)

Studies on skills and performance of livestock value chain actors, markets, institutions, policies and economic environments undertaken

KRA 4

Strategies/Action Plans for joint resource mobilization with specialized partner institutions for strengthening facilities developed **(B)**

Develop resource mobilization plans
Develop proposals for funding for upgrading identified
facilities by identified donors
Map out livestock or livestock-related investment projects
in regions/countries

KRA 1

Contracts developed with companies/institutions to test and adapt viable ICT options (B)

Develop contracts with selected companies/institutions

KRA 4

Studies on the economic contribution of livestock to national GDPs and Agricultural GDPs in West Africa states undertaken facilitated (B)

Identify investments projects with adequate production and financial data for further analysis

KRA 4

Of Undertake multi-country economic and policy studies on livestock contribution to GDPs

Produce and disseminate Policy Briefs that target policy makers and governments

Policy Briefs based on livestock research and development activities of WALIC and partner institutions for policy makers (B)

KRA 1

Policies "un-friendly" to livestock businesses, trade and investments identified (B)

Studies on livestock contribution to economies and growth undertaken (B)

KRA 2

Institutions, organizations with similar objectives and with potentials for engagement with partners identified (B)

KRA 3

Existing livestock value chains set within organizations or associations mapped (B)

Analyze and identify "un-friendly" policies in the livestock domain

Conduct Studies on livestock roles and contribution to economic growth, GDPs

Select institutions with similar objectives for further consultations

Map up livestock value chains set within organizations and associations

Select value chains with capacity and facilities to partner with higher level or broader base institutions

2016 KRA 2

Guidelines on design and implementation of genetic improvement programmes developed and disseminated (B)

KRA 3

Formal agreements on collaboration and partnerships with national, regional and global institutions with relevant databases established (B)

KRA 4

Collaborative and partnerships with lead international institutions and those in Africa established (B)

KRA 1

Institutions and programmes audits in potential partner organizations for livestock conservation and use undertaken (B)

Tools, options and approaches to conservation and use of livestock genetic resources identified jointly with stakeholders (B)

Develop and adapt guidelines on livestock genetic improvement schemes for West Africa situations/conditions

Initiate and finalize agreements with national, regional and global institutions with database facilities
Initiate collaboration/partnerships discussions with lead institutions

Finalize MoUs with selected institutions for collaboration

Analyse partner institutions for suitability for undertaking breeding and management activities required for breed evaluation and comparisons

Field consultant teams to undertake institutional audits on livestock resources matters to identify partners with complementary strengths

Develop capacity in institutions to contribute to identification of tools, options for AnGR conservation

KRA 2

Training of livestock producers and other value chain actors in agri-business and markets related

Map out value chain actors in the livestock sector and training providers and document constraints and

matters facilitated (B) opportunities Select actors and service providers with organizational structures to be involved in capacity training and mentoring Creation of platforms for value chain actors' Facilitate training of livestock producers and other value engagements, business transactions and value chain actors in agri-business chain development facilitated (B) KRA 2 Communication tools on knowledge Develop specific communication tools for policy makers uptake targeting key stakeholders in and educators to inform livestock policy and strategy policy arena developed (B) development KRA 4 Economic and financial analysis of Map out livestock projects in public and private sector public and private sector livestock domains investments to ascertain viability and Identify projects in the documented constraints, profitability undertaken in selected opportunities and other socio-economic information/data regions/countries undertaken (B) KRA 1 Dialogue on "bad" policies facilitated (B) Facilitate dialogue among stakeholders and policy makers KRA 2 Frameworks for stakeholder partnerships and Develop Frameworks for partnerships and mechanisms for exchanges developed (B) exchanges of expertise/resources 2017 KRA 3 Train WALIC and NARS personnel in AnGR data Cadre of technical personnel in data collection, collection, management, analyses and communication management and dissemination recruited and trained at WALIC and partner' institutions (B) KRA 4 Potential sites for international breed evaluation Facilitate improvement of facilities at partner breeding sites and comparisons in Africa identified and agreements signed (B) KRA 1 Organizational and training Facilitate the training of key WALIC and partner institutions structures/programmes in support of livestock staff in organizing of stakeholder activities and mentoring of value chain actors sector players established (B) Training and mentoring workshops for livestock Organize training sessions and workshops for value chain value chains and stakeholders undertaken (B) actors in organizing and running associations KRA 2 Creation of platforms for value chain actors' Facilitate producer/processor and marketing organizations engagements, business transactions and value seeking to create district and regional level platforms as chain development facilitated (B) well as apex body platforms

	KRA 3 Strategies and guidelines for the revision/update of existing educational curricula on livestock facilitated/prepared for educational systems/policy makers (B) KRA 3 WALIC and partner institutions staff trained in weather data collection and database creation and export to forecasting organizations (B)	Develop strategies/guidelines for facilitating the revision of curricula Train WALIC and partner institution staff in database creation, management and export	
	KRA 3 Value chains linked with organizations and associations with capacity to partner higher level or broader base institutions identified (B) KRA 1	Select value chains with capacity and facilities to partner with higher level or broader base institutions	
	Stakeholders, chain actors, investors and policy makers' fora convened (B)	Convene key stakeholder, value chain actors, donor/investor and policy makers fora	
	KRA 2 Consultations with identified organizations and institutions on partnerships undertaken (B)	Develop Frameworks for partnerships and mechanisms for exchanges of knowledge, expertise and resources	
		Facilitate consultations among organizations, associations and institutions for partnering	
2018-	KRA 2 Field surveys/Studies on the assessment of status of threatened livestock breeds facilitated (C)	Undertake or facilitate field studies to identify and document ruminant livestock breeds at risks, and status of their habitats	
	KRA 4 Proposals developed to seek funding for evaluations and application of molecular approaches in the breeding schemes (C) A viable/sustainable evaluation programme established and running (D)	Undertake analyses of new and on-going livestock and (NRM)-related projects and investments to identify opportunities for the inclusion of livestock resources Facilitate improvement of facilities at partner breeding sites Develop strategies/plans to link evaluation/comparison exercise at partner sites with selected production systems N'Dama, WAD goats and Djallonke included in evaluation	
	KRA 2 Innovative financing arrangements linking producers/processors and associations to credit institutions through donor-funded projects/programmes facilitated (C)	Map out financing institutions, donor funded projects, NGOs and government agencies with activities in credit and smart subsidy programmes	
	Development of inducement packages/incentives for youth facilitated (C)	Develop career counseling strategies/programmes Organize workshops targeting educational system	

		heads/policy makers on incentive and reward systems
partner in	building at WALIC and specialized institutes' leadership and technical el developing and delivering gical/policy options of regional relevance ten (C)	Facilitate discussions among national government agencies responsible for developing incentive programmes for youth careers and employment
	Is developed to seek funding for iment /upgrade of facilities at partner ins (C)	Develop proposals for funding for upgrading identified facilities by identified donors Facilitate training of partner institutes staff to cope with new/additional tasks Train key WALIC staff in coordination of network facilitation
KRA 1		
-	WALIC in-house capacity to monitor and capture progress/change in information and knowledge use among stakeholders secured (C)	Conduct training for relevant WALIC staff on monitoring/capturing ICT progress in the field
-	Developed training for stakeholders in the use of ICT-based information and knowledge uptake facilitated (D)	Facilitate training of groups of stakeholders to serve as ' trainers of trainers' in livestock related ICT use of information and knowledge uptake
KRA 3	Linkages between local forecasting systems and regional/global early warning systems facilitated (C)	Create forum to bring actors in forecasting/early warning system experts and institutions together
KRA 3		
	orks for value chain actors' partnerships chanisms for innovations developed and d	Develop agreements with identified institutes on modalities of operation, including ownership and intellectual property right
	on livestock contribution to economies with undertaken (D)	Conduct Studies on public and private sector investments and livestock-related enterprises
KRA 2 8	k KRA 3	Conduct Studies on the state of livestock-based institutions and performance in partnerships and partnering.

KRA 2		Develop Frameworks for partnerships and mechanisms for	
	orks for stakeholders' partnerships and ges developed	exchanges of knowledge, expertise and resources	
	'		

Human Resources Estimation

In estimating the human resources requirement, an assumption was made that the full complement of research staff and technicians will come on-board starting in Year 3 (2015). For 2013-2014. Programme 1 (Theme 1)- Livestock Genetic Improvement and Conservation (LIGIC) will be run by a Programme Manager (PM), two senior researchers, one senior technician recruited from the region and a locally administrative assistant. The PM for Programme 1 shall take charge of one of the four Projects under the Programme. It is suggested that the PM for Programme 1 act as the Director of Research for the entire Centre until a Deputy CEO is recruited in f Year 2 (2014). One of the two senior researchers will head Project 4- Livestock Resources International Evaluation together with one other two remaining Projects. whereas the other senior researcher will head the remaining Project with additional responsibility as a liaison of the Programme to the M&E group. Programmes 2 and 3 will each be run by a team of a Programme Manager, a senior researcher, a technician and an administrative assistant. The Manager will head the two remaining Projects whereas the senior scientist will head the two remaining Projects. For Programme 4- Advocacy and Partnership (ADVOPART) where there are only three Projects the Manager will head one Project whereas the senior researcher will head two Projects within the Programme. An M&E specialist together with a technician will run the M&E Unit. The Finance and Administration Department will be manned by a Head of Finance and Administration, a Senior Accountant, a Senior Administrative Officer, an Accounts clerk and an Administrative Assistant

In Year 3 (2015) each of Programme 2, 3 and 4 will have an additional researcher in a lower category, designated as "junior researcher" paid at a lower rate. A junior M&E officer will be added to the M&E Team in Year 3.

The distribution of human resources for the research, finance and administration and M &E is in Table 6.3 below.

Table 6.3 Distribution of human resources by Year of Operation

	Year 1	Year 2	Year 3	Year 4	Year 5
Category					
Researchers	9	9	12	12	12
Reserarch-	4	4	4	4	4
Technicians					
Research	1	1	1	1	1
Admin. Support					
Finance &	3	3	3	3	3
Administration					
Admin. Support	1	1	1	1	1
M&E	2	2	3	3	3
Total	20	20	24	24	24

Estimating approximate costs associated with human resources

The estimates below were used

Programme Manager

Annual gross salary US\$70,000

All other benefits US\$25,000 per year (including retirement contribution, educational grant, paid leave)

Increment 10% per annum

Senior Researcher:

Annual gross salary US\$60,000

All other benefits US\$25,000 per year (including retirement contribution, educational grant, paid leave)

Increment 10% per annum

Technician (regionally recruited)

Annual gross salary US\$35,000

All other benefits US\$10,000 per year (including retirement contribution, educational grant, paid leave)

Increment 10% per annum

Admin Support (locally recruited) US\$20,000

All other benefits US\$5,000 per year (including retirement contribution, educational grant, paid leave)

Increment 10% per annum

M&E Specialist

Annual gross salary US\$60,000

All other benefits US\$25,000 per year (including retirement contribution, educational grant, paid leave)

Increment 10% per annum

M&E Technician (Regionally recruited)

Annual gross salary US\$35,000

All other benefits US\$10,000 per year (including retirement contribution, educational grant, paid leave)

Increment 10% per annum

The costs associated with the M&E will be shared equally (25%) among the four Programmes.

Finance and Admin Manager

Annual gross salary US\$70,000

All other benefits US\$25,000 per year (including retirement contribution, educational grant, paid leave)

Increment 10% per annum

Accountant (regionally recruited)

Annual gross salary US\$40,000

All other benefits US\$10,000 per year (including retirement contribution, educational grant, paid leave)

Increment 10% per annum

Admin Officer (regionally recruited)

Annual gross salary US\$40,000

All other benefits US\$10,000 per year (including retirement contribution, educational grant, paid leave)

Increment 10% per annum

Accounts Clerk (locally recruited)

Annual gross salary US\$20,000

All other benefits US\$5,000 per year (including retirement contribution, educational grant, paid leave)

Increment 10% per annum

Messenger

Annual gross salary US\$15,000

All other benefits US\$5,000 per year (including retirement contribution, educational grant, paid leave)

Increment 10% per annum

The costs associated with the Finance and Administration will be shared equally (25%) among the four Programmes.

Research Inputs, Equipment and Infrastructure

Research Outputs aligned with the minimum activities identified as part of the Results Chain in Chapters 2-5 were globally assigned costs by Programme for each year (Year 1-5) relative to the nature and number of activities. The detailed allocation to individual activities by frequency of tasks is deferred to annual project planning periods. For Year 1 and 2, costs of a special rehabilitation, infrastructural, refurbishment of residential and experimental facilities at the three ITC (WALIC) stations and purchase of equipment, livestock and feeds, as well support to two researchers were factored into the calculation. A total projected cost of US\$ 3 million (roughly US\$ 2 million for Year 1 and US\$ 1 million for Year 2) were included in the costing.

The global costs for the CEO and Deputy CEO were not included in the costing, as these positions are not currently attached to a Programme or Project will be determined by the WALIC Governing Council in the near future.

Results:

The total costs associated with human resources (by categories) for Year 1 to Year 5 for each of the four Programmes are in Tables 6.3, 6.4, 6.5 and 6.6, respectively.

Table 6.3 Programme (Theme 1): Livestock Genetic Improvement and Conservation Estimate Budget (X 1000)

Category	Year 1 (2013)	Year 2 (2014)	Year 3 (2015)	Year 4 (2016)	Year 5 (2017)	Total
RESEARCH						
Research Staff	340	360	400	440	485	2,025
Research inputs	400	500	550	605	610	2,665
M&E	40	45	65	72	80	302
Sub-Total	780	905	1015	1117	1175	4,992
PROGRAMME SUPPORT						
Finance and Administration	60	66	72	79	87	364
Sub-total	60	66	72	79	87	364
SPECIAL INPUTS						
Infrastructural & Equipment	1320	908				2228
Recruitment	500	372				872
Sub-total	1820	1280				3100
GRAND TOTAL	2660	2251	1087	1196	1262	9,436

The estimated research budget (staff, inputs and M&E) for Programme 1 for the first 5 years is US\$4,992,000, close to the US\$5,129,000 estimated in the WALIC Strategy. Thus, the research budget for Programme 1 derived in the Operational Plan for the first 5 years is 4.4% lower than in the Strategy. The budget for Year 6-10 of the Strategy was not derived. However, Outputs and some Activities have been developed. It is envisaged that some of the Outputs dealing with project proposals for funding would have come on stream to enable the Programme to have been expanded beyond that developed for the initial years. The one time injection of rehabilitation, infrastructure, livestock purchase, equipment and feed development cost amount to US\$3,100,00. Should this amount be received from the Donor, the expanded

livestock base at the WALIC breeding stations would yield the required number of improved sires for disseminated to other countries in the region.

Table 6.5 Programme (Theme 2):Value Chain Actors Capacity Building (VACACAB) Estimated Budget (X 1000)

Category	Year 1 (2013)	Year 2 (2014)	Year 3 (2015)	Year 4 (2016)	Year 5 (2017)	Total
RESEARCH						
Research Staff	250	275	363	400	440	1728
Research inputs	150	175	215	250	300	1090
M&E	40	45	65	72	80	302
Sub-Total	440	495	643	722	820	3120
PROGRAMME SUPPORT						
Finance and Administration	60	66	72	79	87	364
Sub-total	60	66	72	79	87	364
SPECIAL INPUTS						
Infrastructural & Equipment						
Recruitment						
Sub-total						
GRAND TOTAL	500	561	715	801	907	3484

The estimated research budget (staff, inputs and M&E) for Programme 2 for the first 5 years is US\$3,120, 000, somewhat higher than the US\$2,564,000 estimated in the WALIC Strategy. Thus, the research budget for Programme 2 derived in the Operational Plan for the first 5 years is about 22% higher than in the Strategy. The budget for Year 6-10 of the Strategy was not derived. However, Outputs and some Activities have been developed. It is envisaged that some of the Outputs dealing with project proposals would have come on stream to enable the Programme to have been expanded beyond that developed for the initial years.

Table 6.6 Programme (Theme 3): Knowledge Management (KNOWMAN) Estimated Budget (X 1000)

Category	Year 1 (2013)	Year 2 (2014)	Year 3 (2015)	Year 4 (2016)	Year 5 (2017)	Total
RESEARCH						
Research Staff	250	275	363	400	440	1728
Research inputs	175	200	250	260	270	1155
M&E	40	45	65	72	80	302
Sub-Total	465	520	678	732	790	3185
PROGRAMME SUPPORT						
Finance and Administration	60	66	72	79	87	364
Sub-total	60	66	72	79	87	364
SPECIAL INPUTS						
Infrastructural & Equipment						
Recruitment						
Sub-total						
GRAND TOTAL	525	586	750	811	877	3549

The estimated research budget (staff, inputs and M&E) for Programme 3 for the first 5 years is US\$3,185, 000, somewhat higher than the US\$2,564,000 estimated in the WALIC Strategy. Thus, the research budget for Programme 3 derived in the Operational Plan for the first 5 years is about 24% higher than in the Strategy. The budget for Year 6-10 of the Strategy was not derived. However, Outputs and some Activities have been developed. It is envisaged that some of the Outputs dealing with project proposals would have come on stream to enable the Programme to have been expanded beyond that developed for the initial years.

Table 6.7 Programme (Theme 4): Advocacy and Partnership (ADVOPART) Estimated Budget (X 1000)

Category	Year 1 (2013)	Year 2 (2014)	Year 3 (2015)	Year 4 (2016)	Year 5 (2017)	Total
RESEARCH						
Research Staff	250	275	363	400	440	1728
Research inputs	125	150	225	250	275	1025
M&E	40	45	65	72	80	322
Sub-Total	415	470	653	722	795	3055
PROGRAMME SUPPORT						
Finance and Administration	60	66	72	79	87	364
Sub-total	60	66	72	79	87	364
SPECIAL INPUTS						
Infrastructural & Equipment						
Recruitment						
Sub-total						
GRAND TOTAL	475	536	725	801	882	3419

The estimated research budget (staff, inputs and M&E) for Programme 4 for the first 5 years is US\$3,055, 000, somewhat higher than the US\$2,564,000 estimated in the WALIC Strategy. Thus, the research budget for Programme 4 derived in the Operational Plan for the first 5 years is about 19% higher than in the Strategy. The budget for Year 6-10 of the Strategy was not derived. However, Outputs and some Activities have been developed. It is envisaged that some of the Outputs dealing with project proposals would have come on stream to enable the Programme to have been expanded beyond that developed for the initial years

Implementation of the Strategic Plan under three funding scenarios

The three funding scenarios selected for the implementation of the Strategic Plan are:

Optimistic Scenario Slightly less Optimistic Scenario Slightly over Optimistic Scenario

Given that the research costs estimated for the undertaking the minimum Activities in support of the sample Outputs listed in Chapters 2-5 exceeded the estimated costs by about 22% for three of the four

Programmes, the funding proposals in the Operation Plan will be taken as representing the slightly over Optimistic Scenario. The Optimistic Scenario is represented by funding spelt out in the Strategic Plan. In the event that the potential investors listed in the Strategy and those expected to come on-board later are found to be slow in responding or are showing lesser enthusiasm about the WALIC Research Agenda than expected, the plans developed for Programmes 3, 4, 5 will have to be revised to bring them in line with what was estimated under the Optimistic scenario. In the unlikely event that the Optimistic Scenario is still not supported fully by investors some Outputs/Activities under Programme 1 may have to be postponed or be excluded entirely. A closer look may have to be taken at the Activities under Project 4 – Livestock Resources International evaluation of selected breeds, given that it was the lowest prioritized Key Results Area for Theme 1.

In summary the Optimistic Scenario, taken as the projected cost in the WALIC Strategic Plan for research for the first five years t (2013-2017) amounts to US\$12.81 million. The slightly over Optimistic Scenario is taken as the projection made in this Operational Plan which amounts US\$14.35 million. For the slightly less Optimistic Scenario, a conservative figure of 80% of the Optimistic Scenario funding was applied, resulting in an amount of US\$10.25 million. It is expected that the amounts stated for the various scenarios will be revised once a newly appointed Governing Council of WALIC examines the funding environment and make recommendations to WALIC Management accordingly.

Chapter 7- Monitoring and Evaluation

The WALIC Strategic Plan seeks a M&E framework for tracking progress of work implemented under the four Themes (translated in to four work Programmes). There are several tensions in the Concept and Practice of Monitoring and Evaluation. Among the most cited of these tensions are time and money, baselines, triangulation, sufficient and quality data, independence and participation, the objectivity of independent evaluators, concerned about future work, diverse partner understandings and purposes and clients hopes/needs for 'favourable' findings. Nevertheless, M&E has become an essential tool in Programme/Project implementation and also provides information from its activities used to manage and focus portfolios of institutions and organizations. The M&E framework chosen must be able to monitor and evaluate performance at all levels. The M&E staff retained for the institution must be capable in interfacing with researchers in achieving standardized planning and designing of programmes and projects, as well as planning and carrying out evaluations, technology adoption studies and impact assessment.

In looking for an M&E framework that will fit WALIC's requirements of monitoring and evaluating at Institutional, Programme (Theme) and Sub-Programme/Project (KRA) levels, the Alliance for a Green Revolution in Africa (AGRA) M&E Framework was adapted. The key elements in the Framework are in Table 7.1 below.

Table 7.1 A suggested Monitoring and Evaluation Framework for WALIC

M&E Approach adapted for WALIC Programme management and Implementation

Levels	Area of Focus	Indicator Level	Method of data Collection	Sources of Data	Frequency	Responsible Persons/Units	Key Documents
Institu- tional Level	ECOWAS mandated Countries in West Africa	Impact and Outcome Indicators	Statistical Surveys, Impact Evaluations	National Socioeconomic and Agricultural Statistical Data, FAO Statistics, ECOWAS, CORAF, FARA, CGIAR, National	Annual, Three and five Years interval or when Statistics are available at National level	M&E Units Programme Support Units	WALIC Strategy, Operational Plan M&E ECOWAP, ECOWAS Livestock Strategy
Progra- mme Level	Four Programmes developed from Themes in Strategy	Short –term and Intermediary Outcome, Output, and Process indicators including Milestones	Statistical Surveys, Research Studies, Rigorous Impact Evaluations	National Socioeconomic and Agricultural Statistical Data. WALIC funded Baseline Survey and Special Studies, Evaluation Reports	Annual, three to Five years Interval and when needed	M&E Unit, Programme Managers Program Support	Program M&E plan,Approved Proposals, Programme Work plan and Reports
Sub- Progra- mme/ Project Level	All Projects at WALIC and Projects at selected Partner Sites	Short-term Outcome, Output and Process indicators	Indicator Performance table and Report, Special Studies, Mid - and final Programmes evaluations	Project Reports, Special Studies and Evaluation Reports	Quarterly and Bi-Annual and Annual	M&E Unit, Project Managers	Project Concept papers, Project Proposals, Project Agreements

Application of the adopted WALIC M&E Framework in the preparation of the Operational Plans

The logic and steps in WALIC adopted M&E Framework has been applied to the development of the Programme Level Logical Framework. The elements in the Results Chain Framework in Chapters 2-5 have been used in developing the four Logical Frameworks. The Logical Framework for Programme 1 is in Table 7.2 below to illustrate the close links in the elements in the M&E Framework (Table 7.1) and the Logical Framework approach used for the preparation of the current Operational Plans. The Logical Frameworks for Programmes 2, 3 and 4 are in the Appendix Table Section of this Operational Plan.

Table 7. 2. Logical Framework for Theme 1- <u>Genetic improvement, conservation and enhanced use of West African ruminant livestock</u>

Programme Logic/Result Chain	Indicators	Method of data Collection	Sources of Data	Frequency of measurement	Responsible units	Assumptions			
Programme/Theme: Lives	stock Genetic Improve	ment and Conservation	n (LIGIC)						
Programme/Thematic Go use in response to changin	•		r coordinated e	fforts for the conserva	ation of indigenous	ruminant livestock genet	tic resources	and their imp	roved
Programme Objective: Imindigenous livestock resour		y, tools and coordinatio	n aimed at achie	eving better manager	ment, utilization, co	nservation and value add	dition for incr	reased benefits	s from
Sub-Programme/Project/	KRA 1: Livestock Resou	urces Visioning Project							
Project Objective: A more	coherent strategy and i	mplementation framew	ork for indigeno	us livestock resourc	es conservation ar	nd use in West Africa			
Outcome 1.1 Improved coordination among stakeholders in formulating livestock resources strategies and frameworks	Number of regional or sub-regional livestock projects formulated with active participation of country-level stakeholders	Statistical Surveys Visits to Project sites	Donor- funded project records. NARS Records	Yearly	WALIC M&E Section Project Leaders	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options			
Outcome 1.2 Enhanced and more rigorous analyses and characterization of production and market systems and producer objectives	Number of livestock improving programmes using participatory approaches in designing projects	Review of new and on-going breeding programmes Surveys among livestock sector actors	Project records Mid-term and Final Evaluation Reports	Half-Yearly	WALIC M&E Section Project Leaders	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options			

Outcome 1.3 Increased availability and extended use of improved genetic materials from on-going WALIC (ITC) ONB schemes.	Number of improved bulls, rams/bucks released into multiplier herds Number of countries importing sires from WALIC projects	Statistical Surveys Visits to Project sites	WALIC Reports Country NARS records	Half-yearly	WALIC M&E Section Project Leaders	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options		
Output 1.1 Stakeholder analyses on constraints and opportunities in livestock genetic resource sectors undertaken	Number of Workshops Number of Research conducted in the domain	Surveys among stakeholders	WALIC Reports Country NARS records	Half-yearly	WALIC M&E Section Project Leaders	WALIC committed to genetic improvement in the field Willingness of private farmers and other stakeholders to be engaged in participatory breeding		
Output 1.2 Institutions and programmes audits in potential partner organizations for livestock conservation and use undertaken	Number of studies Number of institutions	Surveys among stakeholders	WALIC Reports Country NARS records	Yearly	WALIC M&E Section Project Leaders	WALIC committed to genetic improvement in the field Willingness of institutions and their breeding programmes to be audited		
Output 1.3 Planning meetings/workshops on strategies and frameworks for livestock value chains and actors conducted	Number of planning meetings and workshops	Surveys	WALIC Reports Country NARS records	Yearly	WALIC M&E Section Project Leaders	WALIC committed to genetic improvement in the field Willingness of value chain actors to participate in meetings		

Output 1.4 Tools, options and approaches to conservation and use of livestock genetic resources identified jointly with stakeholders	Number of stakeholder consultations Number of methodologies developed with stakeholders	Surveys	WALIC Reports Country NARS records	Biennial	Programme and Project Leaders	WALIC committed to genetic improvement in the field Availability of appropriate tools for ready use			
Output 1.5 Additional partners sought to participate in ongoing WALIC (ITC) breeding programmes	Number of institutions/donors participating in the breeding programmes	Compilation of Programme/Project activities.	WALIC Reports Country NARS records Donor records	Annual	Programme and Project Leaders Finance Department	WALIC committed to genetic improvement in the field Availability of partners and donors ready to contribute			
Sub-Programme/Project/h	(RA 2: Livestock Reso	urces Enhancement F	Project	1	1	1	<u>'</u>	<u> </u>	
Project Objective: Enhand	ced and better use of	indigenous livestock	resources ma	tched with production	on-marketing sys	tems and environmental	l conditions	s in West Af	rica
Outcome 2.1 Improved capacity of partner national/ regional institutions in identifying opportunities in incorporating livestock into new/on-going projects	Number of new livestock Projects initiated by countries with WALIC inputs	Surveys Project site visits	Country NARS records	Annual	Programme and Project Leaders	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options			
Outcome 2.2 Improved breeding designs and better implemented livestock genetic resource projects in the West Africa region	Number of livestock projects initiated that completed successfully	Surveys Project site visits	Country NARS records Donor records	2-3 yearly	Programme and Project Leaders	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options			

Outcome 2.3 Increased number of livestock conservation and use projects in the West Africa region	Number of Conservation and related projects developed, funded or implemented	Surveys Visits to National and regional institutions in the domain	Country NARS records Donor records	Yearly	Programme and Project Leaders	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options	
Output 2.1 Synthesis of experiences /results of recent genetic improvement, animal genetic resources (AnGR) and conservation projects and responsible institutions in the region and elsewhere undertaken	Number of Synthesis Reports Number of impact studies conducted	WALIC Compilations of records	WALIC Reports	Yearly	WALIC M&E Section Programme and Project Leaders	WALIC committed to genetic improvement in the field Accessibility of data and reports pertaining to experiences of other institutions	
Output 2.2 Guidelines on design and implementation of genetic improvement programmes developed and disseminated	Number of guidelines produced	WALIC Compilations of records Surveys among partners	WALIC and NARS Reports	Yearly	Programme and Project Leaders	WALIC committed to genetic improvement in the field Interest of Governments to improve livestock resources in systematic way	
Output 2.3 Studies on national and regional opportunities and challenges to better use of AnGR undertaken /facilitated	Number of studies Opportunities and challenges identified	WALIC Compilations of records	WALIC Reports and publi- cations	Yearly	Programme and Project Leaders	WALIC committed to genetic improvement in the field Accessibility of data and reports pertaining to experiences of other institutions	

Output 2.4 Field surveys/Studies on the assessment of status of threatened livestock breeds facilitated	Number of surveys or research studies conducted Number of reports written on the topic	WALIC Compilations of records	WALIC Reports and publi- cations	Yearly	Programme and Project Leaders	WALIC committed to genetic improvement in the field Interest of Governments to halt extinction of valuable breeds			
Output 2.5 Priority project proposals to conserve endangered breeds developed	Number of proposals commissioned. Number of proposals developed	WALIC Compilations of records	WALIC Reports	Yearly	Programme and Project Leaders	WALIC committed to genetic improvement in the field Governments in the region interest in conserving endangered breeds			
Output 2.6 On-going ITC ONB S continued and with biotechnology tools	Number of evaluations done Number of biotechnologies deployed	Partner institutions and WALIC compilations	WALIC Reports Partner Reports	Yearly	Programme and Project Leaders	WALIC committed to genetic improvement in the field Availability of biotechnology partners and tools			
Sub-Programme/Project/N Project Objective: Improv Africa			,	tock genetic resour	ces among stake	holders using major inter	national la	anguages in	West
Outcome 3.1 Enhanced repository capacity of WALIC for information on livestock and related sectors	Number of entries of information on livestock entered in WALIC databases	WALIC Databases analyses	WALIC Reports	Half-yearly	Programme and Project Leaders	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options			

Outcome 3. 2 -Improved access to livestock databases and use by diverse stakeholders in the livestock value chains	Number of users of WALIC databases Percent of users satisfied with access	WALIC Databases analyses	WALIC Reports Surveys	Quarterly	WALIC Information Services	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options		
Outcome 3.3 Improved linkages of West Africa livestock- related data- bases with continental/global databases	Number of global or continental databases linked with WALIC system	WALIC Databases analyses	WALIC Reports Surveys	Yearly	WALIC Information Services	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options		
Output 3.1 Impact assessment study on on-going WALIC (ITC) ONBS undertaken and results disseminated	Number of adoption and impact assessment studies	WALIC compilation of records	WALIC Impact Reports Annual Report	Yearly	WALIC Programme and Project Leaders WALIC M&E	WALIC committed to genetic improvement in the field Expertise to undertake assessments		
Output 3.2 Data collection, storage, retrieval and dissemination infrastructure created/installed	Pieces of infrastructure installed at WALIC Pieces of infrastructure installed at Partner sites	WALIC compilation of records Partner compilation	WALIC Annual Report Partner Reports	Yearly	WALIC Programme and Project Leaders WALIC Finance Services.	WALIC committed to regional database repository Availability of funds for long term activities related to data		

Output 3.3 Cadre of technical personnel in data collection, management and dissemination recruited and trained at WALIC and partner' institutions	Number of trained Personnel	WALIC compilation of records Partner compilation	WALIC Annual Report Partner Reports	Yearly	WALIC Programme and Project Leaders WALIC Capacity Building Services	WALIC committed to livestock-focused capacity building Availability of interested personnel to be trained		
Output 3.4 Formal agreements on collaboration and partnerships with national, regional and global institutions with relevant databases established	Number of MoUs signed Number of databases established	WALIC compilation of records	WALIC Annual Report Partner Reports	Yearly	WALIC Corporate Services	WALIC to committed to Partnership arrangements Willingness for global institutions to collaborate		
Output 3.5 Personnel in databases domain in national systems trained	Number of personnel trained	WALIC compilation of records	WALIC Annual Report Partner Reports	Yearly	WALIC Programme and Project Leaders WALIC Capacity Building Services	WALIC will be committed to livestock-focused capacity building Interested persons available for training		

Sub-Programme/Project/KRA 4: Livestock Resources International Evaluation Project

Project Objective: Increased opportunities and enhanced capacity for enlarging West Africa's genetic base through international evaluation and comparisons of selected breeds and crossbreds

Outcome 4.1 Increased knowledge base and skills at WALIC and partner NARS in international breed evaluation and comparisons	Number of WALIC staff trained Number of Partners staff trained	WALIC compilation of records Surveys	WALIC Annual Report Partner Reports	Yearly	WALIC Programme and Project Leaders WALIC Capacity Building Services	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options	
Outcome 4. 2 Enhanced partnership and collaboration with forerunner institutions and service providers in the domain of international breed evaluation	Number of institutions partnered with	WALIC compilation of records	WALIC Annual Report Partner Reports	Biannually	WALIC Programme and Project Leaders WALIC Corporate Services	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options	
Outcome 4.3 Improved opportunities to increase livestock productivity	Number of "foreign" breeds incorporated into West Africa production systems	WALIC compilation of records	WALIC Annual Report	Biannually	WALIC Programme and Project Leaders	Governments and private sectors acceptance for the need to conserve indigenous livestock resources in ways that might exclude approaches popular but destructive options	
Output 4.1 A framework for undertaking strategic pilot international evaluation and comparisons developed	Number of meetings held on developing framework	WALIC compilation of records	WALIC Annual Report	Half-Yearly	WALIC Programme and Project Leaders	WALIC will be committed to AnGR programmes Expertise in international breed evaluations available	

Output 4.2 A pilot scheme of comparisons of West African breeds initiate	Number of breeds evaluated and compared	WALIC compilation of records	WALIC Research Reports	Yearly	WALIC Programme and Project Leaders	WALIC will be committed to AnGR programmes Expertise in international breed evaluations available	
Output 4.3 Collaborative and partnerships with lead international institutions and those in Africa established	Number of MoUs signed	WALIC compilation of records	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Corporate Services	WALIC committed to Partnership arrangements Availability of international and lead institutions for collaboration	
Output 4.4 Potential sites for international breed evaluation and comparisons in Africa identified and agreements signed	Number of sites found Number of MoUs signed	WALIC compilation of records	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Corporate Services	WALIC committed to AnGR programmes and partnerships Availability of international and lead institutions for collaboration	
Output 4.5 Proposals developed to seek funding for evaluations and application of molecular approaches in the breeding schemes	Number of proposals developed Number of biotechnology tools incorporated	WALIC compilation of records	WALIC Annual Report	Half-yearly	WALIC Programme and Project Leaders WALIC Corporate Services	WALIC committed to AnGR programmes Donor interest in international breed comparisons	
Output 4.6 A viable and sustainable evaluation programme established	Number of comparisons made Number of "foreign" breeds incorporated into West Africa	WALIC compilation of records	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders	WALIC committed to AnGR programmes Sustainable funding	

Chapter 8- Risk Analyses and Management

The WALIC Strategic Plan calls for a more detailed risk management plan as part of the operationalization of the strategy, including a detailed risk register. The major steps in developing the plan were identified in the Strategy as: identify critical and non-critical risks; document each risk in depth through a standard risk analysis form; log all risks and identify their severity; take action to reduce the likelihood of risks occurring and; propose action to reduce the likely impact should the risks occur. The present assignment takes an approach of re-visiting the risks identified during the stakeholder consultations and identify additional risks and elaborate on these risks and to establish a monitoring and review mechanism as part of the risk management plan.

In analysing risks and managing risks associated with the implementation of the Strategic Plan, a classical definition of Risk of being "a potential event or occurrence beyond the control of the programme (external residual risk) that could adversely affect achievement of the of the desired results" was adopted and placed in the context of the five major risk categories identified by stakeholders during the process of developing the Strategic Plan. These five categories were stated in the Strategic Plan as:

- Organizational effectiveness which includes areas related to impact focus, organizational capacity and partnerships
- Organizational efficiency e.g. duplication of effort, costs of goods and services ('value for money'), adequacy of resources for the job at hand and adequacy as well as functionality of implementation procedures and systems
- Financial integrity
- Legal compliance and reputation including stakeholder ownership and political support by the ECOWAS Region, intellectual property management issues and relationships and formal agreements with partners
- Safety and security

In order to analyse the risks named above in detail as prescribed in the Strategic Plan, a scan was made of the various Outputs developed for the four programmes described in Chapters 2 to 5, to identify those that are quite significant in terms of large contribution to Outcomes and which WALIC is held accountable but subjected to some significant level of risks. The risks associated with the selected Outputs were scored on importance in terms of their impacts and on the probability or likelihood of the risk happening. Mitigation to the identified risks were provided and documented.

Risk in the *Organizational effectiveness* category.

Impact focus: Risk issues include those Outputs which achievement depended on whether the beneficiaries, stakeholders and partners were correctly selected and that the intended impact would reach them.

<u>Objective</u>: A more coherent strategy and implementation framework for indigenous livestock resource conservation and use in West Africa

- Stakeholder analyses on constraints and opportunities in livestock genetic resource sectors undertaken
- Tools, options and approaches to conservation and use of livestock genetic resources identified jointly with stakeholders
- Additional inputs and partners sought to participate in ongoing WALIC (ITC) breeding programmes
- Impact assessment study on on-going WALIC (ITC) ONBS undertaken and results disseminated

Risks	Impact	Probability	Mitigation
Stakeholders engaged are persuaded not to be involved or disengage themselves	Medium	Low	Transparent stakeholder analyses on approaches, responsibilities and long term benefits and rewards
Stakeholders abandon agreed-upon processes and approaches	Low	Medium	Use easy- to- understand methods to demonstrate benefits in jointly identifying approaches and adapting/adopting them for local use
Lack of interest by donors and partners in traditional breeding schemes	Medium	High	Keep donors and partners abreast of current thinking on combined use traditional and modern methods to achieve sustainable progress in making livestock products cheaply available through genetic improvement
Absence of impact made on beneficiaries from long term participation of ITC breeding programmes	High	Low	Plan to use Impact Assessment models that capture social indicators, anthropogenic measurements and livestock productivity

Organizational Capacity: Risk issues include those Outputs which achievement depended on whether WALIC has the capacity (human and financial resources) to coordinate and to deliver the expected outputs.

<u>Objective</u>: Improved facilitation of value chain actors and other stakeholders to achieve economies of scale in their business

- Organizational and training structures/programmes in support of livestock value chain actors established
- Training and mentoring workshops for livestock value chains and stakeholders undertaken
- Training of livestock producers and other value chain actors in agri-business and markets related matters facilitated
- Creation of platforms for value chain actors' engagements, business transactions and value chain development facilitated

Risks	Impact	Probability	Mitigation
Organizational structures and training structures never get established or poorly supported	Medium	Medium	Engage public-private partnerships to seek support towards this end; Consider private sector for specific services
Trained livestock producers and other value chain actors do not move to operate enterprises with business principles	Medium	Medium	Use successful case scenarios as demonstrations to motivate value chain actors to adopt business approaches to enterprises
Platforms created do not develop to become a focal point for transaction on livestock businesses and promoting the sector	Medium	Medium	Regularly review approaches to delivering training and mentoring; Demonstrate successful operations elsewhere to motivate actors and stakeholders

Partnerships: Risk issues include those Outputs which achievement depended on whether WALIC will secure the partnering and partnerships required for achieving its goals in view of the strategy of basing most of WALIC's with partner institutions in and outside of the West Africa region.

<u>Objectives</u>: Increased partnerships among stakeholders that ensure greater coordination and expertise and resource sharing; Enhanced partnerships among stakeholders that ensure better facilitation of livestock value chains development and functioning.

- Consultations with identified organizations and institutions on partnerships undertaken
- Frameworks for stakeholder partnerships and exchanges developed
- Consultations among institutions, organizations and associations with wider stakeholder communities facilitated
- Frameworks for value chain actors' partnerships and mechanisms for innovations developed and promoted

Risks	Impact	Probability	Mitigation
Identified organizations and institutions commitment to partnerships ideals fall short of expectation	High	Medium	Designate some few organizations as champions of partnerships and serve as models and mentors to other partners
Wider stakeholder communities ideas not in tune with brokered partnerships or have suspicions on third parties motives	Medium	Medium	Work on creating enabling engagement environment for wider stakeholders to interact and engage fully with partners Allow for a certain level of discontent among wider stakeholders and partners' biases
Frameworks developed for partnerships do not fit mould of operations in targeted areas	Medium	Medium	Have amenable Frameworks and alternative approaches that can be incorporated into Frameworks

Risk in the Organizational efficiency category.

Duplication of efforts: Risk issues include those Outputs which generation by WALIC and immediate partners is being pursued independently by the said partners or being generated by other organizations at a comparative advantage.

<u>Objective:</u> Enhanced facilitation of the development of national institutes charged with regionally relevant tasks in the domain of livestock

- Capacity building at WALIC and specialized partner institutes' leadership and technical personnel developing and delivering technological/policy options of regional relevance undertaken
- Proposals developed to seek funding for refurbishment /upgrade of facilities at partner institutions

Risks	Impact	Probability	Mitigation
Capacity building at Partner institutions based on different funding and models that target same staff and programmes but may not lead to expertise required for WALIC-led Agenda	Low	Medium	Encourage the concept and practice of building "critical mass" of expertise and programmes in Partner institutions to extend capacity building in other institutions in Partners' areas of operations
Partner institutions independent resource mobilization efforts target same investors of WALIC	Medium	Low	Promote honest and transparent partnerships that engender joint resource mobilization effort

Adequacy of Resources: Risk issues include those Outputs which generation by WALIC and immediate partners require initial substantial financial and human resources and for additional resources for continuing activities depend largely on resource mobilization.

<u>Objective:</u> Enhanced facilitation of the development of national institutes charged with regionally relevant tasks in the domain of livestock

 Strategies/Action Plans for joint resource mobilization with specialized partner institutions for strengthening facilities developed

Risks	Impact	Probability	Mitigation
Lack of resource mobilization culture in Partner institutions	Medium	Medium	Seek to promote business-like approaches to innovation development in Partner institutions
Strategies and Action Plans developed do not fit investment culture and environment in Partners domains	Medium	Low	Fully engage Partners in the development of Strategies and Action Plans

Functionality of implementation procedures and systems: Risk issues include those Outputs which generation by WALIC and immediate partners depend existing well functioning facilities, procedures and systems or those to be created in the near future close to the implementation of activities.

Objective: Enhanced and better use of indigenous livestock resources in West Africa

- On-going ITC ONB scheme continued and with biotechnology tools with testing at other sites outside of The Gambia
- Additional inputs and partners sought to participate in ongoing WALIC (ITC) breeding programmes

Risks	Impact	Probability	Mitigation
ITC (WALIC) ONBS structures and infrastructure no longer in position to produce or deliver required numbers of improved animals for application of relevant biotechnology tools to enhance rapid improvement	High	Medium	Seek regional and international funding that bridge on-going activities with future activities
Donors support to traditional genetic improvement approaches and in-situ conservation of ruminant livestock wanes	High	Medium	Link ONBS approaches and in-situ conservation to environmental sustainability when approaching regional and international donors for support

Risk in the Financial integrity category.

Relationships and formal agreements with partners: Risk issues include those Outputs which generation by WALIC and immediate partners requires sustainable funding and cash flows

<u>Objective:</u> Adequate financial resources to support the take-off of crucial programmes backed by successful resource mobilization targeting traditional and non-traditional donors

- Proposals developed to seek funding for evaluations and application of molecular approaches in the breeding schemes
- Proposals developed to seek funding for refurbishment/upgrade of facilities at partner institutions

Risks	Impact	Probability	Mitigation
Delayed ECOWAS political and financial support to WALIC	High	Medium	Seek support of key leaders in the West Africa region to lobby ECOWAS organs/structures for the needed support
Over-estimation of donor and investors confidence in WALIC and potential funding	Medium	Medium	Manage expectations. Plan for certain level of difficulties in funding Develop multi funding scenarios
Funding proposals not of high quality in competitive grant schemes	Medium	Medium	Seek external expertise in proposal development or create in-house capacity
Funding proposals poorly targeted at investors	Medium	High	Engage potential donors early in the proposal development phases
Weak financial management that erodes donors confidence	High	Medium	Recruit and maintain strong financial management team

Chapter 9: Next Steps

The Operational Plan presented in the preceding Chapters provide a broad picture of what Results that must be generated in order to contribute to the stated Theme or Programme Goal listed in the various Logframes (see Table 7.2 and additional Logframes in Appendix Tables). These Results will contribute to the "implied development outcomes" of food security, poverty reduction and environmental sustainability as articulated in the WALIC Vision. Although the Operational Plan has defined Activities, Outputs and Outcomes at the Theme level, estimated budgets per category, Research Staff costs, Research input costs, M&E costs and Finance and Administration, these would need to be refined when Medium Term Plans which require inputs of the CEO's office, Research Managers and Scientists, are being developed for each period of 3 years (with in-built rolling mechanisms as explained in the WALIC Strategic Plan).

It is recommended that the infrastructural and refurbishment of the ITC (WALIC) facilities, including the purchase of equipment and livestock and, and the limited activities associated with the anticipated grant from the Islamic Development Bank be carried out in the remaining six months of 2013. The full WALIC Agenda should then be initiated in January 2014. However, the recruitment processes for the CEO, Research Managers and key Researchers should be initiated in the last quarter of 2013, for staff to be at post in January 2014. The first WALIC Medium Term Plan, drawing on this Operational Plan should then be completed by the key staff under the directions of the CEO by the end of the first guarter of 2014.

A standalone detailed Work Plan for Year 1, developed as part of this Operational Plan should be used to launch the WALIC Innovation and Research Agenda (I&R Agenda). Experience and lessons learnt in the implementation of Year 1 activities should be properly documented for the purpose of them being used to guide the implementation of future Annual Work Plans (AWPs).

Appendix Tables

Logical Frameworks for Programme (Theme) 2,3 and 4.

 Table 7.3 Logical Framework for Theme 2- Capacity development of actors along livestock value chains

Programme Logic/Result Chain	Indicators	Method of data Collection	Sources of Data	Frequency of measurement	Responsible units	Assumptions			
Programme/Theme: - Value	 ue Chain Actors Capac			measurement	units				
Programme/Thematic Goo market-oriented livestock	<u> </u>	capacities of livestoci	k keepers and	public and private	sector actors to ϵ	ffectively perform thei	r core roles	s in order to	facilitate
Programme Objective: En	nhanced capacity of insti	tutions, organizations a	nd individuals i	n achieving successe	es in wealth creatio	n, food and nutrition secu	urity from liv	estock busin	ess
Sub-Programme/Project/P	KRA 1: Economies of	Scale and Markets	Project						
Project Objective: Improv	ved facilitation of value o	chain actors and other s	takeholders to	achieve economies	of scale in their bus	sinesses			
Outcome 1.1- Improved capacity at WALIC to facilitate stakeholder and value chain actors fora and business relatedmeetings	Number of stakeholder and value chain fora facilitated by WALIC	WALIC compilation of records	WALIC Records Value chain Actors records	Half-Yearly	WALIC M&E Section Project Leaders	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes			
Outcome 1.2 -Increased training and organizational capacity at WALIC and partner institutions to train stakeholders to acquire better livestock-related business skills	Number of training sessions organized by WALIC Number of training sessions organized by WALIC Partners	WALIC compilation of records Surveys among WALIC partners	WALIC Records Partner institutions Records	Half-Yearly	WALIC M&E Section Project Leaders	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes			

Outcome 1.3 -Improved organizational, communication and marketing skills of livestock products value chain actors	Number of value chain actors who report improved skills	Statistical Surveys	WALIC Reports Value chain actors records	Half-yearly	WALIC M&E Section Project Leaders	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes		
Output 1.1 Studies on skills and performance of livestock value chain actors, markets, institutions, policies and economic environments undertaken	Number of studies carried out Efficiency of institutions and markets	WALIC compilation of records Research Studies	WALIC Reports Value chain actors records	Yearly	WALIC M&E Section Project Leaders	WALIC is committed to value chain approaches Value chain actors and institutions are willing to participate in activities of WALIC		
Output 1.2 Livestock value chain actors' and stakeholders' linkages to livestock and products markets mapped	Number of linkages mapped	WALIC compilation of records	WALIC Reports	Yearly	Programme Leaders Project Leaders	WALIC develops confidence-building partnerships with stakeholders and value chain actors Value chain actors and institutions are willing to participate in activities of WALIC		
Output 1.3 Organizational and training structures /programmes in support of livestock value chain actors established	Number of organizations and training structures identified	Compilation of records at WALIC Compilation of records at Partner institutions	WALIC Reports Partner records	Yearly	Programme Leaders Project Leaders	WALIC is committed to value chain approaches Organizations and Training structures are willing to support value chains		

Output 1.4 Training and mentoring workshops for livestock value chains and stakeholders undertaken	Number of training and mentoring workshops Stakeholders who acknowledge training and mentoring	Compilation of records at WALIC	WALIC Reports Stake- holder records	Yearly	Programme and Project Leaders	WALIC committed to capacity building Value chain actors open to training		
Sub-Programme/Project/h Project Objective: Improv	•	•	access to inpu	ts, advisory services a	nd finance (credit))		
Outcome 2.1 Enhanced knowledge and awareness of producers/processors on availability and accessibility to inputs, services and credit	Number of producers and processor who acknowledge increased awareness Number of producers with greater access to inputs and credits	Surveys Research studies	Stake- holder Records and Reports WALIC Reports	Annual	Programme and Project Leaders	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes		
Outcome 2.2 -Improved business capacity of livestock producers/processors and other value chain actors	Number of producers and process who acknowledge improved capacity	Surveys	WALIC Reports	Yearly	Programme and Project Leaders WALIC M&E	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes		
Outcome 2.3 Improved efficiency in livestock sector activities, including production, processing from timely access to inputs and services.	Profit margins in livestock businesses Number of businesses reporting timely access to inputs	Surveys Research studies	Country NARS records Donor records	Yearly	Programme and Project Leaders	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes		

Output 2.1 Training of livestock producers and other value chain actors in agri-business and markets related matters facilitated	Number of training courses facilitated Number of livestock producers and value chain actors trained	WALIC Compilations of records	WALIC Reports	Yearly	WALIC M&E Section Programme and Project Leaders	WALIC commits to Value Chain approaches Value chain actors open to training		
Output 2.2 Creation of platforms for value chain actors' engagements, business transactions and value chain development facilitated	Number of platforms facilitated Number of new value chains developed by actors	WALIC Compilations of records Surveys among partners	WALIC Reports Value Chain Actors reports	Yearly	Programme and Project Leaders	WALIC commits to Value Chain approaches Value chain actors willing to engage each other on platforms		
Output 2.3 Innovative financing arrangements linking producers/processors and associations to credit institutions through donor-funded projects/programmes facilitated	Number of donor funded Projects engaged with for credit negotiations Number of financing arrangements secured for producers	WALIC Compilations of records Surveys on Producer Associations	WALIC Reports and publications Records of partner Financial institutions	Yearly	Programme and Project Leaders WALIC Corporate Services	WALIC commits to Value Chain approaches Credit institutions willing to administer programs Donors willing to add credit components to Projects		
Output 2.4 Studies on livestock businesses facilitated through ITC-inspired farmer organization, GILMA, conducted	Number of Studies conducted on GILMA activities	WALIC Compilations of records	WALIC Reports and publi- cations	Yearly	Programme and Project Leaders WALIC M&E	WALIC commits to Value Chain /agri- business approaches GILMA operated businesses willing to participate in studies		

Sub-Programme/Project/KRA 3: Youth and New Entrants to Livestock Project

Project Objective: Increased youth and "new entrants" participation in livestock business

Outcome 3.1 Improved educational policies that promote holistic training and that link with other policies that promote equal opportunities and equitable reward systems	Number of pro- agriculture educational policies advocated	WALIC Databases analyses	WALIC Reports	Half-yearly	Programme and Project Leaders	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes		
Outcome 3. 2 Enhanced second and tertiary cycle institutions' agriculture curricula with larger content for livestock business, agribusiness and development	Number of second and tertiary institution proagriculture curricula advocated Percent change in number of educational systems with agriculture-friendly curricula	WALIC compilation records Surveys	WALIC Reports Public and private schools and colleges Records	Yearly	WALIC M& E Section Information Services	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes		
Outcome 3.3 Increased numbers of West African youth taking employment in livestock agriculture sectors	Number of youth taking up employment in agriculture, livestock related sectors	Surveys Research Studies	WALIC Reports Surveys	Yearly	WALIC Capacity Building Services WALIC M&E	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes		
Output 3.1 Sensitization and advocacy programmes on youth training and employment in agriculture/livestock directed at policy and law makers developed	Number of Sensitization and advocacy program developed	WALIC compilation of records	WALIC Impact Reports Annual Report	Yearly	WALIC Programme and Project Leaders	WALIC committed to working with Educational systems and Employment Ministries Education and Employment institutions willing to cooperate		

Output 3.2 Strategies and guidelines for the revision/update of existing educational curricula on livestock facilitated/prepared for educational systems/policy makers	Number of Strategies facilitated Number of guidelines produced	WALIC compilation of records Educational Systems compilation Survey s	WALIC Annual Report Educa- tional Systems Reports	Yearly	WALIC Programme and Project Leaders WALIC Capacity Building Services.	WALIC committed to working with Educational systems and Employment Ministries Education and Employment institutions willing to cooperate	
Output 3.3 Career counseling strategy/programmes aimed at graduating high school, diploma and degree students developed and executed in collaboration with partners	Number of career counseling related programmes developed Number of career counseling related strategies advocated	WALIC compilation of records Adoption Studies	WALIC Annual Report WALIC research reports	Yearly	WALIC Programme and Project Leaders WALIC Capacity Building Services	WALIC committed to working with Educational systems and Employment Ministries Education and Employment institutions willing to cooperate	
Output 3.4 Development of inducement packages/incentives for youth facilitated	Number of engagements with Government Agencies responsible for job incentives	WALIC compilation of records	WALIC Annual Report Govern- ment Agency Reports	Yearly	WALIC Capacity Building Services	WALIC committed to working with Educational systems and Employment Ministries Education and Employment institutions willing to cooperate	
Sub-Programme/Project/N				ما بيناله من ممالي بمام	cont to also in the a	manin of liverheals	
Project Objective: Enhan		,					
Outcome 4.1 Improved financial resources and capacity at WALIC for engaging national and sub-regional institutions to upgrading facilities/programmes in support of livestock-based research	Amount of funding obtained for the National institutes capacity project Number of WALIC staff in skills for assisting partner programmes	WALIC compilation of records Surveys	WALIC Annual Report Partner Reports	Yearly	WALIC Programme and Project Leaders WALIC Capacity Building Services	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes	

Outcome 4. 2 Improved collaboration and partnership between WALIC and national institutes and regional & international laboratories	Number of joint programming with partner institutions	WALIC compilation of records	WALIC Annual Report Partner Reports	Yearly	WALIC Programme and Project Leaders WALIC Corporate Services	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes		
Outcome 4.3 Improved leadership and management at national institutions	Number of national institute leaders who acknowledge improved management skills	WALIC compilation of records Surveys	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders	WALIC Investors consider value chain approaches effective and resource WALIC at levels needed to achieve outcomes		
Output 4.1 A framework for networking of national, regional and international institutes for AnGR activities developed	Number of networks developed	WALIC compilation of records	WALIC Annual Report	-Yearly	WALIC Programme and Project Leaders	WALIC committed to AnGR programmes and Partnerships Willingness of national and international institutes to network		
Output 4.2 Strategies/Action Plans for joint resource mobilization with specialized partner institutions for strengthening facilities developed	Number of resource mobilization Strategy and Action Plans developed	WALIC compilation of records Partner institutions compiling records	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Corporate Services	WALIC committed to Partnership arrangements Willingness of specialized institutions for joint Resource mobilization		
Output 4.3 Capacity building at WALIC and specialized partner institutes' leadership and technical personnel developing and delivering technological/policy options of regional	Number of training of WALIC staff Number of training of Partner staff	WALIC compilation of records Surveys	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Capacity Building Services	WALIC committed to AnGR programmes Leadership in specialized institutions willing to be trained		

relevance undertaken								
Output 4.4 Proposals developed to seek funding for refurbishment /upgrade of facilities at partner institutions	Number of proposals developed	WALIC compilation of records	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Corporate Services	WALIC committed to Partnership arrangements Donors willingness to fund third party institutions		

Table 7.4. Logical Framework for Theme 3- Knowledge Management

Programme Logic/Result Chain	Indicators	Method of data Collection	Sources of Data	Frequency of measurement	Responsible units	Assumptions			
Programme/Theme: Know	vledge Management (K	(NOWMAN).							
Programme/Thematic Goa	al: To facilitate livestoci	k stakeholders' access	to reliable and	up-to-date information	and knowledge to	inform timely decision-n	naking		
Programme Objective: Im climatic events	proved stakeholders' ca	pacity and skills for acc	essing and usi	ng information and kno	wledge for decision	on-making on organizatio	n, managem	ent and ada	aptation to
Sub-Programme/Project/h	(RA 1: ICT for Livest	ock Value Chains Pr	oject						
Project Objective: Increa	sed facilitation of partne	rs and stakeholders in t	testing options	on the use of ICT for v	alue livestock cha	in development and use.			
Outcome 1.1 Increased testing of ICT options and improved adaptation of viable options for livestock value chain improvement	Number of ICT options tested Number of viable ICT options adapted	WALIC compilation of records	WALIC Records ICT companies records	Yearly	WALIC M&E Section Project Leaders	Political commitment and information and technology environments exist to permit adaptation and adoption of ICT use in the field			
Outcome 1.2 Enhanced usage of ICT by livestock value chain actors in production, processing and marketing activities as well as in organization of associations and stakeholder engagements	Number of Value Chain actor groups Using ICT in their businesses	Surveys among Value Chain actor groups	WALIC Records Value Chain Actor groups records	Half-Yearly	WALIC M&E Section Project Leaders Programme Leaders	Political commitment and information and technology environments exist to permit adaptation and adoption of ICT use in the field			

Output 1.1 Potential ICT options and their sources mapped	Mapping Report	Research Studies Survey	WALIC Reports Research Report	Yearly	WALIC M&E Section Programme Leaders Project Leaders	WALIC committed ICT in its Agenda ICT companies open to collaboration		
Output 1.2 Contractors and out- sourced facilities mapped	Mapping Report	Research Studies Surveys among ICT companies and facilities	WALIC Reports Contractors Record	Yearly	Programme Leaders Project Leaders	WALIC committed ICT in its Agenda Existence of range of contractors and willingness to collaborate		
Output 1.3 Contracts developed with companies/institutions to test and adapt viable ICT options	Contracts availability	Compilation of records at WALIC Compilation of records by Contractors	WALIC Reports Contractor records	Yearly	WALIC M&E Section WALIC Corporate Services	WALIC committed ICT in its Agenda Existence of range of contractors and willingness to collaborate		
Output 1.4 WALIC in-house capacity to monitor and capture progress/change in information and knowledge use among stakeholders secured	Number of training courses for WALIC Staff	Surveys	WALIC Reports	Yearly	Programme and Project Leaders	WALIC committed to partnerships WALIC is resourced to level of creating inhouse capabilities in monitoring ICT use		
Output 1.5 Developed training for stakeholders in the use of ICT-based information and knowledge uptake facilitated	Number of ICT training courses facilitated	Compilation of records at WALIC	WALIC Reports	Yearly	WALIC Capacity Building Service	WALIC committed to partnerships Stakeholders' willingness to be trained in use of ICT		

Sub-Programme/Project/KRA 2: Knowledge and Information Support Project Project Objective: Enhanced development of information and knowledge products in support of stakeholders' access and use Outcome 2.1 Number of WALIC Country Annual Programme Political commitment Increased number of databases Compilations of NARS and Project and information and records quality livestock- related developed records Leaders technology databases developed for environments exist to easy access and use by permit adaptation value chain actors. and adoption of ICT use in the field Outcome 2.2 Number of WALIC WALIC Yearly Programme Political commitment Improved development Management Compilations of records and Project and information and and use of market Information System records Leaders technology information systems to (MIS) developed environments exist to WALIC enable producers and Surveys permit adaptation and adoption of ICT other value chain actors Study Reports use in the field increase their shares of Number of producer market benefits and value chain actors using MIS data Number of analyses Outcome 2.3 Surveys WALIC Yearly Programme Political commitment WALIC and Project Increased analysis of undertaken Reports and information and links between livestock Compilations of Leaders technology sector activities and records environments exist to climate change as basis permit adaptation for policy making and and adoption of ICT education of stakeholders use in the field WALIC WALIC committed to Output 2.1 Development Number of WALIC Yearly WALIC M&E Compilations of Section of quality databases by databases Reports partnerships partner institutions and Programme developed by records through contracts and Project Partner institutions Partner Availability of facilitated Surveys records Leaders contractors and Number of partner institutions to databases by develop databases contractors

Output 2.2 Training of key stakeholder and livestock value chain actors in the use of databases and associated summaries to improve productivity and marketing facilitated/undertaken	Number of stakeholders and value chain actors trained	WALIC Compilations of records Surveys among stakeholders and value chain actors	WALIC Reports Value Chain Actors reports	Yearly	Programme and Project Leaders WALIC Capacity Building Services	WALIC committed to Value Chain approaches Willingness of stakeholders and value chain actors to be trained			
Output 2.3 Training of key WALIC staff and partner institutions staff in analysis of linkages between livestock/sectors and climate change undertaken	Number of WALIC staff trained in analysis Number of Partner Institutions staff trained in analysis	WALIC Compilations of records Partners compilation records	WALIC Reports and publications Records of partner institutions	Yearly	Programme and Project Leaders WALIC Capacity Building services	WALIC committed to Climate variability and Climate Change impact as valid areas of investigation			
Output 2.4 Communication tools on knowledge uptake targeting key stakeholders in policy arena developed	Number of communication tools developed	WALIC Compilations of records	WALIC Reports and publi- cations	Yearly	Programme and Project Leaders	WALIC committed to modern Communication approaches Target stakeholders open to receiving communication			
Sub-Programme/Project/h			•						
Project Objective: Improve	ed facilitation of partners	and stakeholders in the	e development	of weather and climat	e databases for liv	estock keepers and othe	r informatioi	n users	
Outcome 3.1 Increased use of weather and climate information by livestock keepers in making decision on livestock management	Number of livestock keepers using weather and climate information	Surveys Research Studies	WALIC Reports Producer Association Reports	Half-yearly	Programme and Project Leaders	Political commitment and information and technology environments exist to permit adaptation and adoption of ICT use in the field			

Outcome 3. 2 Improved weather and climate events forecasting to aid producers' decision making and to alert or warn of impending climate related events	Number of producers acknowledging using better forecasting information	Surveys	WALIC Reports Producer Association Reports	Yearly	WALIC M& E Section WALIC Climate group/ network	Political commitment and information and technology environments exist to permit adaptation and adoption of ICT use in the field		
Outcome 3.3 Enhanced weather related data collection/assemble and data-base creation by WALIC and partner institutions/private sector	Number of databases created by WALIC Number of databases created by WALIC partners	WALIC Compilations of records	WALIC Reports Surveys	Yearly	WALIC Climate group /network	Political commitment and information and technology environments exist to permit adaptation and adoption of ICT use in the field		
Outcome 3.4 Improved linkages among local warning systems and Global Early Warning Systems	Number of linkages made	Surveys	WALIC Reports Partner Reports	Yearly	WALIC Climate group /network	Political commitment and information and technology environments exist to permit adaptation and adoption of ICT use in the field		
Output 3.1 All weather/climate forecasting organizations mapped	Number of forecasting organizations mapped	WALIC compilation of records	WALIC Impact Reports Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Climate group /network	WALIC committed to Climate variability and Climate Change impact as valid areas of investigation Weather forecasting organizations willingness to participate		

Output 3.2 All existing databases that can be used for weather/climate forecasting mapped	Number of databases mapped Number of databases in use for forecasting	WALIC compilation of records	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Climate group /network	WALIC committed to Climate variability and Climate Change impact as valid areas of investigation Databases owners willingness to participate	
Output 3.3 Gaps in database required for effective forecasting of weather/climate events identified	Reports on Studies identifying gaps in databases	Research Studies	WALIC Annual Report WALIC research reports	Yearly	WALIC Programme and Project Leaders WALIC Climate group /network	WALIC committed to Climate variability and Climate Change impact as valid areas of investigation Databases owners willingness to participate	
Output 3.4 WALIC and partner institutions staff trained in weather data collection and database creation and export to forecasting organizations	Number of WALIC and Partner Institutions trained	WALIC compilation of records Partners compilation of records	WALIC Annual Report	Yearly	WALIC Capacity Building Services	WALIC committed to Climate variability and Climate Change impact as valid areas of investigation Expert companies available to deliver training	
Output 3.5 Linkages between local forecasting systems and regional/global early warning systems facilitated	Number of linkages facilitated by WALIC and Partners	WALIC compilation of records Partners compilation of records	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Climate group /network	WALIC committed to Climate variability and Climate Change impact as valid areas of investigation Compatibility among forecasting systems	

Sub-Programme/Project/KRA 4: Livestock Policy and Economics Project

Project Objective: Enhanced economic and policy analyses that support the case for higher public/private investments in livestock sectors in West Africa states

Outcome 4.1 Increased use of evidence-based statements and facts that support the argument for higher public investments in livestock sectors	Number of public debates on investments backed by evidence-based statistics	Surveys Research Studies	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Policy group	Political commitment and information and technology environments exist to permit adaptation and adoption of ICT use in the field		
Outcome 4. 2 Improved demonstration of economic viability and financial profitability in investment in livestock enterprises	Number of studies initiated	WALIC compilation of records Research Studies	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Policy group / networks	Political commitment and information and technology environments exist to permit adaptation and adoption of ICT use in the field		
Outcome 4.3 Improved livestock policy making approaches that utilize broad-based data generated and aggregated from livestock value chain activities	Number of livestock policies from countries based on field data	Surveys Research Studies	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Policy group / networks	Political commitment and information and technology environments exist to permit adaptation and adoption of ICT use in the field		
Output 4.1 Studies on the economic contribution of livestock to national GDPs and Agricultural GDPs in West Africa states undertaken/ facilitated	Study Reports	Surveys Research Studies	WALIC Annual Report	-Yearly	WALIC Programme and Project Leaders WALIC Policy group / networks	WALIC committed to Socio-economics work in Agenda Structured livestock and economic data exist for analysis		

Output 4.2 Economic and financial analysis of public and private sector livestock investments to ascertain viability and profitability undertaken in selected regions/countries undertaken	Study Reports	Surveys Research Studies	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Policy group / networks	WALIC committed to Socio-economics work in Agenda Structured livestock and economic data exist for analysis		
Output 4.3 Mechanisms to aggregate farm level opportunities and constraints for policy makers to inform livestock policy formulation are identified	Reports on Studies targeting grassroot participation in policy making processes	Surveys	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Policy group / networks	WALIC committed to Socio-economics work in Agenda Policy makers willingness to use grassroots data		
Output 4.4 Policy Briefs based on livestock research and development activities of WALIC and partner institutions for policy makers	Number of Policy Briefs produced	WALIC compilation of records	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders WALIC Policy group / networks	WALIC committed to Socio-economics work in Agenda Policy makers willingness to use grassroots data		

Table 7. 5. Logical Framework for Theme 4- <u>Advocacy and Partnership Brokerage</u>

Programme Logic/Result Chain	Indicators	Method of data Collection	Sources of Data	Frequency of measurement	Responsible units	Assumptions			
Programme/Theme: Adv	ocacy and Partnership	(ADVOPART).							
Programme/Thematic Gos systemic industry-wide bott	•		more support i	for the sector and pron	note collaboration	among livestock develop	ment stakel	holders to ad	ldress
Programme Objective: In public-private investme		•	r brokeragin	g advocacy and a	wareness initia	tives that support fa	vourable _l	oublic polic	cies and
Sub-Programme/Project/h	(RA 1: Enabling Policy	and Investment Proje	ect						
Project Objective: Impro	ved enabling policy and	investment environmen	t for dynamic li	vestock sectors					
Outcome 1.1 Increased stakeholders' awareness of their roles and participation in "bottom-up" policy making	Number of stakeholders who acknowledge increase in awareness	Surveys	WALIC Reports	Yearly	WALIC Policy group	Socio-economic and policy environments conducive for partnerships and advocacy			
Outcome 1.2 Increased evidence-based policy formulation process used by policy makers	Number of public policies backed by evidence	Research studies on public policy in the livestock domain	WALIC Reports Reports from other Stake- holder groups	Half-Yearly	Project Leaders Programme Leaders WALIC Policy group	Socio-economic and policy environments conducive for partnerships and advocacy			

Outcome 1.3 Improved policies in livestock agriculture, marketing and trade favourable for public and private sector investment in livestock	Number of stakeholder groups that acknowledge Improved policies	Research studies on public policy in the livestock domain	WALIC Reports Reports from other Stake- holder groups	Yearly	Project Leaders Programme Leaders WALIC Policy group	Socio-economic and policy environments conducive for partnerships and advocacy		
Output 1.1 Livestock-related, marketing, trade and input policies mapped.	Number of policies mapped Availability of policies mapping reports	Research Studies Survey	WALIC Reports Research Report	Yearly	Programme Leaders Project Leaders	WALIC committed to socio-economics Agenda Governments willing to alter policies		
Output 1.2 Policies "un-friendly" to livestock businesses, trade and investments identified	Number of "un- friendly" policies identified Existence of survey reports	Research Studies Surveys among stakeholders	WALIC Reports	Yearly	Programme Leaders Project Leaders WALIC Policy group	WALIC committed to socio-economics Agenda Governments willing to alter policies		
Output 1.3 Dialogue on "bad" policies facilitated	Number of dialogue meetings	Compilation of records at WALIC Compilation of records by Government Agencies	WALIC Reports Governme nt recors	Yearly	Project Leaders WALIC Policy group	WALIC committed to socio-economics Agenda Governments willing to alter policies		
Output 1.4 Studies on livestock contribution to economies and growth undertaken	Availability of Study Reports Number of studies undertaken	Compilation of records at WALIC	WALIC Reports	Yearly	Programme and Project Leaders WALIC Policy group	WALIC committed to socio-economics Agenda Governments willing to alter policies		

Output 1.5 Stakeholders, chain actors, investors and policy makers' fora convened	Number of fora convened	Compilation of records at WALIC	WALIC Reports	Half-yearly	Programme and Project Leaders WALIC Policy group	WALIC committed to socio-economics Agenda Governments willing to alter policies		
Sub-Programme/Project/l	·		·	ordination and expertis	e and resource sh	narina		
Outcome 2.1 Increased stakeholders and value chain actors' awareness on benefits from partnerships and partnering	Number of stakeholders and value chain actors who acknowledge awareness Number of actors reporting increased benefits	Surveys	WALIC Annual Reports Value Chain Actors Records	Yearly	Programme and Project Leaders	Socio-economic and policy environments conducive for partnerships and advocacy		
Outcome 2.2 Enhanced possibilities for sharing expertise, technologies, knowledge and information products	Number of mechanisms identified for sharing expertise, technologies and information	WALIC Compilations of records Surveys	WALIC records WALIC Study Reports	Yearly	Programme and Project Leaders	Socio-economic and policy environments conducive for partnerships and advocacy		
Outcome 2.3 Improved articulation of livestock sector needs and achievements	Number of pro- livestock position papers presented to policy makers by sector actors	Surveys	WALIC Reports Stake- holder Reports	Yearly	Programme and Project Leaders WALIC Policy /Network group	Socio-economic and policy environments conducive for partnerships and advocacy		

Output 2.1 Livestock-based institutions, associations and consortia, their capacities and facilities mapped	Number of institutions , associations, consortia and facilities mapped	WALIC Compilations of records	WALIC Reports Partner records	Yearly	WALIC M&E Section Programme and Project Leaders	WALIC committed to private sector organizations Willingness of institutions to share resources and facilities	
Output 2.2 Institutions, organizations with similar objectives and with potentials for engagement with partners identified	Number of institutions and organizations identified	WALIC Compilations of records	WALIC Reports	Yearly	Programme and Project Leaders	WALIC committed to private sector organizations Willingness of organizations to engage	
Output 2.3 Consultations with identified organizations and institutions on partnerships undertaken	Number of consultations held Number of partnerships formed	WALIC Compilations of records Partners compilation records	WALIC Reports and publications Records of partner institutions	Yearly	Programme and Project Leaders	WALIC committed to private sector organizations Willingness of various partners to plan together	
Output 2.4 Frameworks for stakeholder partnerships and exchanges developed	Number of frameworks developed Partnerships and exchanges developed	WALIC Compilations of records Surveys	WALIC Reports and publi- cations	Yearly	Programme and Project Leaders	WALIC committed to private sector organizations Willingness of various partners to exchange	

Sub-Programme/Project/KRA 3: Partnerships for Livestock Value Chains Project

Project Objective: Enhanced partnerships among stakeholders that ensure better facilitation of livestock value chains' development and functioning

Outcome 3.1 Increased value chain actors' awareness on benefits in gaining access to lucrative markets from partnerships	Number of value chain actors who acknowledge awareness Number of actors reporting access to lucrative markets	Surveys Research Studies	WALIC Reports Value chain actors Reports	Half-yearly	Programme and Project Leaders	Socio-economic and policy environments conducive for partnerships and advocacy		
Outcome 3. 2 Improved linkages of local organizations to regional, national and apex bodies	Number of linkages developed	Surveys	Producer Association Reports	Yearly	WALIC M& E Section Programme and Project Leaders	Socio-economic and policy environments conducive for partnerships and advocacy		
Outcome 3.3 Improved performance of livestock value chains actors and businesses	Number of actors acknowledging improved performance Incomes from value chain actors' businesses	WALIC Compilations of records	WALIC Reports Surveys	Yearly	Programme and Project Leaders	Socio-economic and policy environments conducive for partnerships and advocacy		
Output 3.1 Existing livestock value chains set within organizations or associations mapped	Number of organizations and institutions mapped	WALIC compilation of records	WALIC Annual Report	Yearly	WALIC Programme / Project Leaders	WALIC committed to value chain approaches Willingness of value chain actors to partner		
Output 3.2 Value chains linked with organizations and associations with capacity to partner higher level or broader base institutions identified	Number of linkages achieved	WALIC compilation of records Surveys	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders	WALIC committed to value chain approaches Willingness value chain actors to partner		

Output 3.3 Consultations among institutions, organizations and associations with wider stakeholder communities facilitated	Number of consultations and meetings held	WALIC compilation of records	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders	WALIC committed to partnership approaches Willingness of organizations to partner		
Output 3.4 Frameworks for value chain actors' partnerships and mechanisms for innovations developed and promoted		WALIC compilation of records Partners compilation of records	WALIC Annual Report	Yearly	WALIC Programme and Project Leaders	WALIC committed to partnership approaches Willingness of organizations to partner		