



FRAMEWORK CONTRACT EUROPEAID/127054/C/SER/multi Lot 1 SPECIFIC CONTRACT N° 2010/243277/1 WITH TRANSTEC

DRAFT FINAL REPORT

Final Evaluation of SERECU II Project

Experts:

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August 2010

Disclaimer

"This Report was prepared with the financial assistance of the European Commission. The views expressed in this report are those of the consultants and do not necessarily reflect those of the European Commission."

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LIST OF ABBREVIATIONS

ACP	African Caribbean Pacific
AU-IBAR	African Union-Interafrican Bureau for Animal Resources
ARIS	Animal Resources Information System
ASF	African Swine Fever
CAHWs	Community Animal Health Workers
CBPP	Contagious Bovine Pleuro-Pneumonia
CCPP	Contagious Caprine Pleuro-Pneumonia
CIRAD-EMVT	Centre International de Recherche Agronomique et Développement Ecole de Médicine Vétérinaire Tropicale
CVL	Central Veterinary Laboratory
DAC	Development Assistance Committee (of OECD)
DVS	Director of Veterinary Services
EC	European Commission
EDF	European Development Fund
EMPRES	Emergency Prevention Systems
EPP	Emergency Preparedness Plans
EU	European Union
EUD	European Union Delegation
EVA	Ethiopian Veterinary Association
FAO	Food and Agricultural Organization
FMD	Foot and Mouth Disease
GF-TADs	Global Framework for the Eradication of Trans-boundary Animal Diseases
GLEWS	Global Early Warning and Response System for Major Animal Diseases, including Zoonoses
GREP	Global Rinderpest Eradication Programme
HACCP	Hazard Analysis on Critical Control Points
HPAI	Highly Pathogenic Avian Influenza
IAEA	International Atomic Energy Agency
IAH	Institute for Animal Health, Pirbright
IBAH	Inter-African Bureau of Animal Health
ISO	International Standard Office
JP 15	Joint Programme 15
KARI	Kenya Agricultural Research Institute
KVA	Kenya Veterinary Association
KWS	Kenya Wildlife Service
M&E	Monitoring and Evaluation
NGO	Non-governmental organization
NVI	National Veterinary Institute (Ethiopia)
OAU	Organization of African Unity
OECD	Organisation for Economic Co-operation and Development

OIE	Office International des Epizooties (World Organization for Animal Health
OVI	Objectively Verifiable Indicators
OVI	Onderstepoort Veterinary Institute
PACE	Pan African Programme for the Control of Epizootics
PAN-SPSO	Participation of African Nations in Sanitary and Phyto-sanitary Standard-setting Organizations
PANVAC	Pan African Veterinary Vaccine Center
PARC	Pan African Rinderpest Campaign
PATTEC	Pan African Tsetse and Trypanosomiasis Eradication Campaign
PCU	Project Coordination Unit
PDS	Participatory Disease Surveillance
PE	Programme Estimate
PID	PACE Integrated Database
PPR	Peste des Petits Ruminants
PSC	Project Steering Committee
RAO	Regional authorizing Officer
RP	Rinderpest
RVF	Rift Valley Fever
SAHSP	Somali Animal Health Services Project
SES	Somali Eco-System
SERECU	Somali Eco-System Rinderpest Eradication Coordination Unit
SOLICEP	Somali Livestock Certification Project
STRC	Scientific and Technical Committee of the OAU
SPINAP-AHI	Support Programme for Integrated National Action Plans of Avian and Human Influenza
SPS	Sanitary & Phyto-Sanitary
ТА	Technical Assistant (Assistance)
TADs	Trans-boundary Animal Diseases
TOR	Terms of Reference
USDA	United States Department of Agriculture
WAHIS	World Animal Health Information System

Acknowledgements

The consultants gratefully acknowledge the assistance and co-operation of SERECU II project Coordinator Dr. Dickens Chibeu and the Project Administrative Assistant Ms Shadra Zaid -the remaining staff already left due to the closure of the project end of June 2010-who provided all requested information and technical and logistic support. The support of Mr Peter Sturesson, Head of Rural Development and Food Security Section of the EU Delegation (EUD) to Kenya and Mr David Mwangi Njuru Programme Officer, Rural Development and Food Security Section of the EUD Kenya was equally much appreciated.

1 EXECUTIVE SUMMARY

SERECU II is the final part of the rinderpest eradication process, which lasted more than 50 years, and for which the European Union mobilised more than € 250 million on the African continent alone.

The project was implemented by the AU-IBAR, which was the RAO and the contracting authority for the project. The AU-IBAR entered into contractual agreements with further implementing partners such as the OIE and the FAO for the provision of scientific and technical inputs and the Governments of Kenya, Ethiopia and Somalia (through the EU funded project Somali Animal Health Services Project - SAHSP) for the implementation of activities in the respective countries.

According to the Financing Agreement, the period of execution of the project lasts until 31 December 2012, including 2 years of closure. Implementation of activities, including closure of accounts, was set at 31 December 2010. Two Programme Estimates have been implemented: PE1 lasting from 14 May 2008 to 30 June 2009, and PE2 lasting from 1 July 2009 to 31 December 2010, including a closure phase of 6 months from 1 July to 31 December 2010.

Relevance

SERECU II built on the achievements of previous programmes mainly funded by the EU:

- ✓ Joint Project 15 (JP15, 1962 to 1973)
- ✓ Pan African Rinderpest Campaign (PARC, 1986 to 1999)
- ✓ Pan African Programme for the Control of Epizootics (PACE, 1999-2007)
- ✓ SERECU I (2006-2007) and its bridging phase (2007-2008).

Just before the end of the PACE programme, the need to dedicate special attention to the suspicions of mild rinderpest foci harboured in the SES led to the unanimous decision of the 10th PACE Advisory Committee –where all stakeholders were represented- to develop a strategic plan for the verification of absence of rinderpest from the SES, in line with the global FAO-GREP strategy and the OIE pathway for RP eradication. For this reason the SERECU I project was designed as a specialised component of PACE in 2006. SERECU II took over after a 12 months bridging phase, as it appeared evident that RP would not have been eradicated during the lifespan of the PACE programme.

Effectiveness

OIE accreditation of freedom of rinderpest was gained by Ethiopia in May 2008, by Kenya in May 2009 and by Somalia in May 2010. <u>The project purpose has therefore been</u> <u>achieved</u>.

Efficiency

Looking at the achievements of the project, it is evident that resources and inputs have been converted economically into results. However, about 40% of the resources allocated to the project have not been spent, mainly due to: i) Delay in transferring project funds from the main project account to the national components accounts; ii) Delay in recruiting project personnel (above all FAO TA and M&E expert); iii) The decision to delete some project activities, such as the PPR vaccine trial and the establishment of the RP vaccine bank; iv) The postponement of the celebrations linked to the final declaration of eradication of rinderpest to 2011. Most probably, the adoption of a start-up PE would have allowed a better identification and quantification of expenditures.

Impact

The rinderpest eradication activities implemented under SERECU II in the 3 SES countries has lead to the development of national emergency plans (which however need continuous update and a serious commitment of resources), rapid reaction teams, surveillance and response systems including PDS, rumour registries and disease investigation teams. The support through the project resulted in positive changes that include for instance improved knowledge of veterinary staff, introduction of new epidemio-surveilance methods, including participatory techniques, and animal health delivery systems through CAHW's.

Positive changes for livestock keepers, small holders and cattle trades can be seen in reduced animal disease risks and improved livestock trade.

Sustainability

The likelihood that the improved animal disease surveillance and response systems will be sustained is estimated very likely. The project used existing structures especially in Ethiopia and Kenya and the capacity building provided by the project have strengthened their National Veterinary Services.

In Somalia the support has been mainly given to the Transitional Federal Government through SAHSP via NGOs and FAO. For the time being sustainability in Somalia will be secured through a third phase of SAHSP presently planned for 2 years hopefully starting in October 2010.

Visibility

The project has maintained a high profile and visibility for both the project itself and its funding agency.

Overall Assessment

Despite delays and a slow start of the project it has safely achieved the results of the Financing Agreement.

LESSONS LEARNT

Lessons learnt refer to:need for long-term donor support; effective and successful project design; harmonization of surveillance activities; enhancement of linkages with all the stakeholders in animal disease control activities; importance of close collaboration with international organizations; and vital role of sharing of transparent technical information communication.

CONCLUSIONS AND RECOMMENDATIONS

The mission team notes that the project successfully achieved the project purpose of OIE accreditation of freedom form rinderpest in the countries belonging to the Somali Ecosystem.

RECOMMENDATIONS

The mission fully agrees with the conclusions and recommendations of the study to propose a Livestock Diseases Surveillance Project to support risk reduction and empowerment in relation to export of livestock products together with a Rinderpest Exit Strategy for Africa (2011 – 2016). It firmly recommends follow-up by AU-IBAR in collaboration with FAO and OIE.

Selection of candidate transboundary diseases for targeted surveillance should take into consideration how their control or eradication will affect market access for livestock commodities to other African countries and to international markets.

The evaluators strongly recommend further donor support to consolidate and build on the achievements of SERECU II.

Areas proposed for future project support are:

- Continued surveillance of animal diseases (including syndromic surveillance) as part of an exit strategy of rinderpest eradication and in opening of livestock and livestock products trade.

- Trade and marketing – for development of marketing strategies, particularly from disease free zones, compartmentalisation and quarantine.

– Wildlife - continued use of sentinel wildlife for surveillance.

– Policy formulation – based on risk analysis and HACCP; with expertise on ISOs, SPS agreement, OIE Terrestrial Animal Health Code and Codex Alimentarius.

- Vaccines - development of improved vaccines for CBPP, RVF, and development of a vaccine for ASF.

AU-IBAR should intensify sensitisation and awareness creation activities targeting Stakeholders (especially Policy Makers) with a view to sustain the benefits of SERECU II.

It is recommended that National Governments assure adequate funding for surveillance activities in order to keep the present status of freedom of rinderpest.

The success of SERECU II shows that it is possible to eradicate infectious diseases, but the way to achieve this result is long and expensive. Rinderpest was eradicated thanks to a joint worldwide effort that lasted about 50 years and required an enormous multi-donor financial commitment: the EU alone contributed for about 250 million EUR. Any other important animal disease that would be targeted for eradication should be dealt with through a comparable serious and substantial coordinated commitment.

2 THE SERECU II PROJECT AND ITS FINAL EVALUATION

2.1 General Context

Until recently, rinderpest was the most dreaded of all cattle diseases in Africa. Just over 100 years ago, the disease was introduced on the continent through the Eritrean port of Massawa from where it spread, first to Ethiopia and from there to east, south and west Africa within a near continent-wide pandemic that was associated with massive losses to both livestock and wildlife populations as well as severe human hardship.

In 1948 a Conference on Rinderpest in Africa was held in Nairobi, Kenya; the conference recommended the creation of a Bureau to study the epidemiological situation and control of rinderpest in Africa. The Bureau was launched in 1952 as the Inter-African Bureau of Animal Health (IBAH). In 1970 this body broadened its responsibilities to include Animal Production and was renamed the InterAfrican Bureau for Animal Resources (IBAR). Given the growing understanding among Directors of Veterinary Services of the need for concerted action against rinderpest the OAU/STRC and IBAR moved to start a joint, inter-African campaign supported by Member States and International Development Partners aiming to eradicate rinderpest through mass vaccination. This first attempt Joint Project 15 (JP15) demonstrated that the only way rinderpest could be eradicated from sub-Saharan Africa was through interstate cooperation. In 1981 a joint AU-IBAR/FAO/OIE meeting proposed another continental campaign and a new funding initiative to tackle rinderpest. This second major effort, the "Pan African Rinderpest Campaign" (PARC) was implemented in sub-Saharan Africa under the coordination of AU-IBAR from 1986 to 1999 with main financing from the European Union (EU). Its successor the "Pan African Programme for the Control of Epizootics" (PACE), again an AU-IBAR initiative with EU financing was launched in November 1999 to build on the achievements of PARC. The major objective of the program was the eradication of RP from the African continent in line with FAO/GREP global objective that aims to achieve global eradication of RP by the year 2010. Through the PACE programme, convincing evidence was gotten that RP had been eradicated from the African continent and most of the PACE participating countries embarked on the OIE pathway for accreditation of freedom from the disease. However, the verification of freedom in the SES and by extension the entire countries that constitute the ecosystem (Ethiopia, Kenya and Somalia) has had its pitfalls. The SES had over the years been suspected to harbour foci of mild rinderpest virus. The suspicion had been based on evidence of a disease syndrome in cattle consistent with mild rinderpest. Consequently, PACE and the three SES countries developed a strategic plan for the eradication of rinderpest from the SES in line with the global FAO-GREP strategy and the OIE pathway for RP accreditation. The plan was endorsed by the 10th PACE Advisory Committee in March 2005 and the EU in November 2005, leading to the establishment of SERECU within AU-IBAR/PACE with a specific mandate to dynamically manage a scientific-based, coordinated and time bound regional program with the end point being the verification of absence of RP infection and OIE accreditation of RP freedom for the entire SES countries. The first phase of SERECU was funded within the PACE Programme and was implemented between January 2006 and February 2007.

Recognizing that rinderpest would not be eradicated from the SES by the end of PACE financing agreement (February 2007), AU-IBAR prepared SERECU II project to allow the finalisation of rinderpest eradication and accreditation of freedom beyond February 2007.

2.2 Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) II Project

The specific objective of the first phase of SERECU (SERECU I) as originally conceived, was to dynamically manage a science-based, coordinated and time bound regional program as an entry point for the verification of eradication and OIE accreditation of freedom from Rinderpest for each of the 3 SES countries. This was to ensure that freedom

from the disease is achieved and the finding officially approved by the OIE. The second phase, SERECU II, was conceptualized to build on the achievements of SERECU I and ensure OIE accreditation of freedom for the three SES countries. A bridging phase between the two projects was necessary, funded by AU-IBAR and FAO with their own resources.

According to the Financing Agreement the overall objective of SERECU II was to contribute to poverty reduction for those involved in the livestock-farming sector in the Somali Ecosystem (SES). The programme purpose being OIE accreditation of freedom from Rinderpest disease/infection progressed in the Somali Eco-System (SES) (see project Area in Annex 1). The three results of the project were:

(1) National animal disease early warning and response capacities functional and coordinated at the SES,

(2) Rinderpest surveillance in the SES coordinated and harmonized and

(3) The SES countries' accreditation process guided and supported.

By achieving this, the initiative would have contributed enormously to livestock development and provided for a great opening of new trade opportunities. This in return is an indispensable building block to reach the overarching goal – which is to lift people involved in livestock farming in Africa out of poverty.

The project was entirely funded by the EC. The AU-IBAR was the direct Beneficiary of the intervention being at the same time Contracting Authority and Regional Authorising Officer of the project. AU-IBAR entered into contractual agreements with further implementing partners such as the OIE and the FAO for the provision of scientific and technical inputs and the Governments of Kenya, Ethiopia and Somalia (in the case of Somalia, through the EU funded project Somali Animal Health Services Project - SAHSP) for the implementation of activities in the respective countries.

The project was implemented through 2 programme estimates: PE1 lasting from 14 May 2008 to 30 June 2009, and PE2 lasting from 1 July 2009 to 31 December 2010, including a closure phase of 6 months from 1 July to 31 December 2010.

The original logical framework for the project was reviewed and adapted in PE1 and PE2. The three logical framework matrixes are reported in annex 2.

The Financing Agreement was amended once (2 July 2009) with no cost implication, to allow the use of contingency reserve and a budgetary re-allocation from result 2 to results 3 and 4.

PE1 was amended 4 times:

- Amendment 1, endorsed by the EU on 15 July 2008, to allow for procurement of laboratory and field sampling supplies and vehicles;
- Amendment 2, endorsed by the EU on 19 December 2008, to allow for budget provision for purchase of motor vehicles, conducting random-survey in Non-SERECU part of Kenya and recruitment of short-term expertise;
- Amendment 3, endorsed by the EU on 30 April 2009, approving a no-cost extension of PE1 up to 30 June 2009 and a consequent re-allocation of funds;
- Amendment 4, endorsed by the EU on 29 May 2009, approving the de-commitment of EUR 600,0000 due to delays in implementation of certain activities.

PE2 was not amended.

2.3 Objectives of the Evaluation

The final evaluation of SERECU project was commissioned through the EU Framework Contract Beneficiaries as part of the project's Financing Agreement primarily to evaluate the implementation process and achievements of SERECU II project from 2008 to the end of field activities in June 2010. The Terms of Reference (TOR) for the evaluation mission are attached as Annex 3.

The mission addressed the design, relevance, efficiency, effectiveness, sustainability and impact of the project. Emphasis was put on the appropriateness of the project's concept and design to the overall vision of the Somali Eco-System (SES) countries.

The final evaluation documented lessons learnt in terms of intervention selection and project implementation. Specifically, the evaluation verified and analysed the performance of the project and sought to find answers to the following evaluation questions:

	Question:	Evaluation criteria:	
1.	Was the design of the project appropriate?	Did the project address the	
2.	Did the stated objective correctly address the problems and real needs of the target groups?	identified problems and needs (Relevance of the programme)	
3.	Were project inputs economically converted into results?	Sound management and value for	
4.	Was the use of the project resources cost- effective?	money (Efficiency)	
5.	Have the SERECU II project purpose and results been achieved?	Achievement of purpose (Effectiveness)	
6.	Did SERECU produce any sustainable changes – positive / negative, intended/un-intended on the target groups?	Achievement of wider effects (Impact)	
7.	Are some of the SERECU benefits/outputs likelihood to be continued after end of the project?		
8.	What sustainability measures have SERECU project put in place?	Likely continuation of achieved	
9.	Were the activities of the SERECU project implemented in participatory and empowering manner?	results (Sustainability)	
10.	Were the key stakeholders of the project involved in planning and execution of activities, and steering the project?		

The mission also made recommendations for sustaining the project outputs.

2.4 Description of the Mission

The SERECU II final evaluation mission team was composed of Andrea Massarelli, Team Leader, and Johannes Hoogendijk, Disease Control Expert/Epidemiologist. A 1-page summary of the team members CVs is included as annex 4.

As prescribed in the TOR, the Evaluation Team was be based at the AU-IBAR headquarter in Nairobi for the whole duration of the mission, apart from the field visits to Kenya and Ethiopia. Office space, technical and logistical support was provided by SERECU II team of AU-IBAR.

The evaluation was conducted following the guidelines set by the EU in their 2006 set of documents on "Evaluation Methods for the European Union's External Assistance", the "Project Cycle Management Guidelines" (2004) and the 1998 "Review of the DAC Principles for Evaluation of Development Assistance", issued by OECD/DAC. The detailed evaluation method is attached as Annex 5.

The methodological approach was based upon:

- ✓ An <u>initial familiarisation</u> with the project and the actors involved, through review of the documents produced by the project and other available documents relevant to the final eradication of rinderpest.
- ✓ This documents review and familiarisation led to the <u>identification of a series of issues</u> <u>and questions</u> relevant to the 5 evaluation criteria considered in the evaluation process (relevance, efficiency, effectiveness, impact and sustainability).
- ✓ A <u>series of meetings, interviews and visits</u> aimed at collecting views, data and information on the various activities carried out during the project, completed the first part of the desk and identification phase.

The mission was implemented in three phases (see implementation schedule, Annex 6):

- 1. Desk Phase (Inception and planning phase), from 1 to 9 August;
- 2. Field Phase, from 10 to 18 August,
- 3. Synthesis Phase, from 19 to 27 August.

1. During the desk Phase the mission team was briefed by the EUD, AU-IBAR and the SERECU II PCU, and then embarked on a thorough review of the documentation produced by the project and its partners/stakeholders and further documents referring to rinderpest and its eradication (see list of literature and documentation consulted, annex 7). The mission identified the main issues to study and a series of key questions relevant to the evaluation exercise that represented the guidelines for the following meetings, interviews and visits (list of persons/organizations consulted at annex 8). At the end of the phase, a desk report –available upon request- containing details on the methodological approach and the mission schedule was issued and endorsed by the client and the beneficiary.

2. Field Phase, during which the mission visited Ethiopia (Addis Ababa and veterinary laboratories in Debre-Zeit and Sebeta) and Kenya (Garissa area, veterinary laboratories in Kabete and Muguga) to meet with decentralised actors, target groups and final beneficiaries of the project. The mission also met with the SERECU Somali team, the SAHSP staff and with the authorities of the Somalia National Veterinary Services, Ministries and beneficiaries of the project. Interviews with other stakeholders –FAO, OIE, KWS, EU Delegations to Somalia and Ethiopia, NGOs- were equally undertaken during the field phase. A Draft Report (available upon request, having the value of an enlarged *Aidememoire*) was prepared and submitted by the mission on Thursday 19 August, before the debriefing meeting.

3. Synthesis Phase: Following the field phase, the outcomes, findings, conclusions and recommendations of the evaluation mission were presented to the client, the project and the beneficiary institution in a de-briefing meeting held in the EUD premises on Thursday 19 August. Subsequently the findings of the evaluation mission were presented and discussed with the stakeholders during a half-day workshop held at Nairobi Serena Hotel on Friday 20 August. Annex 9 contains the attendance list to the workshop.

No major practical difficulties were encountered during the evaluation mission. Logistics were assured by the project team, especially the Project Administrative Assistant, Ms Shadra Zaid, who efficiently liaised with all persons to be interviewed/met and with the national liaison officer to organize visits in the field. Some minor delays in the implementation of the first phase occurred due to the "Referendum Day" for the approval of changes to the Kenyan Constitution (Wednesday 4 August, declared National Holiday) as most of the Kenyan officers travelled to their towns of origin to express their preferences in the framework of the referendum. The mission used this time to study in detail the documents produced by the project.

The biggest constraint to the mission was the limited time allocated for the whole evaluation. Indeed the team was squeezed in its activities and had to organize visits and meetings in a very tight manner, with quite low flexibility. Luckily, no unforeseen events

occurred and the schedule was respected. Time for writing intermediate reports (desk phase report and draft report) was also very limited, implying extra-time and week-ends (unpaid) work for the mission team. It is advisable for future similar missions to allocate more time for report writing or to reduce the number of intermediate reports and/or their content.

3 FINDINGS OF THE EVALUATION MISSION

3.1 Problems and needs (Relevance)

Design of the Project

The design of SERECU II built on the achievements of previous programmes, in particular SERECU I (2006-2007) and its bridging phase (2007-2008) that was a specialised project for the SES under the larger Pan African Programme for the Control of Epizootics (PACE). PACE was launched in November 1999, and implemented in 28 countries by AU-IBAR with EU funding; the programme ended in February 2007. PACE succeeded the Pan African Rinderpest Campaign (PARC, 1986 to 1999) and Joint Project 15 (JP15, 1962 to 1973).

The major objective of PACE was the eradication of RP from the African continent in line with FAO/GREP global objective that aimed to achieve global eradication of RP by the year 2010. Through the PACE programme, there was convincing evidence that RP has been eradicated from the African continent. However, the verification of freedom in the Somali Ecosystem (SES) and by extension the entire countries that constitute the ecosystem (Ethiopia, Kenya and Somalia) still had its pitfalls. The SES was over the years been suspected to harbour foci of mild rinderpest virus. The suspicion was based on evidence of a disease syndrome in cattle consistent with mild rinderpest. Consequently, PACE and the three SES countries developed a strategic plan for the eradication of rinderpest from the SES in line with the global FAO-GREP strategy and the OIE pathway for RP accreditation. The plan was endorsed by the 10th PACE Advisory Committee in March 2005 and the EU in November 2005, leading to the establishment of SERECU within AU-IBAR/PACE with a specific mandate to dynamically manage a scientific-based, coordinated and time bound regional program with the end point being the verification of absence of RP infection and OIE accreditation of RP freedom for the entire SES countries. The first phase of SERECU was funded within the PACE Programme and was implemented between January 2006 and February 2007.

Recognizing that rinderpest would not be eradicated from the SES by the end of PACE financing agreement (February 2007), AU-IBAR prepared SERECU II project to allow the finalisation of rinderpest eradication and accreditation of freedom beyond February 2007. A bridging phase of approximately 12 months funded by AU/IBAR and FAO was necessary to fill the gap between the end of SERECU I and the beginning of SERECU II.

The Director of AU-IBAR was responsible for the overall implementation of SERECU II. The day-to-day technical management was delegated to a Project Coordination Unit (PCU), headed by the Projector Coordinator, who assumed the role of Imprest Administrator. The Finance and Administration Unit of IBAR supported the PCU on matters concerning human resources management, financial disbursement and recording, protocol, procurement and logistics. IBAR's Finance and Administration officer assumed the role of the Imprest Accounting Officer. The Monitoring and Evaluation Unit of IBAR was involved –at a later stage due to the delayed recruitment of the M&E expert- in the establishment of a monitoring system and the critical review of OVIs and action plans. In the organogramme of AU-IBAR (Annex 10) the project falls –together with other projects funded by the EU- under the TADs and Zoonoses Unit, which reports to the Chief Animal Health Officer. This position is vacant since the former Chief was nominated Director of AU-IBAR. In July 2010 the SERECU II Coordinator took the interim position of Chief Animal Health Officer.

The Imprest Administrator of the project was the SERECU II project coordinator, while the Imprest Accounting Officer was the Senior Finance Officer of AU-IBAR. The latter officer changed 3 times during the duration of the project, which provoked some delays in administrative procedures for the launching of minor procurement and the disbursement of funds. Apart from the project coordinator who was reconfirmed de officio from the previous phase of SERECU, all the project staff have been recruited following competitive and transparent procedures. National staff in Ethiopia and Kenya have been appointed by the respective DVS. Terms of reference for selected project staff positions are reported in Annex 11.

A Project Steering Committee (PSC) provided the overall policy guidance and oversight of the implementation process. The composition and terms of reference of the PSC are reported in annex 11.

The main implementers were the National Veterinary Services in the 3 SES countries. Liaison officers representing each of the three participating countries were responsible for assuring strong linkages with the PCU and coordinating the respective country activities. FAO and OIE provided technical inputs, adding on to the AU-IBAR/SERECU in-house expertise to strengthen the focus on the SES for coordinated and cross-institutional analysis and updating of the strategy for the final eradication of rinderpest. The two organizations have international mandates in animal production, health and trade and in particular in the control of animal disease: in the specific case of rinderpest, FAO is responsible for GREP and OIE is responsible for the evaluation and accreditation of freedom from rinderpest.

The project entered into contractual agreements with the 3 beneficiary countries (SAHSP for the Somali operations) and the partner organisations, based on the main PE ruling the project implementation.

The adoption of separate and individual contractual arrangements was a smart move of the project to minimise the inconvenience of cumbersome bureaucratic procedures linked to the management of sub-PEs, such as the opening of specific bank accounts per each PE and the fragmentation of certain activities which were centralised and therefore better managed (procurement of bulky items of common use).

The financial contribution to OIE and FAO was quite limited (EUR 50,000 for OIE and EUR 226,600 for FAO), mostly aimed at recruiting a TA (epidemiologist), mobilising high calibre short-term experts and paying travel costs and per diem for senior staff attending the meetings of SERECU II. The funds allocated have not been completely used. FAO claimed more independence and flexibility in the use of funds, which was one of the reasons for the delay in signing the contract with SERECU II and therefore for the delayed recruitment of the project TA.

The contribution of countries (Kenya and Ethiopia) to the project was never properly displayed and quantified: indeed they contributed with staff salaries, office space, use of equipment and logistics, but their support was never shown in financial documents.

SERECU II carried out activities in Somalia in collaboration with SAHSP II.

Indeed SERECU II funded capacity building activities, vehicles, equipment, wildlife component of field activities, local meetings, participation to regional (cress-border, steering committee) and international (OIE general sessions) meetings for a total value of about USD 101,000 while SAHSP funded all field activities and in particular active and passive surveillance for RP and other TADs.

The second phase of SAHSP ended 30 June 2010; the third phase is already agreed upon and is likely to start in October 2010, for a duration of 24 months at a value of 2.5 million EUR. The main objective of the project is to maintain RP free status and improve the general animal health status aimed at improving trade and opening/strengthen access to lucrative markets.

Overall objective

The overall objective of SERECU II was to contribute to poverty reduction for those involved in the livestock-farming sector and of the wider populations in the three countries by enhancing livestock development and trade opportunities.

Project purpose

The purpose of the project was: OIE accreditation of freedom from rinderpest disease / infection progressed in the Somali Ecosystem (SES).

Results

The expected results aiming at achieving internationally verified freedom from rinderpest for the three SES countries in line with GREP's deadline of 2010 are:

- National animal disease early warning and response capacities functional and coordinated at SES level
- Rinderpest surveillance in the SES coordinated and harmonized
- SES countries' accreditation process guided and supported

In spite of the changes the OIE made to the rinderspest pathway, which reduced the stages of eradication from 3 (infected, free from disease, free from infection) to 2 (infected, free from rinderpest) the wording of the project purpose was not reviewed and remained ".... freedom from rinderpest disease / infection.....".

Quality of the objectives

The objectives stated in the financing agreement and reiterated in the PEs correctly addressed the problems identified and the needs expressed by the stakeholders and target groups.

The livestock sector is a major contributor to the economies of the three SES countries in terms of livelihood, employment and income generation. Moreover in much of the "Greater Horn of Africa", livestock husbandry is the only viable and sustainable livelihood use for most of the vast areas of arid and semi-arid rangelands that spread across the region. They sustain the largest numbers of pastoralists and agro-pastoralists and the largest concentration of livestock in Africa.

The combinations of undependable climate and rainfall, civil unrest, and epidemic diseases make the pastoralists livelihoods very vulnerable to shocks of losses, periodically of such magnitude as to cause widespread deaths and destitution. For more than a century since the introduction into Africa in the 1880's, Rinderpest has been the most feared and most devastating disease to afflict the cattle herds of the continent. Outbreaks of classical rinderpest in cattle cause mortality rates reaching up to 90%. So devastating is this "Cattle Plague" that countries worldwide have made efforts to stamp it out and, having once eliminated it, to prevent its re-entry.

Rinderpest presence or suspected presence in a country thus served as a major barrier to livestock trade and, since 1983, has cost the countries of the "Greater Horn of Africa" the loss of access to their most valuable livestock market: Saudi Arabia and other countries in the middle-east. This has been devastating to their trade and has impoverished the pastoral peoples of the area. It caused considerable blows to the economies of their countries as a whole. The eradication of rinderpest therefore is no longer an individual concern of countries but rather a global public good, whose deadline for eradication has been set at

2010. The eradication of the disease will help the beneficiary countries in re-gaining access to lucrative external livestock markets.

Validity and appropriateness of the assumptions

The assumptions considered during the identification and formulation phase and confirmed at the beginning of the project seem to be appropriate.

The ultimate appropriateness of the project that was supported by the EU and managed by IBAR lies in the fact that it fully achieved its goal. Of great importance for this has been the close collaboration with international agencies like FAO and OIE, the development and use of novel epidemio-surveilance methods, including participatory techniques, and novel animal health delivery systems, such as use of CAHW's through NGOs, particularly in Somalia.

SERECU II achieved by verifying absence of disease through statistically significant results of field sampling and by following the "OIE pathway" international recognition of freedom from rinderpest in the 3 SES countries.

In addition to this SERECU II established a harmonised ecosystem approach of conducting and interpreting surveillance data as well a coordinated regional response to potential rinderpest outbreaks.

The mission wonders why the security assumption for SES region has been deleted from the logical frameworks attached to PE1 and PE2. Indeed, security issues –especially in central and southern Somalia due to the continuing civil unrest- repeatedly jeopardised the implementation of practical surveillance activities during the PACE programme and SERECU I, leading to a delay in the collection of field data and the consequent impossibility to declare freedom from the disease. Civil unrest and terrorist actions are unfortunately still continuing. Apart from the frequent acts of piracy in the mainland and the sea, a terrorist attack was perpetrated against prominent Somali politicians during the last days of the evaluation mission (August 23) and 17 members of the Somali parliament have been killed.

The adequacy of OVIs

The OVIs originally included in the logical framework are pertinent to the project objectives and the expected results, even if not all of them are properly quantified. They have partially been reviewed in the initial phase of the project in consideration of the changes that occurred in the OIE terrestrial code. Indeed, the original indicator "*Country dossiers prepared and submitted to OIE by September 2008 for recognition of freedom from infection (Ethiopia) and disease (Kenya and Somalia)*" of the Financing Agreement had to be adapted to the changes in the OIE pathway for rinderpest, that does not foresee anymore freedom from disease and freedom from infection, but only the status of country infected free from rinderpest. The specific OVI in PE1 and PE2 reads "Country dossiers for freedom from rinderpest prepared and submitted to OIE by September 2008".

The project team expected inputs from a short expert on M&E, which only materialised in mid 2009. The expert was recruited only part-time by the SERECU II project, as his major assignment was the establishment of an transversal M&E Unit within the AU-IBAR Organogramme. The unit staffing was completed with the recruitment of 2 further permanent experts, which are still on board. The Unit proved to be a very useful tool for the follow up of all projects implemented by AU-IBAR. Considering the advanced stage of implementation of SERECU II, its good design and its straight forward objectives and expected results, the unit gave priority to other projects more critical and complex than SERECU II, such as SPINAP-AHI, PAN-SPSO and other projects in their early stage of implementation. The M&E Unit was able to deal with SERECU II only at the beginning of 2010 with the establishment of a results -based monitoring system and with specific missions to Ethiopia (April 2010) and Kenya (May 2010). During these missions, the M&E

expert reviewed the activity planning together with the national project staff and established a matrix based action plan for the remaining period of implementation. Both missions have been performed in collaboration with the Finance Unit of IBAR, that went in detail through the accounting systems in use and assessed the level of disbursement and the relevant procedures. The joint mission led to the mobilisation of funds for the last 2 months of field activities, which has been efficiently used at a 90% consumption ratio.

It is a pity to note that such efficient M&E measures have been put in place only close to the end of the project.

Addressing of problems and real needs

Pastoral livestock keepers, small holders, ranchers, dealers, potential exporters and national economies suffer important consequences when outbreaks of rinderpest but also other TADs such as FMD, CBPP, PPR, RVF and CCBP occur. Consequences are in terms of food security, especially in the SES region which is already structurally affected by food insecurity; while both actual outbreaks and risk of them occurring cause disruption of local trade in livestock and livestock products. By reaching international recognition of freedom from rinderpest and improving animal disease surveillance and response systems in the 3 SES countries, SERECU II addressed the problems and real needs of its target group.

Integration of cross-cutting issues

The project focused on the achievement of freedom from a specific disease, Rinderpest. However, cross-cutting issues such as poverty alleviation, gender equity, environmental issues and good governance have been integrated in the project. Indeed, as trade will improve as result of the eradication of rinderpest it can be expected that more direct economic benefits will be achieved by small rural livestock owners (including women and disadvantaged members of the rural communities) while at the same time the animal population pressure will decrease or will be balanced through increased sales of livestock.

Issues of gender are not directly affected by the OIE accreditation of freedom of rinderpest, but –as just mentioned- women can benefit from the improved animal health and production status and the increased livestock population. Food security for livestock keepers has been improved through the better income they can obtain from the sale of livestock and their products, and the increased availability of animal dung from healthier animals for use as crop manure, which in some cases has increased crop yield significantly. Poverty alleviation was indirectly addressed by the project, as trade activities also generate wealth for the induced sectors operating in the livestock value chain.

A positive effect towards good governance is expected to result from building official veterinary capacity in Somalia and strengthening surveillance and diagnostic capacity in Kenya and Ethiopia as can be expected from facilitating the coordination and harmonization of disease control activities across national borders. The introduction of a novel approach for participatory surveillance based on the assessment of symptoms for groups of diseases (Syndromic Surveillance) instead of active surveillance targeting specific diseases, will improve governance of veterinary services through a more efficient and less expensive national surveillance system. Moreover, the involvement of non-state actors in the surveillance exercise will promote the integration of public and private sector for the achievement of public health and good governance results. Finally, the project generated more awareness in the public about the importance of healthy and certified food.

The project had no direct effect upon the environment and no effect upon human rights.

3.2 Achievement of purpose (Effectiveness)

OIE accreditation of freedom of rinderpest was gained by Ethiopia in May 2008, by Kenya in May 2009 and by Somalia in May 2010. <u>The project purpose has therefore been</u> <u>achieved</u>. This achievement has been reached through implementation of the project activities, that resulted in the attainment of the 3 results in the 3 SES countries. More in detail:

Result 1. National animal disease early warning and response capacities functional and coordinated at SES level	 The 3 SES countries have Emergency preparedness plans for RP in place, functioning and co-ordinated at SES level and integrated into the post-eradication strategy The SES disease intervention network is operational and integrated into the post-eradication strategy The project successfully carried out stakeholder awareness and communication campaigns RP vaccine stocks in the region have been identified, tested and are properly maintained
Result 2. Rinderpest surveillance in the SES coordinated and harmonized	 Regional surveillance plans have been harmonised, endorsed and tested for implementation by SES stakeholders Regional epidemiological and laboratory capacity have been improved and strengthened. Institutional and cross-border communication related to animal disease situation has been dramatically improved
Result 3 . SES countries' accreditation process guided and supported	 All SES Countries have been officially recognised free from rinderpest by OIE The history of rinderpest eradication in Africa has been duly and extensively documented Further projects for the post SERECU phase are prepared or under implementation

Some constraints have been experienced in the achievement of part of result 1 "National animal disease early warning and response capacities functional and coordinated at SES level". While the project was extremely effective in establishing a sound and viable coordination and harmonisation mechanism through the PSC and the Cross-Border Technical Harmonisation meetings, activities like "establishing and maintaining a strategic rinderpest vaccine bank" and "conducting a PPR vaccine trial at Muguga for the protection of cattle against RP" have not been undertaken. The first activity was withdrawn from PE1 Amendment 4, as the project decided to use the existing rinderpest vaccine in Ethiopia (3 Million doses) and Kenya (600,000 doses) as vaccine strategic stock, previous potency testing, which proved positive. The PPR vaccine trial was suspended following an external expertise which suggested not to continue with the trial, based on the previous trials conducted by PACE and their contradictory results, as well as on the review of available scientific information and contacts with prominent scientists.

3.3 Sound management and value for money (Efficiency)

Use of project resources

As mentioned above, the project was successful as it attained the purpose for which it was funded. There were however quite a number of administrative obstacles leading to sometime long delays which are the main reason why an important part of the project funds have not been spent during the lifespan of the project. Indeed the project did not consumed

about EUR 1,5 million during the lifespan of the project, of which about EUR 900,000 during PE1, and about EUR 600,000 during PE2.

Various factors influenced the reduced utilisation of funds, such as:

- Delay in transferring funds from the main project account to the national components accounts, initially due to difficulties in opening bank accounts in national components and later to low consumption of funds and delay in requesting replenishments.
- Delay in recruiting project personnel –in particular the M&E expert and the TA through FAO, recruited only at the end of PE1 and the 3rd month of PE2, respectively– which implied a reduced disbursement for salaries and related operational costs.
- The decision to skip on the PPR vaccine trial linked to the results of an external technical expertise undertaken on the validity and opportunity of the vaccine trial at this stage of eradication of the disease.
- The decision to delete the establishment of the RP vaccine bank from project activities at the end of PE1, justified by the opportunity to use residual vaccine stocks in Kenya and Ethiopia as vaccine reserve in case of. Potency tests carried out at PANVAC proved the efficacy (in vitro) of the vaccine.
- The postponement of the final declaration of eradication of rinderpest to 2011, which according to original planning and to the FAO-GREP pathway was due by May 2010. This delay implied the cancellation of all activities related to celebrations, events, communication, awareness, visibility and similar, for which the project budgeted more than EUR 250,000, which were spent only at a ratio of less than 20%.

Most probably, the adoption of a start-up PE would have allowed a better identification and quantification of expenditures and the confirmation of their validity in the dynamic changing scenario of the eradication of the disease.

Nevertheless, the project adopted some "original" arrangements in order to minimise the risk of important delays in transfer of funds and to avoid cumbersome bureaucratic procedures at national level. AU-IBAR entered into contractual agreement with each of the implementing partners –OIE, FAO, SAHSP, Government of Kenya and Government of Ethiopia- based on the Programme Estimate (PE) approved by the EU Delegation in Kenya. This arrangement made easier and faster the transfer of money to the bank accounts opened specifically for project purposes. However it has to be noted that the opening of bank accounts took sometimes very long, delaying the transfer of funds to the national project components and thus reducing the time available for spending the funds during the PE. Procurement of goods was as much as possible centralised at IBAR level, avoiding the cumbersome procurement procedures of beneficiary countries.

A financial and administrative audit was going on at the same time of the evaluation mission. The auditors –KPMG, recruited directly by the EUD Kenya- only audited PE1 when the evaluation team briefly met them. No major problems were found in the financial and administrative management of the PE. PE2 will be audited before the end of the year.

Use of project inputs

Looking at the use of project inputs in manpower as well as materials shows that they have been converted economically into project results and into the achievement of the ultimate objective, eradication of rinderpest.

Studies carried out by PACE did already show that investments in animal disease control are beneficial both from an economic and social standpoint. These studies revealed that for each \in invested in rinderpest control in 10 African countries considered, there is a return of \in 1,83. In terms of epidemio-surveillance, study of the Ethiopian example shows that an investment of \in 1 in animal disease surveillance would yield a three-fold increase in returns. The studies also identified non-quantified benefits in terms of easy acceptance of livestock

products in international markets, which are now even more evident, e.g. the resuming of negotiation between countries previously blocked in terms of trade with potential clients (mainly Arab Countries) and the boosting of export oriented activities in the Greater Horn of Africa, where traded animals are mainly provided by big livestock producing countries such as those of the SES.

The "Cost-Benefit Analysis of Rinderpest Eradication from Ethiopia and Kenya" carried out under SERECU II in 2010 confirms this. In this study the costs and benefits of rinderpest eradication were evaluated under a social cost-benefit framework. The total benefits of rinderpest eradication from Ethiopia and Kenya were calculated US\$ 951.3 million and US\$ 433.97 million respectively. Overall, rinderpest eradication contributed 2.4% and 0.5% to the Ethiopia's and Kenya's economies respectively.

The mission noted that in spite of the efforts made by previous regional and continental projects for the adoption of specific data information software for the collection and treatment of animal health data (PID, ARIS, TAD-Info) field veterinary services in both Kenya and Ethiopia still report in a hand-written form (hard copies) to their respective services, which enter the data into simple excel[®] or access[®] based spreadsheets and transmit the data at central level. Those data are stored at central level and used mainly for the bi-annual report to the OIE. The mission was not informed about any further use and processing of data or about any feedback to the peripheral services and the livestock owners. Zero reporting and rumours books for RP are widely used by the field veterinary services.

Notwithstanding the low rate of use of funds for the recruitment of technical expertise, the project commissioned several technical studies and specific consultancies, summarised in the table below.

Table 2: Technical Studies carried out by SERECU II

PE	TITLE	AUTHOR
1	Study to assess the suitability and need to carry out	Dr Emmanuel Couacy-
•		5
	phase II of the PPR vaccine trial as heterologous	Hymann
	and marker vaccine cattle against RP	
1	Communication Expert Consulting services	TEC Associates
1	Moderation work-planning workshop and preparation of draft PE 2	Maina Kanyonyo
1	Consultancy services in Risk-based Surveillance	Dr. Angus Cameron /
		AustVet Animal Health
		Services
1	Evaluation of laboratories testing sera from Somalia	Dr. John Anderson
1	Development of a Strategic Plan for AU-IBAR	PICO Team
2	Socio-economic benefits of Rinderpest Eradication	John Omiti & Patrick Irungu
	from Ethiopia and Kenya	
2	Exit Strategy	Pan Livestock
2	History of Rinderpest Eradication	Dr W. Masiga / Dr M. Burudi
2	Communication Expert Consultancy on Publicity	TEC Associates
	Assignment	
2	Eighth AU Conference of Ministers Responsible for	SERECU II
	Animal Resources	
2	Preparation of Project Proposal on Trade	Alex Saelaert
	Development after RP eradication	
2	Moyale rinderpest simulation Report	Julius K.M. Kajume

In order to have a first-hand impression of the supporting work done by regional and national laboratories and their networking during the project, the mission visited during the field phase the Central Veterinary Laboratory (Kabete) and National Veterinary Research Centre (Muguga). in Kenya, and the National Veterinary Institute, the National Animal Health Diagnostic & Investigation Centre and the Pan-African Veterinary Vaccine Centre (PANVAC) In Ethiopia.

Through the activities of SERECU II a regional network of these laboratories has been created as well as links supported with international (reference) laboratories.

Both Kenyan laboratories are involved in testing samples from the Somali ecosystem. The Central Veterinary Laboratory (CVL – Kabete), Virology Department has been an active member and Project Holder of the FAO-IAEA Joint Division "Rinderpest Laboratory Network" since 2006. The staff is actively involved in collaborative studies with many leading international laboratories recognised by the OIE as Centres of Excellence. A mark of a competent laboratory is good communication both within the Institute and outside the Institute. The specialist evaluator of "Laboratories testing sera from Somalia" Dr. John Anderson concludes that the CVL is exemplary in this respect. CVL Kabete stocks a 680 000 doses of RP vaccine coming from SES; the vaccine expired since September 2003.

The KARI National Veterinary Research Centre, Muguga has a long and illustrious history in veterinary medicine with perhaps the highlight being the development of the rinderpest attenuated vaccine by Plowright in the 1960s. The Virology Department of the National Veterinary Research Centre, Muguga was one of the founder members and Project Holders of the FAO-IAEA Joint Division "Rinderpest Laboratory Network" since the Network's inception in the early 1980s.

As members of this network both laboratories received all appropriate training and updating and attended the Technical Cooperation Project coordination meetings. All staff working on the rinderpest surveillance project have attended training on ELISA principles, PCR, rinderpest H-CELISA and virus isolation provided through the Joint Division IAEA/FAO, USDA, EU, FAO, AU-IBAR, CDC and KARI. Tripartite Nairobi training courses on virological techniques between CDC Nairobi, FAO and the Kenya Medical Research Institute are held on a regular basis in Nairobi. The National Veterinary Research Centre, Muguga has an impressive list of international collaborators, which include amongst others USAID, CIRAD-EMVT, CTVM (Edinburgh), IAH (Pirbright), University of California, Laboratoire National de Recherche Vétérinaire (Dakar, Senegal).

During the visit to PANVAC the team was taken to the site where a BSL3 building is to be constructed for safe storage of all remaining RP biologicals from the African continent including a strategic vaccine stock, following the recommendations of the May 2010 Entebbe Conference of African Ministers responsible for animal resources. The National Veterinary Institute (NVI - Debre-Zeit) is a federal laboratory mainly oriented to research and vaccine production, mainly at national level. RP vaccine production could be reactivated if this would be required. The institute is presently producing PPR vaccines which manufacturing is a very similar process. Only RP seed would be needed from PANVAC to allow NVI to restart production in about 4 weeks time with a capacity of about 6 million doses per month. NVI holds about 3 million doses of RP vaccine which are past the expiry date but are still potent as per the most recent tests.

The National Animal Health Diagnostic & Investigation Centre of Ethiopia (NAHD&IC – Sebeta) is a federal laboratory which coordinates and works in close collaboration with 14 regional Ethiopian laboratories. Main activities are animal disease outbreak investigations; export certification and surveillance of TADs. The Centre has a BSL3 facility and expects ISO 7025 accreditation before the end of the year. Close international contact and collaboration exist with OVI (South-Africa), CIRAD-EMVT (France), IAH (Pirbright) and VLA Wyebridge.

3.4 Achievement of wider effects (Impact)

The rinderpest eradication activities implemented under SERECU II in the 3 SES countries have lead to the development of national emergency plans (which however need continuous update and a serious commitment of resources), rapid reaction teams, surveillance and response systems including PDS, rumour registries and disease investigation teams. The support through the project resulted in positive changes that include for instance improved knowledge for veterinary staff, introduction of new epidemio-surveilance methods, including participatory techniques, and animal health delivery systems through CAHW's.

In this respect it should also be mentioned that the improved animal disease surveillance and response systems are presently used in the control of other TADs such as FMD, CBPP, CCPP and HPAI. Through its surveillance activities broadened to cover other TADs especially during the second year of implementation, the project generated objective data on the prevalence and spatial distribution of trade relevant diseases, which can be very useful for future decisions/activities. Surveillance systems have been strengthened but there is need for further improvement in both human and physical resources, as the project alone could not match all the requirements.

The project had a further marginal and indirect effect on food security: it was reported that in Ethiopia food security for livestock keepers has been improved indirectly through increased availability of animal dung from healthier animals for use as crop manure, which has increased crop yield significantly. Due to time constraints, the evaluation team couldn't confirm this statement –which in any case makes sense- either for Ethiopia or for the other SES countries.

Positive changes for livestock keepers and cattle traders can be seen in reduced animal disease risks and improved livestock trade. Indeed, the improvement of knowledge, detection and control of animal diseases in the SES countries, has led to the lifting of export bans by lucrative markets -i.e. Arab peninsula and Saudi Arabia in particular- which were not-accessible in the last 25 years. Somalia increased dramatically their export towards

Arab Countries, while Ethiopia started again bilateral negotiations for exporting towards the Arab Peninsula, especially Saudi Arabia. In all SES countries, Governments and private investors are seriously planning to invest in trade oriented activities, such as the establishment of quarantine zones for export (two sites identified for Ethiopia and tender for their construction launched and under evaluation), disease free areas (inscribed as flagship project in the Kenyan Vision 2030 Plan, to be implemented in 2 different areas of the country) and export approved slaughterhouses (at least 4 private abattoirs constructed in Somalia with technical approval of importing partners).

Due to the above mentioned openings and developments towards new market opportunities, the project had an indirect impact on poverty alleviation, as trade activities also generate wealth for the induced sectors operating on the side of the mere animal health and trade activities. The project also had an indirect impact on good governance, as it generated more awareness in the public about the importance of healthy and certified food as well as the promotion of collaboration and partnership between the public and the private sectors.

The project had no planned or unplanned negative effects.

3.5 Likely continuation of achieved results (Sustainability)

Overall sustainability

As already mentioned under impact the likelihood that the improved animal disease surveillance and response systems will be sustained is estimated very likely. After all it has been the National Veterinary Services in the 3 SES countries who implemented the project with support of SERECU II. The project used existing structures especially in Ethiopia and Kenya and the capacity building provided by the project have strengthened their National Veterinary Services.

In Somalia the support has been mainly given to the Transitional Federal Government through SAHSP via NGOs and FAO, nevertheless contributing to build capacity in the country. For the time being sustainability in Somalia will be secured through a third phase of SAHSP presently planned for an additional 2-year period starting from the 4th quarter of 2010.

As far as Ethiopia and Kenya are concerned the mission team is of the opinion that the impact and changes that occurred during SERECU II can be sustained through appropriate allocation of funds from the national Governments. This scenario was reiterated during the stakeholders' workshop of 20 August 2010 and the will and commitment to make it happen was confirmed by the respective DVS.

Sustainability of Measures

With regard to sustaining the project's purpose, the OIE accredited freedom from rinderpest, sustainability measures put in place by the project relate to improved animal disease surveillance and response systems, as well as to sensitisation and awareness creation of this achievement. In addition, SERECU II commissioned a study to propose a Livestock Diseases Surveillance Strategy to support risk reduction and empowerment in relation to export of livestock products together with a Rinderpest Exit Strategy for Africa (2011 - 2016).

The key sustainability measures proposed by the study are:

- A surveillance strategy that would be sustainable in the post-rinderpest world, yet would be effective at detecting any re-emergence of rinderpest or rinderpest-like syndromes, and;

– A programme to remove existing rinderpest viruses from all but essential and carefully controlled locations.

Regarding the sequestration of the virus and other existing contaminants and their storage in a safe and controlled location, the 8th Conference of Ministers responsible for Animal Resources in Africa held in Entebbe, Uganda on 13 and 14 May 2010, issued a specific recommendation on rinderpest eradication and control of TADs, which reads as follows:

<u>Recommendation 4. On rinderpest eradication and control of Transboundary</u> <u>Animal Diseases (TADs)</u>

- 74. <u>Recognizing the benefit from the eradication of rinderpest and the need for</u> progressive control of other TADs;
- **75.** <u>Recognising the need for a regional approach for effective and sustained control of</u> <u>TADs and zoonosis:</u>
- **76.** <u>Concerned</u> about the risk of rinderpest virus escape from the laboratories and the possible re-emergence of the disease;
- 77. <u>Recognising the support provided by the AUC to AU-PANVAC to establish a level 3</u> <u>Biosecurity laboratory (BSL3):</u>
- **78.** <u>Concerned</u> about the inadequate AU-PANVAC human and financial resources to effectively deliver on its mandate;
- **79. Recognising** the role of AU-PATTEC in the control of tsetse and trypanosomiasis and the success in the control and eradication in Botswana and Namibia and the ongoing initiatives in other infected countries and the need for coordination of actions among affected countries;
- **80. Concerned** about the lack of awareness on AU-PATTEC activities in some Member States and the absence of the programme in some tsetse infested countries;
- 81. <u>Encourage Member States to speed up the process of rinderpest virus sequestration,</u> by completing the FAO/OIE questionnaire regarding the inventory of the virus (samples, vaccines), without any further delay;
- 82. <u>Urge Member States to maintain and regularly update their rinderpest contingency</u> plans and establish syndromic surveillance systems for trade-sensitive TADs, especially in high risk areas and AU-IBAR to mobilise resources to support this endeavour;
- **83. Urge** Member states to improve the quality and timeliness of disease reporting to AU-IBAR including emergency reporting and for AU-IBAR (ARIS) and FAO (TADInfo) to ensure inter-operability between their respective information systems and connecting them to the OIE WAHIS, and FAO GLEWS/EMPRES global systems;
- 84. <u>Urge AUC to strengthen AU-PANVAC human capital to ensure a critical mass of expertise for execution of its mandate;</u>
- **85. Urge** all tsetse and trypanosomiasis affected countries to harmonize and intensify actions and inputs for the control and eradication of tsetse and trypanosomiasis and AU-PATTEC to establish coordination offices at the regional level;
- **86. Recommend** RECs to establish well-structured livestock governance systems to achieve effective coordination of TADs and zoonosis at regional level;
- 87. <u>Recommend Member States to destroy all rinderpest virus strains held in Africa and to hand over what is deemed necessary to AU-PANVAC for safe storage;</u>
- **88. Recommend** that AU-IBAR mobilises resources for the progressive control of PPR and other priority TADs;
- **89. Recommend** that AUC establishes a trust fund for the progressive control and eradication of TADs and trade sensitive diseases.

It is clear from the above recommendations that there is commitment and will of African Governments to maintain their rinderpest free status, and at the same time strengthen a continental AU institution (PANVAC) by giving them the responsibility to store, manage and where necessary destroy all existing vaccine and biological materials on rinderpest.

To this extent it is worth to note that the EU funded FAO for a 15 months long project worth \notin 2.8 million "Global Declaration of Rinderpest Eradication in 2011 and Strategies for a Post-Rinderpest World", which started in April 2010. Among its objectives the project aims at:

- ✓ setting up an inventory of rinderpest biological materials;
- drafting an international agreement on sequestration of rinderpest biological materials being held for research and emergency vaccine production;
- ✓ launch the ceremony officially declaring global freedom from rinderpest, and
- ✓ assist key countries to monitor the eradication of rinderpest in high-risk areas and hold meetings to formulate guidelines for tackling the next priority TADs for control and/or eradication.

In the framework of this project, FAO circulated worldwide a questionnaire aimed at inventory all existing RP viruses and biological materials. Data and information collected are not yet available.

The progressive improvement in the animal health status in the three countries concerned leads also to a better access to more lucrative markets for at least part of the national herd. Countries are now embarking on quite ambitious projects for the establishment of disease free (contained) export zones, which, once established and working efficiently, will guarantee further resources and above all hard currency to increase among others the sustainability of animal health oriented activities. Donors appear interested to fund such trade and market oriented programmes.

Participatory implementation

An important instrument in the eradication of rinderpest has been the use of Participatory Disease Surveillance (PDS). Developed as part of the Global Rinderpest Eradication Program as a tool to locate the final foci of rinderpest in remote areas, PDS has been used by SERECU II in a participatory and empowering manner.

Another example of participatory approach is the SERECU II rinderpest outbreak response simulation implemented in the Somali Ecosystem (SES). The exercise took place in Moyale (Kenya border with Ethiopia) in June this year and consisted of a desktop as well as a field simulation. Participants were from the three SES countries and included representatives of Government Veterinary Services, professional organisations such as Kenya Veterinary Association (KVA) and Ethiopian Veterinary Association (EVA), Police, Kenya Wildlife Services (KWS), Local authorities, National Operation Centre, livestock owners and traders, media, Civil Society, provincial Administration, National Environment Management Authority and AU-IBAR / SERECU staff.

Stakeholder involvement in planning and execution

Key stakeholders of the project have been involved in planning and execution of activities and steering the project mainly through Project Steering Committee (PSC) meetings and Cross-border Technical Harmonization Meetings.

Steering Committee meetings have been held with six-month intervals. Specific terms of reference have been developed for the PSC. (annex 11)

The PSC was made up of the following members:

a) Full status

- The Regional Authorizing Officer (RAO), the contracting authority
- The Chief Animal Health Officer, being the supervisor
- A representative of FAO-GREP
- Director of Veterinary Services, Kenya

- Director-General, Animal Health, Somalia
- Head, Animal and Plant Health Regulatory Department, Ethiopia
- b) Observer status
- Representative of the Head of EU Delegation in Kenya
- Representative of the Somalia Special Envoy
- Technical Advisor, SAHSP
- c) Ex-officio
- The Project Coordinator, being the Imprest Administrator
- The Head of Project Support Unit, being the Imprest Accounting Officer

Other relevant donors and international organisations may be co-opted into the SC on observer status as necessary.

Participation of the regular (almost quarterly according availability of countries) Crossborder meetings was made up from representatives involved in SERECU II of Ethiopia, Kenya, Somalia, SAHSP, KARI, KWS, EU Delegations, FAO, OIE, Joint FAO-OIE Committee, Consultants, AU-PANVAC and AU-IBAR.

3.6 Visibility

The project has been implemented through the structures of AU-IBAR. Visibility of the project and its funding agency the EU has been by making reference in all activities, documents and publications to its main donor. On all project publications and banners used during workshops and presentations the logo of the EU has been clearly visible. SERECU II recruited external experts to develop a communication strategy for the project, which can be adapted by the AU-IBAR Communication Unit. Most of the communication materials and tools developed by the project have been translated into local languages and dialects and can be used to enhance awareness of beneficiaries/target groups and to improve visibility of the project.

4 OVERALL ASSESSMENT (ACHIEVEMENTS)

The most important achievements of the SERECU II project are:

- Ethiopia, accredited free from rinderpest by the OIE at the 76th General Session.
- Kenya accredited free from rinderpest by the OIE at the 77th General Session.
- Somalia accredited free from rinderpest by the OIE at the 78th General Session.
- Eleven other African countries (Cameroon, Chad, Central African Republic, Djibouti, Niger, Nigeria, Liberia, Sierra Leone, Gambia, Comoros and Sao Tome and Principe) supported and guided in the preparation of dossiers for the accreditation of freedom from rinderpest.
- Rinderpest eradicated from Africa with final verification by FAO-OIE experts underway pending global eradication declaration in 2011 by FAO and OIE.
- Exit strategy that includes emergency preparedness and contingency plans for rinderpest prepared.
- Epidemio-surveillance systems strengthened and now able to serve as the foundation and model for the control of other TADs.
- History of rinderpest eradication from Africa fully documented, including the lessons learnt and potential use as an advocacy tool for further investment in the control and eradication of other TADs.
- Organisation of and financial support to the 8th Conference of Ministers Responsible for Animal Resources in Africa, Entebbe, Uganda, 13-14 May 2010.
- Support to the elaboration of AU-IBAR Strategic Plan 2010-2014.
- Showing that a regional project <u>can</u> work efficiently and successfully.

5 LESSONS LEARNT

NOTE: The lessons learnt from the eradication of rinderpest in Africa, is clearly described in a document commissioned in late 2009 by SERECU II to Dr W. Masiga and Dr M. Burudi, "The Eradication of Rinderpest from Africa: A Great Milestone"

Long-term sustained donor support all the way from the JP 15 programme up to the SERECU II project made it possible to eradicate Rinderpest. Government commitment, goodwill and careful formulation of appropriate strategies were the drivers of this process. This should be taken into consideration when planning livestock projects, as implementation horizons tend to be short.

The regional approach adopted by SERECU II and a targeted goal of direct interest to all participating countries, namely the eradication of Rinderpest, proved to be an effective and successful project design. The SERECU II project brought together the three countries in the Somali Ecosystem and led to the harmonization of surveillance activities across the common borders.

Enhancement of linkages with all the stakeholders in animal disease control activities is crucial in the success of animal health programmes. There is need for constant maintenance of these links through feedback (reports, workshops etc) in order to rejuvenate disease surveillance and reporting. Collaboration between the Department of Veterinary Services and other service providers cannot be overemphasised in creating synergies which is crucial in meeting challenges of maintaining of rinderpest free status.

Sharing information as took place in the Cross-border Technical Harmonization Meetings has been essential to reach consensus and common understanding for the three partner countries of the project, as well as building transparency in disease information and outbreaks reporting.

Simulation exercises were crucial in identifying the gaps in the contingency plans. It was quite evident that countries had not internalized and owned the contingency plans and the matter of compensation and stamping out remain theoretical/academic to the concerned countries. More needs to be done to address these constraints.

Innovative approaches (including the use of CAWHs and participatory epidemiology techniques) to animal health services delivery facilitated access and elimination of the disease from remote areas affected by political instability, civil strife and insecurity

The rinderpest eradication process played a very important role in building the capacity of national veterinary services in Africa, particularly in epidemiology and laboratory diagnosis, including the creation of epidemiological and laboratory networks that enabled countries

- ✓ To collate and analyze disease information and formulate dossiers for the accreditation of freedom
- ✓ Deal with the threat of HPAI and other disease threats
- ✓ Design sound disease control strategies

Close collaboration with international organizations such as FAO, OIE and international reference laboratories has been of primordial importance in achieving the project purpose.

Communication and awareness creation is vital in sensitization and mobilization of key stakeholders and others to participate in animal disease eradication and control. It is important to note that communication and awareness creation will continue to play a

critical role in the post rinderpest eradication era to mobilize the stakeholders in providing support and being vigilant against any emergency of the disease.

Innovative ways of channeling funds to beneficiaries circumvented government bureaucracy in the expenditure process.

Oversight support given by the Steering Committee played an important role in the implementation process.

High staff turnover especially at national level due to low remuneration and lack of incentives negatively impacted on the eradication process

6 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The mission team notes that SERECU II successfully achieved the project purpose of OIE accreditation of freedom from rinderpest in the countries belonging to the so called Somali Ecosystem (SES), building on the achievements of previous projects like JP15, PARC, PACE and SERECU I.

Rinderpest is undoubtedly a devastating transboundary disease, and its final eradication will have immeasurable benefits to not only cattle owners of Africa, but to many other regions of the world in which rinderpest continued to be a major disease hazard until quite recently. Thanks to the documented and officially recognised eradication of rinderpest, importers from foreign countries are now willing to buy livestock from the SES countries.

Various factors contributed to the success of the project:

 Implementation arrangements were well designed and balanced considering the regional nature of the project.

- The ultimate objective of the project (eradication of rinderpest) was well defined and achievable, sensitive for the whole international community, including politicians. The final eradication of rinderpest –which is the first animal disease and the second infectious disease, after smallpox, ever eradicated from the globe- will also give high visibility to the animal health community as a whole.

- The high level of communication and exchange between partners, through regular Steering Committee meetings and Cross-border Technical Harmonisation meetings, during which veterinary practices and activities were discussed and agreed upon, as well as continuous exchange between veterinary services of neighbouring countries proved to be winning tools for the achievement of the objective and the establishment of reliable surveillance strategies. Technical and scientific networking also played a major role for the success of the project.

Overcoming and/or minimising cumbersome bureaucratic procedures at national level for mobilization of resources and procurement through sub-contracts with the Governments of Kenya and Ethiopia and the SAHSP Project, within the framework of PE, and the adoption of centralised procurement for bulky items common to all countries.

Competent staff adequate to the objectives of the project was recruited.

However, delays in the recruitment of some key staff occurred, due to slow finalisation of inter-collaboration agreements and arrangements between the project and its partners (OIE and FAO) and the beneficiary Countries, or due to internal procedures. Examples are the late appointment of the FAO TA and the late arrival of the M&E expert. However in both cases the experts caught-up very well with the project and contributed greatly to the achievement of the ultimate goal. In this respect, beneficial effects have been noted on the planning and execution of technical and monitoring activities provided by establishing a continuous technical follow-up and an horizontal M&E system. The latter is part of the new IBAR strategy and applies to all IBAR implemented projects. Indeed the M&E Unit is one of

the horizontal units meant to support all projects implemented by AU/IBAR. The same is valid for the finance unit within IBAR.

Another factor of concern was the excessive mobility and lack of motivation of national staff. Staff trained by the project often moved away from the post for which they were trained as they were offered better paid positions within or outside their respective Ministries/Services.

The project also contributed to the surveillance of other trade-sensitive diseases and paved the way for a sustainable, innovative, relatively low-cost and widely accepted animal disease surveillance system based on syndromic surveillance for 3 major groups of diseases, which the beneficiary countries gladly accepted and will soon put into practice.

Directors of Veterinary Services from the SES countries confirmed during the SERECU II stakeholders workshop of 20 August 2010, the commitment of their respective Governments to continue with regular surveillance activities to keep the rinderpest free status.

Sustainability of achievements and further activities in Somalia in the short/medium term will be assured through a third phase of the SAHSP project, funded by the EUD, which is about to start.

6.2 Recommendations

The recommendations given here relate mainly to sustainability and ownership of the project outputs.

SERECU II has laid a solid foundation for long-term institutional capacity building with a view to long-term sustainability. As a consequence the potential created for additional Animal Health activities should be pursued.

Selection of candidate transboundary diseases for targeted surveillance should take into consideration how their control or eradication will affect market access for livestock commodities to other African countries and to international markets.

The mission fully agrees with the conclusions and recommendations of the study to propose a Livestock Diseases Surveillance Project to support risk reduction and empowerment in relation to export of livestock products together with a Rinderpest Exit Strategy for Africa (2011 – 2016). It firmly recommends follow-up by AU-IBAR in collaboration with FAO and OIE.

The evaluators strongly recommend further donor support to consolidate and build on the achievements of SERECU II. Areas proposed for future project support are:

- Continued surveillance of animal diseases (including syndromic surveillance) as part of an exit strategy of rinderpest eradication and in opening of livestock and livestock products trade.

- Trade and marketing – for development of marketing strategies, particularly from disease free zones, compartmentalisation and quarantine.

– Wildlife - continued use of sentinel wildlife for surveillance.

Policy formulation – based on risk analysis and HACCP; with expertise on ISOs, SPS agreement, OIE Terrestrial Animal Health Code and Codex Alimentarius.

- Vaccines - development of improved vaccines for CBPP, RVF, and development of a vaccine for ASF.

AU-IBAR should intensify sensitisation and awareness creation activities targeting Stakeholders (especially Policy Makers) with a view to sustain the benefits of SERECU II.

It is recommended that national governments assure adequate funding for surveillance activities in order to keep the present status of freedom of rinderpest.

The success of SERECU II shows that it is possible to eradicate infectious diseases, but the way to achieve this result is long and expensive. Rinderpest was eradicated thanks to a joint worldwide effort that lasted about 50 years and required an enormous multi-donor financial commitment: the EU alone contributed for about 250 million EUR. Any other important animal disease that would be targeted for eradication should be dealt with through a comparable serious and substantial coordinated commitment.

ANNEXES TO THE EVALUATION REPORT

- Annex 1. Map of project area
- Annex 2. Logical Framework matrixes
- Annex 3. Terms of Reference of the evaluation
- Annex 4. CVs of the evaluators
- Annex 5. Detailed evaluation method
- Annex 6. Implementation schedule
- Annex 7. Literature and documentation consulted
- Annex 8. List of persons/organisations consulted
- Annex 9. Attendance List, SERECU II Stakeholders Workshop
- Annex 10. Organogramme of AU/IBAR
- Annex 11. Other technical annexes
- Annex 11 A. Guidelines for the surveillance of rinderpest
- Annex 11 B. TOR for the Steering Committee of SERECU II
- Annex 11 C. TOR for technical staff of SERECU II



ANNEX 2. LOGICAL FRAMEWORK MATRIXES

Intervention Logic	Objectively Verifiable Indicator (OVI)	Means of Verification (MOV)	Assumptions
Overall Objective Contribute to poverty reduction for those involved in the livestock-farming sector in the Somali Eco-system (SES)			
Purpose OIE accreditation of freedom from rinderpest disease/ infection progressed in the SES	 SES countries receive positive annual OIE and GREP audits. Ethiopia dossier for freedom from infection recommended for adoption by the International Committee at the OIE General Session in May 2009 Kenya and Somalia dossiers for freedom from disease (countrywide) recommended for adoption by the International Committee at the OIE General Session in May 2009 	 Country dossiers to OIE for freedom from disease/ infection OIE and GREP technical audit reports Reports of the 76th to 78th OIE General Sessions 	• National Governments and AU- IBAR maintain their political will and financial commitment to support a SES structure for coordination of RP eradication and OIE accreditation
Results			
1. National animal disease early warning and response capacities functional and coordinated at SES level	 Rinderpest emergency preparedness and contingency plans (REPCP) in place and functioning in all 3 SES countries and co-ordinated at SES level by end of year one SES disease intervention network operational by end of year one 	 Copies of AU- IBAR validated REPCP Recordings of simulation exercise on EP 	 Governments and donors are willing to make long term commitments to sustain animal health delivery systems and timely provision of resources. Muguga delivers services in a timely and effective manner
	 Stakeholder awareness and communication system in place at SES level and linked to national networks as of year 2 	 Communication strategy on RP eradication and control of other 	

LOGICAL FRAMEWORK TABLE FOR SERECU II (Financing Agreement)

	 PPR vaccine trials completed and results published by end of year one Appropriate strategic RP vaccine stocks in place and maintained by month 6 	 TADs available at AU-IBAR Reports/ publications of PPR vaccine trial Records on Vaccine stocks 	
2. Rinderpest surveillance in the SES coordinated and harmonized	 Harmonised surveillance plans endorsed by SES stakeholders by second quarter and implemented as of third quarter of year one Regional epidemiological and laboratory capacity able to confirm or refute the suspicion of rinderpest activity within one month of the initial suspicion. Joint SES outbreak investigation network established and operational by March 2009 Active disease reporting system operational in all the SES countries by second quarter yr one and follow-up provided in < 60h. ARIS based disease reporting system informs AU/IBAR monthly and OIE twice a year as of third quarter 	 SERECU quarterly progress and crossborder harmonization meeting reports Disease investigation and laboratory reports including FAO and OIE reference labs National and ecosystem level disease report log entries Monthly reports captured in ARIS and reported to AU-IBAR and OIE 	 The simultaneous implementation, by all three countries, of the harmonized surveillance programmes is not unduly disrupted by conditions of climate or civil unrest SAHSP and other projects in SES playing a complementary role in development and support of the livestock sector are successful and SAHSP is funded beyond 2007.
3 . SES countries' accreditation process	 Country dossiers prepared and submitted to OIE by September 2008 for 	• Country reports and dossiers to OIE	

guided and supported	recognition of freedom from infection (Ethiopia) and disease (Kenya and Somalia)	OIE records	
Activities			
Referred to Result 1			
 1.1 Develop and test rinderpest emergency pro 1.2 Organize staff refresher training courses in 1.3 Sensitise stakeholders to objectives, and b 1.4 Support establishment of coordinated SES 1.5 Monitor PPR vaccine trial at Muguga 1.6 Establish and maintain strategic rinderpes 	a surveillance and disease recognition at natio enefits of functional regional surveillance and communication network for RP eradication a	EPP programme	egister response teams
Referred to result 2			
 2.1 Establish/ maintain national animal diseas 2.2 Implement national/ SES emergency di identified 2.3 Implement participatory disease search an 2.4 Conduct randomised sero-surveys in the w 2.5 Monitor rinderpest virus presence in wildl 2.6 Conduct risk-based sero-surveillance from 	sease reporting systems supported by joint d follow-up investigations of suspicious disea hole of SES ife where significant populations of susceptib	follow-up activities wh se events	
Referred to result 3			
3.1 Provide for external verification of SES R3.2 Assist national partners ensure that all sur3.3 Support SES countries in drafting and qua3.4 Assist national staff to represent the interest	veillance data are collated and formatted to su lity control of accreditation dossiers		
LOGICAL FRAMEWORK TABLE PROGRAMME ESTIMATE 1 (UPDATED)

Intervention Logic	Objectively Verifiable Indicator (OVI)	Means of Verification (MOV)	Assumptions
Overall Objective Contribute to poverty reduction for those involved in the livestock-farming sector and of the wider populations in the three countries by enhancing livestock development and trade opportunities			
Purpose OIE accreditation of freedom from rinderpest disease/ infection progressed in the SES	 SES countries receive positive annual OIE and GREP audits. Country dossiers for freedom from rinderpest recommended for adoption by the International Committee at the OIE General Session in May 2010 or earlier 	 Country dossiers to OIE for freedom from rinderpest OIE and GREP technical audit reports Reports of the OIE General Sessions 	• National Governments and AU- IBAR maintain their political will and financial commitment to support a SES structure for coordination of RP eradication and OIE accreditation
Results			
1. National animal disease early warning and response capacities functional and coordinated at SES level	contingency plans (REPCP) in place and functioning in all 3 SES countries and co-ordinated at SES level by March 2009	IBAR validated REPCP	• Governments and donors are willing to make long term commitments to sustain animal health delivery systems and timely provision of resources.
	 SES disease intervention network operational by March 2009 Stakeholder awareness and communication system in place at SES level and linked to national networks as of March 2010 	 Recordings of simulation exercise on EP Communication strategy on RP eradication and 	• Laboratory diagnostic services are delivered in a timely and effective manner

	 PPR vaccine trials completed and results published by March 2009 Appropriate strategic RP vaccine stocks in place and maintained by October 2008 	 control of other TADs available at AU-IBAR Reports/ publications of PPR vaccine trial Records on Vaccine stocks 	
2. Rinderpest surveillance in the SES coordinated and harmonized	 Harmonised surveillance plans endorsed by SES stakeholders by second quarter (July 2008) and implemented as of third quarter of year one (October 2008) Regional epidemiological and laboratory capacity able to confirm or refute the suspicion of rinderpest activity within one month of the initial suspicion. Joint SES outbreak investigation network established and operational by March 2009 Active disease reporting system operational in all the SES countries by second quarter yr one (July 2008) and follow-up provided in < 60h. ARIS based disease reporting system or other appropriate system informs AU/IBAR monthly and OIE twice a year 	 progress and cross- border harmonization meeting reports Disease investigation and laboratory reports including FAO and OIE reference labs National and ecosystem level disease report log entries 	 The simultaneous implementation, by all three countries, of the harmonized surveillance programmes is not unduly disrupted by conditions of climate SAHSP and other projects in SES playing a complementary role in development and support of the livestock sector are successful and SAHSP is funded beyond 2007.
3 . SES countries' accreditation process	as of third quarter (October 2008). Country dossiers for freedom from rinderpest	Country reports and dossiers to OIE	

guided and supported	prepared and submitted to OIE by September 2009	• OIE records				
	2007					
Activities		I				
1.1.1 Develop and test rinderpest emergency						
	s in surveillance and disease recognition at natio		ister response teams			
	d benefits of functional regional surveillance and					
	ES communication network for RP eradication	and TADs control				
	for the protection of cattle against rinderpest					
	ease information systems (with two-way flow) (
	disease reporting systems supported by joint	follow-up activities where	suspect rinderpest cases have been			
identified						
	and follow-up investigations of suspicious disea	ase events				
1. 2.4 Conduct randomised sero-surveys in th		1 11110				
	ildlife where significant populations of susceptib	ble wildlife species exist				
1.2.6 Conduct risk-based sero-surveillance from areas at high risk of rinderpest occurrence						
1.3.1 Provide for external verification of SES Rinderpest surveillance						
1.3.2 Assist national partners ensure that all surveillance data are collated and formatted to support submission of dossiers to OIE						
1.3.3 Support SES countries in drafting and quality control of accreditation dossiers						
1.3.4 Assist national staff to represent the int	erests of SES stakeholders on disease epidemio	logy, control and eradication	on			

LOGICAL FRAMEWORK TABLE PROGRAMME ESTIMATE 2 (UPDATED)

Intervention Logic	Objectively Verifiable Indicator (OVI)	Means of Verification (MOV)	Assumptions
Overall Objective Contribute to poverty reduction for those involved in the livestock-farming sector and of the wider populations in the three countries by enhancing livestock development and trade opportunities Purpose OIE accreditation of freedom from rinderpest disease/ infection progressed in the SES	 SES countries receive positive annual OIE and GREP audits. Country dossiers for freedom from rinderpest recommended for adoption by the International Committee at the OIE General Session in May 2010 or earlier 	 Country dossiers to OIE for freedom from rinderpest OIE and GREP technical audit reports Reports of the OIE General Sessions 	• National Governments and AU- IBAR maintain their political will and financial commitment to support a SES structure for coordination of RP eradication and OIE accreditation
Results			
1. National animal disease early warning and response capacities functional and coordinated at SES level	 Rinderpest emergency preparedness and contingency plans (REPCP) in place and functioning in all 3 SES countries and co-ordinated at SES level by December 2009 and integrated into the post-eradication strategy SES disease intervention network operational by December 2009 and integrated into the post-eradication strategy Stakeholder awareness and communication system maintained and integrated into the post-eradication 	 Copies of AU- IBAR validated REPCP Recordings of simulation exercise on EP Communication strategy on RP eradication and control of other TADs available at 	 Governments and donors are willing to make long term commitments to sustain animal health delivery systems and timely provision of resources. Laboratory diagnostic services are delivered in a timely and effective manner

	strategy.RP vaccine stocks are well maintained	AU-IBAR
	during the project period and into post- eradication phase.	Recordings of radio programmes and copies of print
	• Livestock radio programmes broadcasted and print material distributed by end of	material
	first quarter	
2. Rinderpest surveillance in the SES coordinated and harmonized	• Harmonised surveillance plans endorsed by SES stakeholders within first quarter and ready for implementation	 SERECU progress and cross-border harmonization meeting reports The simultaneous implementation, by all three countries, of the harmonized surveillance programmes is not
	• Regional epidemiological and laboratory capacity able to confirm or refute the suspicion of rinderpest activity within one month of the initial suspicion.	unduly disrupted by conditions
	 Joint SES outbreak investigation network maintained and integrated into the post- eradication phase 	 National and SATISF and other projects in SES playing a complementary role in development and support of the livestock sector are successful and SAHSP is funded beyond 2007.
	• Active disease reporting system maintained in all the SES countries with follow-up provided within 60 hours & the system integrated into the post-	ecosystem level disease report log entries
	eradication strategy.	Monthly reports captured in ARIS
	• ARIS based disease reporting system or other appropriate system informs AU/IBAR monthly and OIE twice a year project period and is integrated into the post-eradication strategy	or other appropriate system and reported to AU- IBAR and OIE

	• Improved institutional communication related to animal disease reporting in national veterinary services	results sent to districts vet offices/ staff and passed on to pastoralists
3. SES countries' accreditation process guided and supported	 Country dossiers for freedom from rinderpest prepared and submitted to OIE by September 2009 National events to commemorate the eradication of rinderpest Continental/ international events on global eradication of rinderpest History and lessons learnt from SERECU prepared The history of rinderpest eradication in Africa documented Project proposal for the post SERECU phase prepared and ready for submission to donors 	 Country reports and dossiers to OIE OIE records Publications and reports on the events National and international media reports Copy of history and lessons learnt available at AU-IBAR Published book on the history of rinderpest eradication in Africa Copy of propject proposal on the

		post SERECU	
		phase available at	
		AU-IBAR	
Activities		<u> </u>	
 1.1.3 Implement national/ SES emergency identified 1.1.4 Sensitise the SERECU primary audient assisting in their implementation 1.1.5 Support the establishment and maintention 	in surveillance and disease recognition at nat isease reporting systems supported by joint e in the SES to the significance and purpose nee of coordinated SES network for RP eradic	e follow-up activities where of having emergency prepa cation and other TADs contro	suspect rinderpest cases have been aredness plans and the importance of
1.2.2 Assist national partners to improve vet by the primary stakeholders1.2.3 Conduct participatory disease surveilla1.2.4 Conduct randomised sero-surveys	ation systems (with two-way flow) with links inary services institutional communication ar ce dlife where significant populations of suscept	nd to enhance and sustain tw	o-way reporting of livestock diseases
1.3.3 Support SES countries in drafting and1.3.4 Assist national staff to better represe vertical communication1.3.5 Create awareness of the benefits of O to motivate stakeholders' support	rveillance data are collated and formatted to s	the epidemiology, control and the teholders' requirements to m	d eradication through horizontal and naintaining this accreditation in order

ANNEX 3. TERMS OF REFERENCE OF THE EVALUATION

SPECIFIC TERMS OF REFERENCE

Final Evaluation of the Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU II) Project

FWC BENEFICIARIES 2009 - LOT 1: Rural Development EuropeAid/127054/C/SER/multi

1. BACKGROUND

1.1. Introduction

Rinderpest ("cattle plague") is a deadly viral disease of domestic animals and wildlife. It has most notably afflicted cattle, spreading across sub-Saharan Africa as a pandemic during the 20th century. The disease has been a serious threat to the livelihoods of millions of Africans and has been the subject of international eradication efforts since the 1940s. The first fully -coordinated control effort was through Point Project 15 (JP 15) and lasted from 1962 to 1975. It was followed by the Pan-African Rinderpest Campaign (PARC) from 1976 to 1998; a programme that eradicated Rinderpest in many African countries but not in southern Sudan and the Somali Ecosystem (SES). By the end of the project, 17 countries had joined the OIE pathway by declaring at least provisional/ zonal freedom from disease.

PARC was, in turn, succeeded by the Pan African Programme for the control of Epizootics ((PACE) (1999- 2007) which further assisted countries in progressing along the OIE pathway and which eradicated Rinderpest from south Sudan. SERECU phase 1 was established in 2006 as a specialized project within the larger PACE programme to coordinate the final effort to secure OIE accreditation of freedom from Rinderpest in the SES. This phase of the project lasted until February 2007, and was followed by a bridging phase between March 2007 and April 2008. SERECU II (2008-2010) was conceptualized to build on the achievements of SERECU I and ensure OIE accreditation of freedom for the three SES countries.

1.2. Legal basis

The SERECU II Project is funded by the European Union through the 9th European Development Fund (9th EDF) under a Financing Agreement signed on 29th February 2008. The project operational implementation phase is scheduled to end on 31st December 2010.

1.3. Origin of the programme, historical background and design

The first phase of SERECU (SERECU I) ran from January 2006 to February 2007 with a bridging phase between March 2007 and April 2008. The second phase (SERECU II) runs between May 2008 and June 2010. It is divided in two periods: Programme Estimate 1(PE1) from May 2008 to June 2009 and Programme Estimate 2 (PE2) from July 2009 to June 2010. Under PE1 encouraging results have been achieved: Ethiopia and Kenya have been accredited Rinderpest free status, but Somalia was still pending. PE2 consolidated the Rinderpest eradication in the SES countries and facilitated the accreditation of freedom for Somalia.

SERECU Project Objectives & Expected Results: The specific objective of SERECU as originally conceived, was to dynamically manage a science-based, coordinated and time bound regional program as an entry point for the verification of eradication and OIE accreditation of freedom from Rinderpest for each of the 3 SES countries. This is to ensure that freedom from the disease is actually achieved and get this finding officially approved by the OIE. By this achievement, the initiative will have contributed enormously to livestock development and provided for a great opening of new trade opportunities. This in return is an indispensable building block to reach the overarching goal - which is to lift people involved in livestock farming in Africa out of poverty.

Some of the main achievements of SERECU I included the establishment of a well coordinated regional and international input from AU-IBAR, FAO/GREP, OIE and IAEA to agree on standards and interpretation of data. Needs and gaps in veterinary delivery systems for future interventions in Rinderpest eradication and control of other trans-boundary diseases were also identified during Phase I of SERECU. A strategic framework that focuses on the proof of freedom from Rinderpest guards against resurgence and achieves OIE accreditation, which is the basis of SERECU II, was formulated. The implementation of surveys in the three Somali ecosystem countries (SES) to ensure their adherence to operating procedures was carried out in a timely manner.

The Expected results of SERECU phase 2 are (i) National animal disease early warning and response capacities functional and coordinated at the SES level, (ii) Rinderpest surveillance in the SES coordinated and harmonized, and (iii) the SES countries' accreditation process guided and supported.

1.4. Key implementation arrangements

The SERECU Programme is managed by the SERECU Programme Coordination Unit (PCU) based at AU-IBAR headquarters, and headed by *Dr. Chibeu Dickens* (SERECU SES coordinator) operating as an integral part of AU-IBAR.

The SERECU Programme structure:

- **Programme Coordination Unit (PCU),** led by the SES Coordinator and comprising the Technical Assistant and PCU support staff: two Accountants, two Secretaries, IT Assistant and a Driver/Messenger. The PCU facilitates and streamlines operations of SERECU projects, provides support and capacity building to the SES countries and deals with the day to day management of the Programme. The SES Coordinator and the Technical Assistant conduct regular visits to SERECU sites in the SES countries.
- The Head of the Animal Health Unit (AHU) acts as Project Supervisor and provides technical backstopping and monitoring of the implementation of the project.
- **Programme Steering Committee (PSC),** the PSC is in charge of all policy issues of the programme and is the overall decision making body. It is in chaired by the Director of AU-IBAR. The PSC meets at least twice in a year to update itself on progress, discusses and approves work plans, provides advice and guidance and oversees programme implementation.
- **FAO and OIE** are providing scientific and technical inputs, adding on to the AU-IBAR/SERECU in-house expertise for underpinning the focus on the SES, for coordinated and cross-institutional analysis and updating of the strategy for the final eradication of Rinderpest.
- **3 National Liaison Officers** support the project. These officers are employed and paid by the National Governments of Kenya and Ethiopia and SAHSP in the case of Somalia within the facilitating of the SERECU project.

1.5. <u>Cost and funding modalities</u>

SERECU II is financed by the European Commission. The total cost of SERECU II is € 4,000,000.

1.6. <u>Duration of the schedule</u>

The financing agreement for SERECU II was signed and entered into force on the 29th February 2008. The last work plan is implemented from 1st July 2009 to 30th June 2010 (12 months). The closure period, included in the period covered by this programme runs from 1st July 2010 to 31st December 2010 (6 months).

1.7. Implementation Status

Ethiopia, Kenya and Somalia have been accredited free from Rinderpest by OIE. Eleven other African countries (Cameroon, Chad, Central African Republic, Djibouti, Niger, Nigeria, Liberia, Sierra Leone, Gambia, Comoros, and Sao Tome and Principe) were supported and guided in the preparation of dossiers for the accreditation of freedom from Rinderpest. Rinderpest has been eradicated from Africa and final verification by FAO-OIE experts is underway pending global declaration in 2011 by FAO and OIE. An exit strategy including emergency preparedness and contingency plans for Rinderpest eradication has been prepared. Also, Epidemio-surveillance system has been established for the control of other Trans-boundary Diseases (TADs).

The history of Rinderpest eradication in Africa including the lessons learnt and impact as an advocacy tool for further investment in the control and eradication of other TADs has been documented.

1.8. Implementation Challenges

Some of the key challenges encountered during implementation includes amongst others, delay in the implementation of key activities and transfer of funds from AU-IBAR to the countries.

2. DESCRIPTION OF THE ASSIGNMENT

2.1. Global objective

The overall Objective, purpose and expected results of the programme are described below:

<u>Overall objective</u>: Contribute to poverty reduction for those involved in the livestock-farming sector and of the wider populations in the three Somali Eco-System (SES) countries by enhancing livestock development and trade opportunities.

<u>Programme purpose</u>: OIE accreditation of freedom from Rinderpest disease/infection progressed in the Somali Eco-System (SES).

<u>Results</u>: There are three main result areas:

Result 1: National animal disease early warning and response capacities functional and coordinated at the SES.

Result 2: Rinderpest surveillance in the SES coordinated and harmonized.

Result 3: The SES countries' accreditation process guided and supported.

2.2. Specific objectives for the final evaluation

A final evaluation of SERECU project is commissioned as part of the project's Financing Agreement primarily to evaluate the implementation process and achievements of SERECU II project from 2008 to date. The final evaluation will document lessons learnt in terms of intervention selection and project implementation. Specifically, the evaluation will respond to the requirements of the SERECU

project to assess, verify and analyze the performance of the project and seek to find answer to the following evaluation questions:

- How appropriate was the project design?
- To what extent did the stated objectives correctly address the problems and real needs of the target groups?
- How economically were project inputs (funds, expertise, time, etc) converted into results in required quantity, quality and time?
- Was the use of the project resources cost-effective?
- To what extent have the SERECU project purpose and results been achieved?
- Did SERECU produce any sustainable changes positive/ negative, intended/un-intended on the target groups?
- Are some of the SERECU benefits/outputs likelihood to be continued after end of the project?
- What sustainability measures have SERECU project put in place?
- To what extent were the activities of the SERECU project implemented in participatory and empowering manner?
- How involved were the key stakeholders of the project in planning and execution of activities, and steering the project?

2.3. Requested Services, including suggested methodology

The consultancy should provide outputs on the following evaluation criteria:

- **Relevance of the programme:** The main focus will be on the appropriateness of the project's concept and design to the overall vision of the Somali Eco-System (SES) countries. In particular, the extent to which the stated objectives correctly address the problems, the vision and real needs of the target countries.
- **Efficiency and effectiveness:** Evaluate the efficiency and effectiveness of SERECU II Programme projects, activities and partnerships.
- **Impact and Sustainability:** Assess the impact and sustainability of the programme in terms of institutional impact within AU-IBAR and in terms of development impact for beneficiaries and development actors in the SES.

The evaluation team is also requested to verify and assess the integration and impact of cross-cutting issues in the project (e.g. gender, climate change and environmental concerns, good governance among others).

Information will be gained through the following means:

Review of documents

The consultants will review all relevant documents produced by the programme, the EC Delegations, the ROM mission, the project audit reports, the TA reports, minutes and documents the SERECU PSC reports, the SERECU TAG reports and other independent consultants. The main reference documents which should be consulted by the review team are summarized in Annex 1. Interviews:

- The mission team will be briefed by the EC Delegation in Kenya and by AU-IBAR management as well as by the SERECU PCU at AU-IBAR headquarters, responsible for the day to day facilitation of the mission.
- In each country the mission will consult with the Permanent Secretary, Ministry of Livestock Development;
- The National Authorising Officer;

- The National Veterinary Service (NVS) Officer;
- The mission will consult with relevant National Veterinary Service scientists involved in the Programme, including visits to project sites (Kabete & Sabeta);
- The mission will consult with relevant SERECU stakeholders and collaborators, including development partners (CBOs/NGOs) in the field.

<u>Note</u>: Where the head of the institution or ministry is not available the team will interview any other relevant representative.

Field visits:

Members of the mission will visit the different sites in the SERECU operation area. Field visits will include discussion with SERECU collaborators participating in different activities. The evaluation will visit Kenya and Ethiopia during which the evaluation team will follow a qualitative approach and use a broad range of methods, such as in-depth individual interviews, focus group discussions and semi-structured interviews. The Project team from Somalia will be invited to Kenya in order to carry out the interview. The evaluation team will be based at the AU-IBAR PCU office for relevant logistical support during the entire mission period in the SES.

2.4. <u>Requested outputs</u>

(A) Programme Logical Framework

The overall SERECU Programme logical framework is attached to the ToRs. The Evaluation Team will review the logical framework to determine:

- the relevance of the programme by reviewing the goal, purpose and results stipulated in the logical framework and indicate the expected impact of the programme;
- the validity and appropriateness of the assumptions indicated;
- the adequacy of OVIs and the level of achievement

(B) Implementation of the Programme

The Evaluation team will:

- Review the organizational and institutional arrangement put in place by SERECU (structures, responsibilities, decision making process, assignment of duties) related to the SERECU programme implementation, including accounting and procurement procedures.
- Assess efficiency and effectiveness of randomly selected SERECU projects.

(C) Planning Monitoring and Evaluation

The evaluation will review the monitoring and evaluation activities carried out to guide project implementation.

(D) Technical Assistance

FAO and OIE have provided scientific and technical inputs, in addition to the AU-IBAR/SERECU in-house expertise. The Evaluation team will review the performance and impact of the technical assistance under SERECU Project.

The evaluation process will be carried out in three phases:

(a) Desk Phases (Inception & Finalization)

At the inception phase, relevant programme documents should be reviewed, as well as documents shaping the SES countries development policy framework. The evaluation team will also analyze the SERECU II logical framework. On the basis of the information collected, the evaluation team should:

- Describe the development context;
- Comment on the logical framework including OVIs;

- Comment on the issues and propose a set of evaluation questions justifying their relevance;
- Describe the analysis strategy;
- Propose the work plan;
- Confirm the final time schedule.

To finalize the desk phase, the evaluation team will prepare an indicative methodology for the assignment and the instruments/tools to be applied for the field phase. Interviews will be conducted with the SERECU project management at IBAR, selected key partners and focal persons at the EC. The evaluation team is expected to submit a desk phase report at the end of this phase.

(b) Field Phase:

Field visits will be carried out by the evaluation team in 2 SES Countries: Kenya and Ethiopia. At

the field level, the evaluation team should:

- Submit its detailed work plan with an indicative list of people to be interviewed, surveys to be undertaken, dates of visit, itinerary, and name of team members in charge. This plan has to be applied in a way that is flexible enough to accommodate for any last-minute difficulties in the field. If any significant deviation from the agreed work plan or schedule is perceived as creating a risk for the quality of the evaluation, these should be discussed immediately.
- Hold a brief meeting with the SERECU Programme Coordination Unit and the Rural Development Sector within the EC Delegation before embarking on field activities.
- Involve different stakeholders;
- Prepare a draft report summarizing main findings, conclusions and recommendations, which will be discussed at a debriefing meeting with the PCU, the AU-IBAR Management and the EC Delegation.

(c) Synthesis phase:

This phase devoted to the preparation of the draft final report. The consultants will make sure that:

- Their assessments are objective and balanced, affirmations accurate and verifiable, and recommendations realistic.
- When drafting the report, they will acknowledge clearly where changes in the desired direction are known to be already taking place.

If the EC Delegation considers the draft report of sufficient quality, the report will be circulated for comments to SERECU PCU at AU-IBAR and convene a meeting in the presence of the team leader. On the basis of comments expressed the mission team leader will amend and revise the draft report as necessary and final report is then produced.

3. EXPERTS PROFILE

3.1. <u>Requested experts by category</u>

A team leader (Senior) will be responsible for the overall coordination and task achievement.

Areas of expertise required to undertake this task are:

- One Livestock Economist/Socio-Economist (Team Leader) with background knowledge on Monitoring and Evaluation-(Senior)
- One Disease Control Expert/Epidemiologist (Senior)

3.2. <u>Required expert profile</u>

The mission team should have expertise and experience in the fields listed below:

- Proven expertise in policy formulation and advocacy related to livestock farming and sustainable development; demonstrated in-depth technical knowledge and proven analytical skills on issues related to livestock farming and sustainable development;
- A solid and diversified experience in epidemiology with special reference to virology, including experience in risk assessment and risk based surveillance programming;
- Proven experience in participatory assessment and monitoring, data processing or analysis and M&E design experience;
- In-depth knowledge of the logical framework methodology (LFM) and the project cycle methodology (PCM) are essential.
- Good contextual knowledge of local issues, community priorities and social and cultural constraints and realities in the SES;
- Knowledge of the principles and working methods of project cycle management and EC aid delivery methods.
- The experts should be able to have coverage of the different aspects of programme evaluation (evaluation methods and techniques) as set out in these terms of reference,

Consultant	Number	Title and service	Area of Expertise	Working language
Consultant with international experience (Senior).	1	Team Leader: Livestock Economist/ Socio- Economist	 Livestock project management; Socio-economic aspects of livestock farming; Organizational development (Participatory and Group Dynamic Techniques); Field experience in the SES; Understanding of governments of the SES countries working systems (accounting and supplies) Background in monitoring and evaluation projects Knowledge of the EC aid delivery methods. 	English
Consultant with international experience (Senior).	1	Disease control expert/ epidemiologist	 Disease control project management Livestock project management; Interdisciplinary research 	English

The composition and respective expertise of the evaluation team is as highlighted

including cross-cutting issues. Working language will be English.

3.3. <u>Time-frame</u>

Expert	N° of experts	Category	Working days
Team leader (Livestock Socio-economist)	1	senior	21
Disease control expert	1	senior	15

4. LOCATION AND DURATION

4.1. Location of assignment

The assignment will be carried out in Nairobi (at the SERECU PCU Offices in the AU-IBAR premises) and in the field. The field component will be carried out in the mandate regions of the AU-IBAR local coordination centres in Addis Ababa and in Nairobi (Kabete).

4.2. Operational period

This final evaluation is scheduled to start in mid July 2010. A full draft report should be delivered at the end of August 2010. It is anticipated that the final report will be ready latest by mid September 2010. The Team Leader will be responsible for the coordination of the entire evaluation exercise and presentation of the final results.

4.3. Planning

The duration of this evaluation study will be a maximum of 90 calendar days including collection of secondary data and information, consultations, field studies, presentation of the findings and submission of the final report. The final report should be submitted within 14 calendar days of the receipt of comments on the draft.

The team leader will be responsible for the coordination of the entire evaluation exercise and presentation of the final results.

Key responsibilities are as follows:

- Consultation with the SERECU PCU and other stakeholders;
- Review of relevant Programme and projects documents and other secondary information;
- Scheduling and coordination of field activities;
- Presentation of the preliminary findings;
- Preparation of the draft consultancy report;
- Preparation of the final consultancy report.

5. REPORTING

5.1. Draft Report

A draft report in 6 copies must be produced and submitted within 14 days after completing the field mission. The reports will be distributed as follows:

- European Union Delegation in Kenya
- Regional Authorising Officer (AU-IBAR)
- CVOs of the SES
- Project Coordinators in Kenya, Somalia and Ethiopia

5.2. Final Report

A final report in 6 copies must be produced (both electronic and hard copies) and submitted within 14 days after receiving all comments. The report will be distributed as follows:

- European Union Delegation in Kenya
- Regional Authorising Officer (AU-IBAR)
- CVOs of the SES
- Project Coordinators in Kenya, Somalia and Ethiopia

6. ADMINISTRATIVE INFORMATION

6.1. Maximum budget

The maximum budget is \in 50.000. One workshop (mostly one day conference) is foreseen to present the final report to all relevant stakeholders to be organized in Nairobi.

6.2. Logistics

For travel outside Nairobi, the SERECU National Coordinator will provide vehicles and travel support. Travel is foreseen to Ethiopia but not to Somalia due to security challenges. However, some travel costs are unforeseen of which the Coordination team will eventually address e.g. within Kenya and maybe around Addis Ababa.

6.3. Other authorized items to foresee under 'Reimbursable'

The items foreseen under reimbursable costs include: Per diems in Kenya & Ethiopia; international travel; regional travel from Kenya to Ethiopia; local travel in Kenya & Ethiopia; and one workshop in Nairobi.

ANNEX 1

Documentation

- 1. SERECU Financing Agreement, including the Logical Framework.
- Pan-African Programme for the Control of Epizootics (PACE): An Assessment of Veterinary Service Delivery Systems in the Somali Ecosystem - Final Report Compiled for the Somali Ecosystem Rinderpest Eradication Coordination Unit by Dr. Walter Masiga, Julius Kajume and Chris Daborn, August 2006.
- 3. Delegation of the European Commission in Kenya, Somalia Operations- Somali Animal Health Services Project Mid-Term Project Evaluation by Mark M Rweyemamu, January 2007.
- 4. Final Evaluation of the pan-African Programme for the Control of Epizootics (PACE) Final Report by Agrisystems Consortium, September 2006.
- 5. Modelling Rinderpest in the Somali Ecosystem: Spatially Heterogeneous Populations and Multihost Systems- by J.C Mariner et al.
- 6. Pan-African Programme for the Control of Epizootics (PACE): Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) Final Report January 2006- February 2007.
- 7. Pan-African Programme for the Control of Epizootics (PACE): Final Report.
- Assessment of the Suitability and Need to Carry out Phase II of the PPR Vaccine Trial for Use as a Marker Vaccine for Rinderpest (28th of September - 06th of October 2008) E. Couacy-Hymann.
- 9. SERECU II Communication Strategy by TEC Associates Ltd. March 2009.
- SERECU II Knowledge, Skills and Practices (KAP) Survey Report by TEC Associates Ltd, May 2009.
- 11. Communication Consultancy: Final Report May 2009.
- 12. Risk-based Surveillance for Rinderpest Freedom, April 2009: Report Prepared for the Food and Agriculture Organisation of the United Nations and the African Union- Inter-African Bureau for Animal Resources by Angus Cameron, AustVet Animal Health Services Pty Ltd (April 2009).
- 13. On-going Documentation of History of Rinderpest Eradication from Africa: Walter Masiga et al (2009)
- 14. Minutes of SERECU II First and Second Steering Committee Meetings.
- 15. Recommendations of 5th and 6th SERECU Cross-border Technical Harmonisation Meetings.

ANNEX 4. CVS OF THE EVALUATORS

Position:			Company: Qualifications:			
Team Leader		drea MASSARELLI	Transtec SA	DVM, MSc equivalent (I)		
Professional Capa	•					
			20 years spent oversea			
			as well as synthesis skills			
Proven expe	rience at tea	m leader level, for both	n short and long term as	signments;		
Proven expe	rience of EU	/EDF procedures;	C C			
			management, including	logical framework, information and	data	
		, evaluation and partic				
				tion/health and sustainable develo	oment:	
	-	tion of complex progra	-		,	
				increased anotainability anotain		
				ironmental sustainability, gender e	equality, good	
		mics, cultural and hum				
			rience in the Somali Eco	osystem		
Selected Profession					•	
Country	Date(s)	Project Title (brief)			Contractor	
Kenya/Botswana	06/2010	Review of ECTAD			FAO	
Chad	05/2010			pilot transit and service zone for	EU/PAFIB	
		livestock trade as w	vell as design of bovine	certification and traceability	Project	
		scheme	C C			
Kenya	03/2010	Formulation of "Rui	al Development Program	mme" 10 th EDF	EUD Kenya	
Sub-Saharan	12/2009			mme "Reinforcing Veterinary	EU AIDCO	
Africa	02/2010		ca", 10 th EDF All ACP Co			
SADC Region	04/2007			of FMD and the promotion of	EU AIDCO	
O/DO Region	11/2009			ocusing on Zimbabwe, Malawi and	LONIDOO	
	11/2003	Mozambique.	Abo countries, mainly h			
Eritrea	02/2007		regulation of a project for	r the prevention of HPAI	EUD Eritrea	
Sub-Saharan	11/2004			ions. Fight against major animal	EU AIDCO	
Africa	02/2007		diseases, including Rinderpest, in 30 sub-Saharan countries			
Chad	12/02-	PACE Programme,	national coordinator		EU AIDCO	
<u> </u>	10/04					
Sub-Saharan	10/02-	PACE Programme,	Mid Term Review of the	e programme	EU AIDCO	
Africa	12/02					
Chad	11/01-	PACE Programme,	Kick-start of the nationa	al component of the programme	EUD Tchad	
	02/02					
MERCOSUR	07/01-	final evaluation of t	he project ALA 93/143,		EU AIDCO	
	08/01					
Albania	05/01-	Review and harmon	nisation of Albanian legi	slation on Veterinary public health	EUD	
	06/01				Albania	
Honduras	01/99-	Managing NGO inte	erventions in food securi	ty and animal health/production	ECHO	
	09/00			-		
Madagascar	11/99-	Final evaluation of	DELSO Project and form	nulation of a further phase	EU AIDCO	
	12/99					
Yemen	06/98-	Managing NGO inte	erventions in food securi	ty and emergency	ECHO	
	12/98			·, ···································		
Nicaragua	11/97-	Project PRA - DC	Nueva Guinea Mid term	expert on animal health and	Italian Govt	
·······································	02/98	production		. e., or on annumbulin and		
Madagascar	02/90		DELSO Project and acc	essment of EU projects on	EU AIDCO	
madayastar	02/98	abattoirs				
Somalia/Kenya	02/90		ivate veterinary practice	a in Somolia	EU AIDCO	
Comana/Nellya			wate veterinary practice			
Domonia /Durati	07/96			fromowork of anivation time		
Romania/Russia	07/94-		io, several mission in the	e framework of privatisation	EU	
	10/95	activities		1 /* /* 187 / 81 4		
Uganda	12/93-	I raining to farmers	on animal health and pr	oduction practices, West Nile	Italian Govt	
	06/94					
Colombia	03/92-	Feasibility study for	the establishment of a	pig value chain project in Nariño	Italian Govt	
	11/92					
Nicaragua	12/88-	Researcher and tea	acher on animal health a	nd production at University of	Italian Govt	
	11/90					

Position:	Nam	e:	Company:	Qualification	s:	
Disease control	expert Han	HOOGENDIJK	TRANSTEC SA	BSc (Trop A	gr), MSc (Vet	Med), DVM
/ epidemiologist					J // (
Professional						
 30 years agriculture (9.5 years 	professional e/livestock dev), and the EU	elopment, includin (2.5 years).	e livestock sector with g the FAO (4 years), RD	P Livestock Ś	ervices BV (12	years), GTZ
EDF funde	ed assignment	ts for the EC since				
			re than 12 years experien	ce in the South	nern Africa regio	n in Zambia,
	berience in p	ar, and DR Congo. roject monitoring	and evaluation and pr	oject implem	entation includ	ing regional
 Regional v 	work experien		Pacific, Caribbean and Eu , German, French, & knov		nish.	
Selected Pro				neuge er epa		
Country	Date(s)	Project Title (brief)			Funding	Years
Country	Date(3)				Agency	rears
SADC	2009		Promotion of Regional Integr ector (PRINT) - 9 ACP SAD		EU-Aidco	<1
Cambodia	2008 - 2009		tock Production Programme		EU-Aidco	1.5
Montenegro	2007		on and Registration (I&R) - F	hase II.	EU-EAR	<1
SADC	2007	Mid Term Evaluati	on: Promotion of Regional I k sector (PRINT) - 9 ACP S	ntegration in	EU-Aidco	<1
Madagascar	2004 - 2006		veloppement de l'Elevage d		EU-Aidco	2.5
Madagascar	2003	Audit organisationnel des services centraux et EU-Aidco <1				<1
Kosovo	2003		Emergency Farm Reconstruction Project WB / FAO			
Kosovo	2002, 2003	Strengthening Public Veterinary Services Project			EU-EAR	<1 <1
Kosovo	2002		Reconstruction Project		WB / FAO	<1
Surinam	2002	Livestock sector s			RDP International	<1
Mozambique	2002	PROAGRI - Family	Sector Livestock Developme	nt Program	IFAD	<1
The Gambia	2001	Livestock Sector	Development Study		AfDB	<1
Bosnia & Herzegovina	2000	Livestock and Rural Finance Development Project IFAD <1				<1
PR of China	2000	Inner Mongolia An	imal Husbandry Project		Lux- Development	<1
Lithuania	1999, 2000	°	evelopment Project		Senter Internationaal	<1
Eastern Europe	1999		inary Diagnosis and Control	J	EU / PHARE	<1
Caribbean	1999		griculture and Fisheries Prog		EU	<1
Lao PDR	1999		gricultral Development Proje	ct Phase II	IFAD	<1
Croatia	1998 - 01	Farmers Support S	-		WB through Senter	<1
Macedonia	1996 - 02	Private Farmers S	upport Project		WB	<1
Hungary	1995, 1995	Introduction of S/EUROP sheep carcass classification in EU / PHARE <1 Hungary				<1
PR China	1995 - 2000		Development Project		EU	<1
Cambodia	1995	Basic Animal Health Services		VSF	<1	
Zambia	1991 - 94	Livestock Develop			DGIS	3
DR of Congo	1981 - 89	Science, Universit		Veterinary	GTZ	9
Western Samoa	1979 - 80		Production Project		FAO	1
Afghanistan	1976 - 79	Assistance project Kabul	to the Faculty of Veterinary	Science in	FAO	3

ANNEX 5. DETAILED EVALUATION METHOD

As prescribed in the TOR, the Evaluation Team was be based at the AU/IBAR headquarter in Nairobi for the whole duration of the mission, apart from the field visits to Kenya and Ethiopia. Office space, technical and logistical support has been provided by SERECU II and AU/IBAR.

The evaluation was conducted following the guidelines set by the EU in their 2006 set of documents on "Evaluation Methods for the European Union's External Assistance", the "Project Cycle Management Guidelines" (2004) and the 1998 "Review of the DAC Principles for Evaluation of Development Assistance", issued by OECD/DAC.

The methodological approach was based upon:

- ✓ An <u>initial familiarisation</u> with the project and the actors involved, through review of the documents produced by the project and other available documents relevant to the final eradication of rinderpest.
- ✓ This document review and familiarisation led to the <u>identification of a series of issues</u> <u>and questions</u> relevant to the 5 evaluation criteria considered in the evaluation process (relevance, efficiency, effectiveness, impact and sustainability).
- ✓ A <u>series of meetings, interviews and visits</u> aimed at collecting views, data and information on the various activities carried out during the project, completed the first part of the desk and identification phase.

The mission was implemented in three phases (see implementation schedule):

- 4. Desk Phase (Inception and planning phase), from 1 to 9 August;
- 5. Field Phase, from 10 to 18 August,
- 6. Synthesis Phase, from 19 to 27 August.
- 4. Desk Phase (Inception and planning phase)

On arrival the mission team was briefed by the EUD, AU/IBAR and the SERECU II PCU. These meetings were two-way meetings, meant to better understand the objectives of the evaluation mission, the issues involved and exchange on methodological approach and desired outputs/deliverables. Afterwards, the mission embarked on a thorough review of the documentation produced by the project and its partners/stakeholders and further documents referring to rinderpest and its eradication. The mission identified the main issues to study and a series of key questions relevant to the evaluation exercise that represented the guidelines for the following meetings, interviews and visits. The desk report was issued for comments and information on August 10. No major comments have been received; the report was considered approved and the mission schedule endorsed.

5. Field Phase

Field visits have been undertaken in Ethiopia (Addis Abeba and veterinary laboratories in Debre-Zeit and Sebeta) and Kenya (Garissa area, veterinary laboratories in Kabete and Muguga). During the field visits the mission met with decentralised actors, target groups and final beneficiaries of the project. The mission also meet with the SERECU Somali team, the

SAHSP staff and with the authorities of the 3 National Ministries beneficiaries of the project. Interviews with other stakeholders –FAO, OIE, KWS, EU Delegations to Somalia and Ethiopia, NGOs- have been equally undertaken during the field phase. As prescribed in the TOR, a Draft Report (having the value of an enlarged *Aide-memoire*) was prepared and submitted by the mission on Thursday 19 August, before the debriefing meeting.

6. Synthesis Phase

Following the field phase, the outcomes, findings, conclusions and recommendations of the evaluation mission have been presented to the client, the project and the beneficiary institution in a de-briefing meeting held in the EUD premises on Thursday 19 August. Subsequently the findings have been presented and discussed with the stakeholders during a half-day workshop held at Nairobi Serena Hotel on Friday 20 August. Comments and remarks raised during the workshop have been included in the draft final report. The draft final report was preliminarily discussed with the client, the project and the beneficiary institution in a "wrap-up" meeting hold at AU/IBAR on Thursday 26 August.

The draft final report of the evaluation mission will be issued by TRANSTEC in 6 copies maximum 14 days after the end of the field phase. The final version of the report will be submitted by the contracted company in 6 copies 14 days after reception of comments.

Issues dealt with during the final evaluation are primarily the implementation process and achievements of the SERECU II project from 2008 to date. The FE documented lessons learnt in terms of intervention selection and project implementation. Specifically, the evaluation assessed, verified and analyzed the performance of the project, the integration and impact of cross cutting issues of the project.

A series of questions (see table 1 below) relevant to the evaluation have been prepared and used during the evaluation exercise. The second column of the table shows the relevance of these questions in relation to the evaluation criteria. The team interviewed SERECU II management, project implementation partners and stakeholders and carefully analysed project documents to find answers to these questions.

Tabl	e 1.	
	Questions:	Evaluation criteria:
1.	Was the design of the project appropriate?	Did the project address the identified
2.	Did the stated objective correctly address the problems and real needs of the target groups?	problems and needs (Relevance of the programme)
3.	Were project inputs economically converted into results?	Sound management and value for money
4.	Was the use of the project resources cost-effective?	(Efficiency)
5.	Have the SERECU II project purpose and results been achieved?	Achievement of purpose (Effectiveness)
6.	Did SERECU produce any sustainable changes – positive / negative, intended/un-intended on the target groups?	Achievement of wider effects (Impact)
7.	Are some of the SERECU benefits/outputs likelihood to be continued after end of the project?	
8.	What sustainability measures have SERECU project put in place?	Likely continuation of achieved regults
9.	Were the activities of the SERECU project implemented in participatory and empowering manner?	Likely continuation of achieved results (Sustainability)
10.	Were the key stakeholders of the project involved in planning and execution of activities, and steering the project?	

No major difficulties have been encountered during the evaluation mission. Logistic was assured by the project team, especially the Project Administrative Assistant, Ms Shadra Zaid, who efficiently liaised with all persons to be interviewed/met and with the national liaison officer to organize visits in the field. Some minor delays in the implementation of the first phase have occurred due to the referendum day in Kenya (Wednesday 4 August) as most of the Kenyan officers travelled to their towns of origin to express their preferences in the framework of the referendum. The mission used this time to study in detail the documents produced by the project.

The biggest constraint to the mission was the limited time allocated for the whole evaluation. Indeed the team was squeezed in its activities and had to organize visits and meetings in a very tight manner, with quite low flexibility. Luckily, no unforeseen events occurred and the schedule was respected. Time for writing intermediate reports (desk phase report and draft report) was also very limited, implying extra-time and week-ends (unpaid) work for the mission. It is advisable for future similar missions to allocate more time for report writing or to reduce the number of reports or review their content.

ANNEX 6. IMPLEMENTATION SCHEDULE

Time schedule - Final Evaluation of SERECU II

			AUGUST 2010																									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	Week ends																											
	Travel day																											
Inception &	Briefing with EUD, AU/IBAR & SERECU PCU																											
Planning Phase	Documents review																											
	Logistic arrangements																											
	Field Mission Planning																											
	Submission of tentative Time Schedule																											
	Meeting with EUD; Meeting with AU/IBAR																											
	Meeting with SERECU PCU and EUD																											
	Work with SERECU PCU																											
	Submission of Desk Phase report																										\Box	_
Field Phase	Mission to Kenya (Garissa)	Т																									Т	
	Visit to Kabete, Muguga Lab and KWS																											
	Consultation with SERECU Somalia Staff			1																								
	Mission to Ethiopia																											_
Synthesis Phase	Summary of findings and report drafting	Т	Τ																								Т	
	Debriefing with EUD, AU/IBAR and PCU			1																								
	Stakeholders workshop																											
	Departure of Disease Control Expert			1	1	1																						
	Report drafting			1	1																							
	Wrap-up meeting with EUD and AU/IBAR																											
	Departure of Team Leader		T	1																								

ANNEX 7. LITERATURE AND DOCUMENTATION CONSULTED

- 1. Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) Project II. Financing Agreement, including the Logical Framework.
- 2. Programme Estimate No. 1. Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) Project II.
- 3. Programme Estimate No. 2. Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) Project II.
- 4. Agreement between FAO-AU/IBAR for the implementation of SERECU II, March 2009.
- 5. Agreement between OIE-AU/IBAR for the implementation of SERECU II, January 2009.
- Agreement between the Transitional Federal Government of Somalia (represented by the Ministry of Livestock, Fisheries and Environment – Terra Nuova/SAHSP II -AU/IBAR for the implementation of SERECU II, PE1 May 2008
- PE 1 Final Implementation Report (May 14th 2008 June 30th 2009). Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) II Project. (September 2009).
- 8. SERECU II Kenya component. Annual Technical Report May 2008 to June 2009.
- 9. SERECU II Kenya component Final Technical Report May 2008 June 2010.
- 10. SERECU II Ethiopia component. Annual Technical Report PE2 July 2010.
- 11. SERECU II Ethiopia component. Final Report PE1 and PE2 August 2010.
- 12. FAO, SERECU II PE1 financial report, September 2009.
- Minutes of the first Steering Committee Meeting of Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) Project II held on 9th October 2008 at AU / IBAR offices Nairobi-Kenya.
- Minutes of the second Steering Committee Meeting of Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) Project II held on 5th March 2009 at Almond Resort, Garissa-Kenya.
- Minutes of the third Steering Committee Meeting of Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) Project II held on 30th October 2009 at Palace Hotel, Lamu – Kenya.
- Minutes of the fourth Steering Committee Meeting of Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) Project II held on 31st March 2010 at Axum Hotel, Addis Ababa – Ethiopia.
- 17. 5th SERECU Cross-Border Technical Harmonisation Workshop. Recommendations. Addis Ababa, Ethiopia. 24 26 June 2008.
- 18. 6th SERECU Cross-Border Technical Harmonisation Meeting. Recommendations. Garissa, Kenya. 3 5 March 2009.
- 19. 7th SERECU Cross-Border Technical Harmonisation Meeting. Recommendations. Dire Dawa, Ethiopia. 30 June 1 July 2009.
- 20. 8th SERECU Cross-Border Technical Harmonisation Meeting. Recommendations. Lamu, Kenya. 28 29 October 2009.
- 21. 9th SERECU Cross-Border Technical Harmonisation Meeting. Recommendations. Addis Ababa, Ethiopia. 29 -30 March 2010.
- 22. Mid-term technical report for letter of agreement between AU/IBAR and FAO, January 2008.
- 23. Final technical report for letters of agreement between AU/IBAR and officer in charge for FAO Somalia, January 2008
- 24. Internal evaluation (Financial & Technical) of SERECU II, AU/IBAR, April 2010.

- 25. Pan-African Programme for the Control of Epizootics (PACE): Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) Final Report January 2006-February 2007.
- 26. Pan-African Programme for the Control of Epizootics (PACE): Final Report, March 2007.
- 27. Pan-African Programme for the Control of Epizootics (PACE): An Assessment of Veterinary Service Delivery Systems in the Somali Ecosystem Final Report Compiled for the Somali Ecosystem Rinderpest Eradication Coordination Unit by Walter Masiga, Julius Kajume and Chris Daborn, August 2006.
- Delegation of the European Commission in Kenya, Somalia Operations- Somali Animal Health Services Project - Mid-Term Project Evaluation by Mark M Rweyemamu, January 2007.
- 29. Final Evaluation of the Pan-African Programme for the Control of Epizootics (PACE) -Final Report by Agrisystems Consortium, September 2006.
- 30. Modelling Rinderpest in the Somali Ecosystem: Spatially Heterogeneous Populations and Multi-Host Systems by J.C Mariner et al.
- 31. Communication Component SERECU II Project. Inception Report. TEC Associates Ltd. (February 2009).
- 32. Communication Component SERECU II Project. Knowledge, Attitudes and Practises -Survey Report. TEC Associates Ltd. (May 2009).
- 33. Communication Component SERECU II Project. Publicity Assignment Final Report. TEC Associates Ltd. (May 2009).
- 34. Communication Component SERECU II Project. SERECU Communication Consultancy - Final Report. TEC Associates Ltd. (May 2009).
- 35. Risk-based Surveillance for Rinderpest Freedom: Report Prepared for the Food and Agriculture Organisation of the United Nations and the African Union- Inter-African Bureau for Animal Resources by Angus Cameron, AustVet Animal Health Services Pty Ltd (April 2009).
- 36. The Eradication of Rinderpest from Africa, A Great Milestone. Walter Masiga and Mboya E. Burudi (2009).
- Expert mission to AU / IBAR Nairobi (Kenya): Assessment of the suitablility and need to carry out Phase II of the PPR vaccine trial for use as a marker vaccine for rinderpest.
 E. Couacy-Hymann. (28 September – 6 October 2008).
- 38. Strategic Plan 2010 2014. African Union Interafrican Bureau for Animal Resources. Nairobi - Kenya. December 2009.
- 39. 8th Conference of Ministers Responsible for Animal Resources in Africa. Report of the Conference Proceedings and Resolution. 13 14 May 2010. Entebbe, Uganda.
- 40. A proposed Livestock Diseases Surveillance Strategy to support risk reduction and empowerment in relation to export of livestock products with a Rinderpest Exit Strategy for Africa (2011 – 2016) Concept Note.
- Evaluation of Laboratories testing sera from Somalia. OIE Mission to Kenya, June 15 30th 2009. By Dr John Anderson MBE.
- 42. Cost-Benefit Analysis of Rinderpest Eradication from Ethiopia and Kenya. A consultancy report submitted to AU-IBAR by John Omiti and Patrick Irungu. February 2010.
- 43. Simulation of an outbreak of Rinderpest, Somali ecosystem (SES), Moyale (Kenya / Ethiopia), 15 -20 June 2010. Report submitted by: Julius K.M. Kajume.
- 44. Towards Global Declaration of rinderpest Eradication in 2011 and Strategies for a Post-Rinderpest World. FAO. 2010.

- 45. Rinderpest, Contingency plan for Kenya. March 2010.
- 46. Peste des Petits Ruminants, Contingency Plan for Somaliland. June 2010.
- 47. Report on FMD participatory disease search in Somali Ecosystem Districts. February 2010.
- 48. Report on foot and Mouth Disease (FMD), Contagious Bovine Pleuropneumonia (CBPP), and Rift Valey Fever Disease (RVF) prevalence survey and continuing vigilance for Rinderpest in Kenya. April 2010.

ANNEX 8. LIST OF PERSONS/ ORGANISATIONS

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- 50. Mr Gerald Nyamatcherenga, Information and Communication Expert, AU-IBAR
- 51. Mr Eric Kimani, Communications Assistant, AU-IBAR

ANNEX 9. ATTENDANCE LIST, SERECU II STAKEHOLDERS WORKSHOP

SERECU STAKEHOLDERS' WORKSHOP 20TH AUGUST 2010, NAIROBI, KENYA

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ANNEX 10. ORGANOGRAMME OF AU/IBAR

Heads of UNITS/ SECTIONS

> Colour code: Positions in Green are regular Senior AU positions (P3 and above). Positions in yellow are seconded staff. Others are in light blue Projects: Projects are those that were ongoing as at 1st July 2010. Black lines indicate reporting lines. TL: Team Leader - HR: Human Resources - IT: Information Technologies - T&M: Trade and Marketing



ANNEX 11. OTHER TECHNICAL ANNEXES

- Annex 11 A GUIDELINES FOR THE SURVEILLANCE OF RINDERPEST
- Annex 11 B TOR FOR THE STEERING COMMITTEE OF SERECU II
- Annex 11 C TOR FOR TECHNICAL STAFF OF SERECU II
ANNEX 11 A - GUIDELINES FOR THE SURVEILLANCE OF RINDERPEST

APPENDIX 3.8.2.

GUIDELINES FOR THE SURVEILLANCE OF RINDERPEST

Article 3.8.2.1.

Purposes of the document

In order to receive OIE recognition of rinderpest freedom, a country's national authority must present for consideration a dossier of information relating to its livestock production systems, rinderpest vaccination and eradication history and the functioning of its <u>Veterinary</u> <u>Services</u>. The dossier must contain convincing evidence derived from an animal disease surveillance system that sufficient evidence has accrued to demonstrate that the presence of rinderpest virus would have been disclosed were it to be present. Guidelines for the structure and the functioning of <u>Veterinary Services</u> and diagnostic support services are provided in Chapters <u>1.3.3</u>. and <u>1.3.4</u>. of the <u>Terrestrial Code</u>. A Member Country must also be in compliance with its OIE reporting obligations (Chapter <u>1.1.2</u>. of the <u>Terrestrial Code</u>).

Article 3.8.2.2.

Definitions

1. Rinderpest

For the purpose of this Appendix, rinderpest is defined as an infection of large ruminants (cattle, buffaloes, yaks, etc.), small ruminants, pigs and various wildlife species within the order Artiodactyla, caused by rinderpest virus. In small ruminants and various species of wildlife, particularly antelopes, infection generally passes without the development of frank clinical signs. Characteristic clinical signs and pathological lesions are described in Chapter 2.1.4. of the *Terrestrial Manual*.

<u>Outbreaks</u> of rinderpest in cattle may be graded as per-acute, acute or sub-acute. Differing clinical presentations reflect variations in levels of innate host resistance (*Bos indicus* breeds being more resistant than *Bos taurus*), and variations in the virulence of the attacking strain. It is generally accepted that unvaccinated populations of cattle are likely to promote the emergence of virulent strains and associated epidemics while partially vaccinated populations favour the emergence of mild strains associated with endemic situations. In the case of per-acute cases the presenting sign may be sudden death. In the case of sub-acute (mild) cases, clinical signs are irregularly displayed and difficult to detect.

- Freedom from rinderpest means freedom from rinderpest virus infection.
- 2. <u>Rinderpest vaccines</u>

For the purpose of this Appendix and the <u>*Terrestrial Code*</u>, OIE-recognised rinderpest vaccines currently in use, or likely to become so in the forseeable future, are considered to be commercial modified live vaccines produced from attenuated rinderpest virus (referred to as 'rinderpest vaccine') produced in accordance with Chapter 2.1.4. of the <u>*Terrestrial Manual*</u>.

Article 3.8.2.3.

Rinderpest surveillance

General guidelines on animal disease surveillance are outlined in Appendix <u>3.8.1.</u> of the <u>*Terrestrial Code*</u>.

Rinderpest must be a *notifiable disease* i.e. notification of *outbreaks* of rinderpest as soon as detected or suspected must be brought to the attention of the <u>Veterinary Authority</u>.

The precise surveillance information required for establishing freedom will differ from country to country depending on factors such as the former rinderpest status of the country, the regional rinderpest situation and accreditation status, the time elapsing since the last occurrence of rinderpest, livestock husbandry systems (e.g. extensive pastoralism, nomadism and transhumance versus sedentary agropastoralism) and trading patterns.

Evidence of efficiency of the surveillance system can be provided by the use of performance indicators.

Surveillance results presented will be expected to have accrued from a combination of surveillance activities including some or all of the following:

1. <u>A routine national animal disease reporting system supported by evidence of its efficiency and follow-up - an on-going, statutory, centrally organised system of reporting</u>

Ideally disease reports should be expressed in a Geographical Information System environment and analysed for clustering of observations and followed up.

- Emergency disease reporting systems and investigation of epidemiologically significant events ('stomatitis-enteritis syndrome') Emergency reporting systems can be devised to short-circuit normal passive reporting systems to bring suspicious events to the fore and lead to rapid investigation and tracing. All such investigations should be well documented for presentation as an outcome of the surveillance system.
- Detection and thorough investigation of epidemiologically significant events ('stomatitis-enteritis syndrome') which raise suspicion of rinderpest supported by evidence of efficiency of the system Laboratory examination undertaken to confirm or rule out rinderpest is given extra

credibility if it is accompanied by the results of differential diagnostic examinations. 4. Searching for evidence of clinical rinderpest

4. <u>Searching for evidence of clinical rinderpest</u>

Active search for disease might include participatory disease searching combined with village disease searching, tracing backwards and forwards, follow-up and investigation.

- 5. <u>Serosurveillance</u>
 - a. Randomised serosurveys

Statistically selected samples from relevant strata within the host populations are examined to detect serological evidence of possible virus circulation.

A sampling unit for the purposes of disease investigation and surveillance is defined as a group of animals in sufficiently close contact that individuals within the group are at approximately equal risk of coming in contact with the virus if there should be an infectious animal within the group. In most circumstances, the sampling unit will be a herd which is managed as a unit by an individual or a community, but it may also be other epidemiologically appropriate groupings which are subject to regular mixing, such as all animals belonging to residents of a village. In the areas where nomadic or transhumant movements exist, the sampling unit can be the permanent bore holes, wells or water points. Sampling units should normally be defined so that their size is generally between 50 and 1,000 animals.

i. Criteria for stratification of host populations

Strata are homogeneously mixing sub-populations of livestock. Any disease surveillance activities must be conducted on populations

stratified according to the management system, and by herd size where this is variable. Herds, or other sampling units, should be selected by proper random statistical selection procedures from each stratum.

ii. Field procedures and sample sizes

Annual sample sizes shall be sufficient to provide 95% probability of detecting evidence of rinderpest if present at a prevalence of 1% of herds or other sampling units and 5% within herds or other sampling units. This can typically be achieved by examining 300 herds per stratum per year, but procedures for sampling should be in accordance with the "Guide to Epidemiological Surveillance for Rinderpest"¹, or another procedure that would achieve the same probability of detection.

Where the sampling frame of herds is known, herds shall be selected for examination by the use of random number tables. Otherwise, samples of herds can be selected by taking the nearest herd to a randomly selected map reference, provided that the herds are evenly distributed. Failing this, any herd(s) within a fixed radius of randomly selected map references should be sampled. It must be compulsory for any selected herd to be examined or tested as required.

In carrying out clinical surveillance for evidence of rinderpest, all animals in selected herds or sampling units will be examined by a <u>veterinarian</u> for signs of the disease, especially mouth lesions. Any positive result shall be evaluated using epidemiological and laboratory methods to confirm or refute the suspicion of rinderpest virus activity. All animals born after the cessation of vaccination and more than one year old will be eligible for serological testing.

Where operational considerations require it, the number of eligible animals tested within each sampled herd may be reduced. This will reduce the probability of within-herd detection and there must be at least a compensatory increase in the number of herds sampled, so that the required 95% probability of detecting 1% between-herd prevalence is maintained.

b. Risk-focussed serosurveillance

Risk-focussed serosurveillance differs from randomised serosurveillance in that it increases detection sensitivity by obtaining samples from areas/populations determined to be at higher risk of infection, so as to detect serological evidence of possible virus circulation. The operational modalities for risk-based focussing of surveillance require definition (randomisation within defined focus, high risk animals, etc.). The extent to which randomisation needs to be retained in the generation of risk-focussed serosurveillance data needs to be established.

Focussing can be achieved by reference to some or all of the following:

- i. Historical disease patterns (prior probability mapping) clinical, participatory and laboratory-based
- ii. Critical population size, structure and density
- iii. Livestock husbandry and farming systems

¹ JAMES A.D. (1998). Guide to epidemiological surveillance for rinderpest. *Rev. Sci. Tech.* 17 (3), 796–824.

- iv. Movement and contact patterns markets and other trade-related movements
- v. Transmission parameters (e.g. virulence of the strain, animal movements)
- vi. Wildlife and other species demography.

Article 3.8.2.4.

Selection of cattle and buffaloes for serosurveillance

Ageing cattle and Asian buffaloes for the purpose of serosurveillance:

Mis-ageing of cattle selected for serosurveillance is the most common source of error. Colostral immunity can persist almost up to one year of age when measured by the H c-ELISA. Thus, it is essential to exclude from sampling buffaloes and cattle less than one year of age. In addition, it is frequently necessary to be able to exclude those which are older than a certain age, for example, to select only those born after cessation of vaccination.

Accounts of the ages for eruption of the incisor teeth vary markedly and are clearly dependent on species, breed, nutritional status and nature of the feed.

Pragmatically, and solely for the purposes of serosurveillance, it can be accepted that:

- a. cattle having only one pair of erupted permanent central incisor teeth are aged between 21 and 36 months (Asian buffaloes 24-48 months);
- b. cattle having only two pairs of erupted permanent central incisor teeth are aged between 30 and 48 months (Asian buffaloes 48-60 months).

Thus selecting a cohort of cattle possessing only one pair of permanent incisors will preclude any interference from maternal immunity derived from earlier vaccination or infection and ensure that vaccinated cattle are not included if vaccination ceased 3 years or more previously (for Asian buffaloes 4 years or more).

Although it is stressed here that animals with milk teeth only are not suitable for surveillance based on serology, they are of particular interest and importance in surveillance for clinical disease. After the loss of colostral immunity, by about one year of age, these are the animals which are most likely to suffer the more severe disease form and in which to look for lesions indicative of rinderpest.

Article 3.8.2.5.

Wildlife surveillance where a significant susceptible wildlife population exists

There are some key wildlife populations, especially African buffaloes, which act as sentinels for rinderpest infection. Where a significant population of a susceptible wildlife species exists, serosurveillance data are required to support absence of infection. These populations should be monitored purposively to support the dossiers to be submitted for freedom from rinderpest virus infection. Detection of virus circulation in wildlife can be undertaken indirectly by sampling contiguous livestock populations.

Obtaining meaningful data from wildlife surveillance can be enhanced by close coordination of activities in the regions and countries. Both purposive and opportunistic samplings are used to obtain material for analysis in national and reference laboratories. The latter are required because most countries are unable to perform the full testing protocol for detecting rinderpest antibodies in wildlife sera.

Purposive sampling is the preferred method to provide wildlife data to evaluate the status of rinderpest infection. In reality, the capacity to perform purposive work in the majority of

countries remains minimal. Opportunistic sampling (hunting) is feasible and it provides useful background information.

Wildlife form transboundary populations; therefore, any data from the population could be used to represent the result for the ecosystem and be submitted by more than one country in a dossier (even if the sampling was not obtained in the country submitting). It is therefore recommended that the countries represented in a particular ecosystem should coordinate their sampling programmes.

The standards for serosurveillance are different from that set for cattle because the serological tests are not fully validated for wildlife species and financial and logistic constraints of sampling prevent collection of large numbers of samples.

From the collective experience of the laboratories and experts over the years, an appropriate test protocol is based on the high expected sero-prevalence in a previously infected buffalo herd (99% seroconversion of eligible animals within a herd), which is detected using a test, which is 100% sensitive. No single test can achieve this; however, combining H c-ELISA to VNT raises sensitivity close to 100%.

In the order of 1-2% of a herd of African buffaloes must be sampled to ensure that no positive case is missed. For example in a herd of 300 buffaloes, five animals should be sampled and the above multiple test protocol followed. Where the serological history of the herd is known from previous work (as might be the case for a sentinel herd), repeat sampling need only focus on the untested age groups, born since the last known infection. Appropriate sampling fraction for other wildlife species are less well defined, as social organization (herd structure, likely contact rates, etc.) vary. The sample needs to be taken according to the known epidemiology of the disease in a given species. Opportunistic samples, which are positive, should not be interpreted without a purposive survey to confirm the validity of these results. Opportunistic sampling cannot follow a defined protocol and therefore can only provide background information.

Article 3.8.2.6.

Evaluation of applications for accreditation of freedom from rinderpest

Evaluation of applications for the status of freedom from rinderpest will be the responsibility of the OIE Scientific Commission for Animal Diseases which can request the Director General if the OIE to appoint an ad hoc group in order to assist in reaching an informed decision to present to the OIE International Committee for approval.

The composition and method of selection of the ad hoc group shall be such as to ensure both a high level of expertise in evaluating the evidence and total independence of the group in reaching conclusions concerning the disease status of a particular country.

Article 3.8.2.7.

Steps to be taken to declare a country to be free from rinderpest

Recognition of the status 'free from rinderpest' is given to a Member Country. Where traditionally managed livestock move freely across international borders, groups of Member Countries may usefully associate themselves into a group for the purposes of obtaining data to be used for mutually supportive applications for individual country accreditation.

For the purpose of this Appendix, the following assumptions are made:

a. that within most previously infected countries, rinderpest vaccine will have been used to control the rate of infection;

- b. that within an endemically infected population there will be a large number of immune hosts (both vaccinees and recovered animals);
- c. that the presence of a proportion of immune hosts within a vaccinated population could have led to a slowing of the rate of virus transmission and possibly the concomitant emergence of strains of reduced virulence, difficult to detect clinically;
- d. that the virulence of the virus (and therefore the ease of clinical detection) may or may not increase as the herd immunity declines following withdrawal of vaccination; however, continuing transmission will generate serological evidence of their persistence.

Before accreditation can be considered, countries which have controlled the disease by the use of rinderpest vaccine must wait until an unvaccinated cohort is available to allow meaningful serological surveillance to be conducted.

The OIE has concluded that the majority of countries have stopped vaccinating for a sufficient length of time for it now to be feasible that a single submission of evidence gained over 2 years of appropriate surveillance shall be sufficient to gain rinderpest free accreditation.

A Member Country accredited as free from rinderpest must thereafter submit annual statements to the Director General of the OIE indicating that surveillance has failed to disclose the presence of rinderpest, and that all other criteria continue to be met.

A country previously infected with rinderpest which has not employed rinderpest vaccine for at least 25 years and has throughout that period detected no evidence of rinderpest virus disease or infection may be accredited as free from rinderpest by the OIE based on historical grounds, provided that the country:

- has had throughout at least the last 10 years and maintains permanently an adequate animal disease surveillance system along with the other requirements outlined in Article <u>3.8.1.6.;</u>
- is in compliance with OIE reporting obligations (Chapter <u>1.1.2.</u>).

The <u>Veterinary Authorities</u> of the Member Country must submit a dossier containing evidence supporting their claim to be free from rinderpest on a historical basis to the Director General of the OIE for evaluation by the OIE Scientific Commission for Animal Diseases and accreditation by the OIE International Committee. The dossier should contain at least the following information:

- a description of livestock populations, including wildlife;
- the history of rinderpest occurrence in the country and its control;
- an affirmation that rinderpest has not occurred for 25 years, that vaccine has not been used during that time, and that rinderpest is a *notifiable disease*;
- evidence that in the last 10 years the disease situation throughout the Member Country has been constantly monitored by a competent and effective veterinary infrastructure that has operated a national animal disease reporting system submitting regular (monthly) disease occurrence reports to the <u>Veterinary Authority</u>;
- the structure and functioning of the *Veterinary Services*;
- the Member Country operates a reliable system of risk analysis based importation of livestock and livestock products.

Evidence in support of these criteria must accompany the Member Country's accreditation application dossier. In the event that satisfactory evidence is not forthcoming, the OIE may seek clarification or refer the dossier back to the originators, giving its reasons for so doing. Under such circumstances a fresh dossier would be entertained in due course. OR

A Member Country having eradicated rinderpest within the last 25 years, wishing to be accredited free from rinderpest and having ended rinderpest vaccination must initiate a twoyear surveillance programme to demonstrate freedom from rinderpest whilst banning further use of rinderpest vaccine. The step of accreditation as free from rinderpest is subject to meeting stringent criteria with international verification under the auspices of the OIE.

A country historically infected with rinderpest but which has convincing evidence that the disease has been excluded for at least two years and is not likely to return, may apply to OIE to be accredited as free from rinderpest. The conditions which apply include that an adequate animal disease surveillance system has been maintained throughout at least that period.

The <u>Veterinary Authority</u> of the Member Country must submit a dossier containing evidence supporting their claim to be free from rinderpest to the Director General of the OIE for evaluation by the OIE Scientific Commission for Animal Diseases and accreditation by the OIE International Committee showing that they comply with:

the provisions outlined in Chapter 2.2.12. of the Terrestrial Code;

OIE reporting obligations outlined in Chapter <u>1.1.2.</u> of the <u>Terrestrial Code</u>.

Other conditions that apply are:

- The Member Country affirms that rinderpest has not occurred for at least 2 years, that vaccine has not been used during that time, and that rinderpest is a *notifiable disease*.
- The <u>Veterinary Authority</u> has issued orders curtailing the distribution and use of rinderpest vaccine in livestock.
- The <u>Veterinary Authority</u> has issued orders for the recall and destruction of rinderpest vaccine already issued.
- The <u>Veterinary Authority</u> has issued orders restricting the importation of rinderpest vaccine into, or the further manufacture of rinderpest vaccine within, the territory under his jurisdiction. An exception can be made for establishing a safeguarded rinderpest emergency vaccine bank under the control of the Chief Veterinary Officer who can demonstrate that no calls have been made on that vaccine bank.
- The <u>Veterinary Authority</u> has set in place a rinderpest contingency plan.
- Over the previous 2 years at least, the disease situation throughout the Member Country has been constantly monitored by a competent and effective infrastructure that has operated a national animal disease reporting system submitting regular (monthly) disease occurrence reports to the <u>Veterinary Authority</u>.
- All *outbreaks of disease* with a clinical resemblance to rinderpest have been thoroughly investigated and routinely subjected to laboratory testing by an OIE recognised rinderpest-specific test within the national rinderpest laboratory or at a recognised reference laboratory.

The dossier shall contain:

- the results of a continuous surveillance programme, including appropriate serological surveys conducted during at least the last 24 months, providing convincing evidence for the absence of rinderpest virus circulation;
- a description of livestock populations including wildlife;
- the history of rinderpest occurrence in the country and its control;
- an affirmation that rinderpest has not occurred for at least 2 years, that vaccine has not been used during that time, and that rinderpest is a *notifiable disease*;
- evidence that in the last 2 years the disease situation throughout the Member Country has been constantly monitored by a competent and effective veterinary infrastructure

that has operated a national animal disease reporting system submitting regular (monthly) disease occurrence reports to the <u>Veterinary Authority</u>;

- the structure and functioning of the *Veterinary Services*;
- the Member Country operates a reliable system of risk analysis based importation of livestock and livestock products.

In the event that satisfactory evidence in support of the application is not forthcoming, the OIE may seek clarification or refer the dossier back to the originators, giving its reasons for so doing. Under such circumstances a fresh dossier would be entertained in due course.

Article 3.8.2.8.

Rinderpest outbreaks after the accreditation process and recovery of rinderpest free status

Should there be an <u>outbreak</u>, or <u>outbreaks</u>, of rinderpest in a Member Country at any time after recognition of rinderpest freedom, the origin of the virus strain must be thoroughly investigated. In particular it is important to determine if this is due to the re-introduction of virus or re-emergence from an undetected focus of infection. The virus must be isolated and compared with historical strains from the same area as well as those representatives of other possible sources. The <u>outbreak</u> itself must be contained with the utmost rapidity using the resources and methods outlined in the Contingency Plan.

After elimination of the *outbreak*, a Member Country wishing to regain the status 'free from rinderpest' must undertake serosurveillance to determine the extent of virus spread.

If investigations show the <u>outbreak</u> virus originated from outside the country, provided the <u>outbreak</u> was localised, rapidly contained and speedily eliminated, and provided there was no serological evidence of virus spread outside the index infected area, accreditation of freedom could proceed rapidly. The country must satisfy the OIE Scientific Commission for Animal Diseases that the <u>outbreaks</u> were contained, eliminated and did not represent endemic infection.

An application to regain the status free from rinderpest shall not generally be accepted until both clinical and serological evidence shows that there has been no virus transmission for at least 3 or 6 months, depending on whether or not stamping-out or vaccination respectively has been applied.

ANNEX 11 B – TOR FOR THE SC OF SERECU II

THE TERMS OF REFERENCE FOR THE STEERING COMMITTEE OF THE SOMALI ECOSYSTEM RINDERPEST ERADICATION COORDINATION UNIT (SERECU) PROJECT II

I Background

SERECU II is a two-year project of AU-IBAR supported by the EU and coordinates all rinderpest surveillance activities in the Somali ecosystem aiming at the final eradication of the disease and individual country recognition of freedom by the World Organization for Animal Health (OIE). The Financing Agreement (FA) worth €4 million was signed by AU-IBAR on 29th February 2008 in Nairobi.

The first phase of SERECU was realized in 2006 as part of the since concluded PACE programme, plus additional 9th EDF funding from the Somali Animal Health Services Project (SAHSP) for field activities in Somalia. An interim phase supported by AU/IBAR, FAO/GREP and FAO/Somalia bridged the two phases.

The overall objective of the project is to contribute to the reduction of poverty of those involved in the livestock-farming sector and of the wider populations in the three countries by enhancing livestock development and trade opportunities resulting from the progress made in OIE accreditation of rinderpest freedom for the SES countries.

The expected results are:

- National animal disease early warning and response capacities functional and coordinated at SES level
- Rinderpest surveillance in SES coordinated and harmonized
- SES countries' accreditation process guided and supported

A Steering Committee (SC) representing key partners was foreseen in the FA

1I Mandate and Functions of the PSC

To provide the appropriate scientific, technical and management guidance as well as oversee and validate the overall direction and policy of the project.

Specifically, the SC shall:

- a) Verify proposed programme estimates
- b) Facilitate the overall project implementation including monitoring and evaluation
- c) Review project progress reports
- d) Review technical and financial documents reports

III. Composition and Membership

The SC shall be made up of the following members

a) Full status

- 1. The Regional Authorizing Officer (RAO), the contracting authority
- 2. The Chief Animal Health Officer, being the supervisor
- 3. A representative of FAO-GREP
- 4. Director of Veterinary Services, Kenya
- 5. Director-General, Animal Health, Somalia
- 6. Head, Animal and Plant Health Regulatory Department, Ethiopia

b) Observer status

- 1. Representative of the Head of EC Delegation in Kenya
- 2. Representative of the Somalia Special Envoy
- 3. Technical Advisor, SAHSP

c) Ex-officio

- 1. The Project Coordinator, being the Imprest Administrator
- 2. The Head of Project Support Unit, being the Imprest Accounting Officer

Other relevant donors and international organisations may be co-opted into the SC on observer status as necessary.

IV Functioning Modalities

a). Membership Criteria

- 1. The SC Members are relevant partners active in the eradication of rinderpest in the Somali ecosystem.
- 2. The SC Members have the capacities relevant to exercise their role on the committee from technical, professional and strategic planning point of view
- 3. The individuals appointed to serve on the Steering Committee by their respective institutions have the actual power of representation of such organisations

b). Meeting Frequency, Convening and Chairing

- 1. The SC shall meet twice a year, or more frequently depending on project needs
- 2. Special procedures will be developed and adopted to assure efficient working of the programme and avoid delays in the implementation (i.e verification of programme estimates through email exchanges, reports etc
- 3. The SC meetings shall be held back to back with other IBAR implemented projects' steering committee meetings whenever feasible for optimal results
- 4. The Director IBAR shall chair the SC meetings; while the representative of FAO GREP shall be the first vice chair and the CVO of the host country the second vice chair
- 5. The SERECU II Coordinator shall be the secretary to the Steering Committee
- 6. The date, time and venue for each SC meeting shall be determined during the previous meeting and included in the minutes of that meeting, apart from the first meeting for

which these details will be communicated in a written invitation by the implementing agency

c) Procedures for Agenda and Minutes

- 1. The Secretary in consultation with the chairman shall prepare the agenda for each meeting; it will be proposed to the other members at the beginning of the meeting for their comment and approval, so that items can be modified or added if needed
- 2. The secretary to the Steering Committee shall draft the minutes of each meeting and circulate to members of the SC within 14 days of the meeting. Members of the Steering Committee shall approve the minutes within five working days from the date of circulation. Failure to respond within the stipulated period shall be deemed to constitute approval of the minutes
- 3. The chair/ secretariat has the right to refuse/ or accept an item on the agenda, but members may wish to raise an item under 'other business' if necessary and time permitting
- 4. The SC meeting format shall be such that item one of the agenda shall be approval of the minutes of the last meeting. Item two shall deal with matters arising from minutes, including reports on the follow-up to agreements of previous meeting. The final item(s) shall be any other business raised by any member of the committee
- 5. The minutes shall record only deliberations reached against each agenda item, not the detailed discussion, unless so determined by the members for specific issues. The minutes should also identify the persons or organizations responsible for following up or implementing an agreement reached and time frame.
- 6. The approved minutes shall be appended to the half yearly project reports.
- 7. If the normal cycle of Steering Committee meetings is interrupted, the SERECU Coordinator shall include this information in the half yearly reports, together with an explanation of why meetings were not held
- 8. Archiving of the minutes of meetings will be done by the office of the secretariat and kept as a complete record. This can be accessed by SC members.
- 9. The SC reserves the right to co-opt observers to the meeting. In such cases the observers must have relevance to the meeting and do not have voting privileges

d) Requirements for validity of deliberations: quorum, voting mechanism and timing

- 1. The *quorum* to hold a valid Steering Committee meeting will be at least three (3) of the full members of the SC.
- 2. Deliberations will be reached by consensus. Where voting is called for, simple majority will take deliberations. Only issues regarding the modification in the composition or functioning of the Steering Committee itself and other major issues as indicated by the Chairperson will be voted by a qualified majority (e.g.: two thirds of the total members number).
- 3. In the case of a deadlock in voting (e.g.: 5 vs. 5), the chairperson may utilise his/her second vote to unlock the decision-making process.
- 4. A member who cannot attend will be able to delegate another member of the same organization to represent him/her in writing.
- 5. In the event of tasks assigned to the Steering Committee or selected members (such as drafting documents, commenting on reports and documents or endorsing project outcomes), the deadline for the validity of the Steering Committee

e) Handling of reports, reviews and presentations

Reports, reviews and other forms of information deriving from the SERECU II project activities can be shared with and discussed by the steering committee members with approval from the Director AU/IBAR. In such instance, the Steering Committee will observe confidentiality, by undersigning the content of the document.

ANNEX 11 C - TOR FOR TECHNICAL STAFF OF

SERECU II

The Coordinator/ Epidemiologist

Employed on full-time basis

The coordinator will:

- ✓ Manage the action's activities under the guidance of the Chief Animal Health Officer of AU/IBAR.
- ✓ Be responsible for programme implementation and coordination of activities of SERECU in the eradication and verification of rinderpest eradication.
- \checkmark As the chief epidemiologist will be responsible for overseeing the planning, development and maintenance of epidemiological surveillance of rinderpest and other trade sensitive diseases in SES countries, and the overall management of epidemiological activities in the same region.
- ✓ Manage:
- ✓ the design of follow-ups and investigations
- ✓ Compilation of data generated from the field
- ✓ Data analysis and mapping in collaboration with the Information and Communication Unit (ICU) of AU/IBAR
- ✓ Assist countries in the preparation of dossiers for submission to the OIE
- ✓ Organize cross-border workshops and information exchange
- Organize training in epidemiological methods and tools
 Plan the needed provisions (equipment, reagents; etc.) for the national laboratories and for the Muguga Laboratory.
- ✓ Liaison with other normative bodies and technical organizations (e.g. OIE, FAO, World Reference Labs)
- ✓ Disseminate practices and standard operating procedures for the necessary diagnostic tests, following the OIE Manual of Diagnostic Tests and Vaccines
- ✓ Ensure essential diagnostic capacity and timeliness of testing, diagnosis, and submission of samples to the World and Regional Reference Laboratories
- ✓ Plan logistical arrangements with PSU for field activities.

The Project Epidemiologist

Employed on full-time basis

Seconded from FAO-GREP, the project epidemiologist will be the Coordinator's principal assistant and responsible to him/her for:

- ✓ Design and updating of the epidemiological strategy for the Somali Ecosystem
- ✓ Planning the methodology and schedule of the surveillance programmes and participation in the planning of their implementation
- ✓ Providing training in aspects of Rinderpest epidemiology
- ✓ Participation in preparation of in-country training courses for field staff on surveillance and sero-surveillance
- ✓ Analysis of the raw data and results of clinical surveillance and sero-surveillance
- ✓ Presentation and discussion of surveillance results at technical meetings and the guarterly border-harmonization meetings
- ✓ Planning with the Liaison Officers to ensure coordinated cross-border activities

- Preparation, and presentation in December of each year, of the annual surveillance strategy for each country/zone in the SES for the next project year, and leading their discussion and clarification at the next appropriate technical/border-harmonization meeting
- ✓ Assisting in the construction and operation of a routine national disease detection and reporting system supported by evidence of effective follow-up activities where rinderpest or suspect rinderpest cases have been identified
- ✓ Assisting in the strengthening of capacity in rinderpest emergency preparedness
- ✓ Participation in the EPP simulation exercise
- ✓ With the Liaison Officers and national services, mounting active searching and thorough investigation of epidemiologically significant events (e.g stomatitis-enteritis syndrome) raising suspicion of rinderpest
- Planning and analysis of risk-focussed sero-surveillance in areas determined to be at high risk of rinderpest occurrence
- Planning and analysis of randomized sero-surveys to examine statistically selected samples from relevant strata within susceptible populations to detect serological evidence of possible virus transmission
- ✓ Assist the wildlife veterinarian in the planning of wildlife surveillance programmes
- ✓ Assist in the strengthening of rinderpest contingency plans
- ✓ Accomplishing any other duties as assigned by SERECU Coordinator
- ✓ In partnership with other stakeholders, promote and support strengthening of communication and awareness strategies and preparing reports, communication materials, leaflets/brochures, posters, etc.

The Liaison Officers

The Liaison Officers of Ethiopia, Kenya (to be employed by their national governments) and Somalia (to be financially supported by SAHSP) will be responsible to the Coordinator for:

- Cultivating and maintaining strong relationship with the National Veterinary Services of respective countries
- Promoting the development of a network involving the relevant stakeholders for the coordination and harmonization of rinderpest eradication in respective countries
- ✓ Jointly organizing and facilitating the support needed to strengthen the national Veterinary Services to improve their coverage in the SES, including the regulation and supervision of paravets and auxiliary systems in accordance with OIE guidelines
- ✓ Planning logistics for field activities
- ✓ Assisting in the shipment of sample specimens to Regional and World Reference Laboratories
- ✓ Promoting awareness of planned activities
- Monitoring and supervision of field activities to ensure they are in line with agreed strategy
- ✓ Jointly organizing and implementing in-country trainings, stakeholder workshops, seminars and awareness campaigns
- Ensuring harmonization of activities among Liaison Officers and participate in the development of a regional network involving all partners
- ✓ Assisting in:
 - planning the coordination and harmonization of rinderpest surveillance and control in the SES, including regular updating of EPPs,
 - o preparation of dossiers for submission to OIE for accreditation, and

- Organization of cross-border harmonization, technical and regional level meetings with the Liaison Officer of the host country taking the lead role in organizing and facilitating the meetings in respective countries
- ✓ (Specific for Somalia) Assisting to establish a central veterinary authority and linking it vertically and horizontally with all key players to internationally acceptable levels in as far as disease surveillance and reporting and official declarations of disease status in the country are concerned. Activities will be implemented in coordination and in harmony with other EU funded projects such as SAHSP in order to avoid duplication while ensuring optimum use of resources
- ✓ Producing detailed and timely progress reports in accordance with approved guidelines
- ✓ Accomplishing any other duties as assigned by SERECU Coordinator.