

**Terms of Reference**

**SOUTHERN AFRICAN DEVELOPMENT COMMUNITY  
EUROPEAN DEVELOPMENT FUND**

**9<sup>TH</sup> EDF – REGIONAL INDICATIVE PROGRAMME**

**Promotion of Regional Integration in the SADC livestock sector (PRINT)  
(9 ACP SAD 002)**

**Feasibility Study for the Expansion of Zoning and Animal Identification and  
Traceability Systems (ZAITS) for Export Trade in the SADC Region**

**Terms of Reference**

**1. BACKGROUND INFORMATION**

***1.1 Beneficiary***

The Southern African Development Community (SADC)

***1.2 Contracting Authority***

The Regional Authorising Officer of the European Development Fund,  
Executive Secretary, SADC Secretariat, Private Bag 0095, Gaborone, Botswana

***1.3 Relevant regional background information***

The PRINT Livestock Project is designed to support the Regional Indicative Strategic Development Plan (RISDP) of SADC and more specifically its policy of regional livestock sector integration and sustainable livestock production. SADC's policies for the livestock sector are to increase livestock productivity and promote livestock based industries, improve livestock management practices and promote, harmonize and apply effective regional animal disease control measures.

Trade in livestock and livestock products has great potential to contribute to the promotion of regional integration for economic growth. However, international trade in livestock and their products depends on a combination of factors which should be taken into account to ensure unimpeded trade, without incurring unacceptable risks to animal and human health. The creation of zones for export trade purposes is used as a risk management tool but has been practised by only a few countries in the SADC region. It is worth noting that various types of zone are known and are defined according to the purpose for which they are created. In addition, traceability is becoming part and parcel of zoning as an important tool to assure food safety and quality in livestock and livestock products (LLPs) commodity chains. Consequently, many developed

countries have introduced mandatory or voluntary programmes using traceability to assure LLPs safety. The driving forces for the introduction of traceability systems arise from a variety of scientific, social and economic factors as follows:

- improvement of animal and human health management and rapid response systems;
- meeting domestic and international consumer demands for meat;
- maintaining and developing international trade;
- verification of product quality attributes; and
- proper assignment of liability in the LLPs supply chain.

The traceability systems being developed across countries differ significantly in their detail, giving rise to trade issues in international markets for LLPs. There are at least two types of traceability i.e. requiring identification to the **individual animal** or **zone**, but major importing countries are insisting on the former as a mandatory requirement in compliance with OIE standards. The choice between the two systems has cost implications. SADC Member States that have export markets are implementing traceability systems in response to mandatory systems required by importing countries such as in the European Union. The international meat market is experiencing unprecedented change with respect to concerns about animal health, food safety, and international trade, improving supply chain management etc., therefore SADC Member States seeking to build or sustain access to international meat markets **must respond** to these concerns.

The PRINT Livestock Project aims at contributing to increased trade flows in livestock and livestock products in the SADC region through the establishment of a Livestock Information Management System (LIMS) in animal health, animal production, trade and marketing. A study on existing zones for export, the implementation of animal identification and traceability systems and the potential to expand these initiatives to other Member States should be an integral part of LIMS.

#### ***1.4 Current state of affairs in the livestock sector***

The characteristics of the agricultural and livestock sector vary greatly from one Member State to another, both regarding natural resources and in economic terms. Most Member States in SADC don't have a well developed commercial farming sector so that generally sale of livestock remains limited due to poorly developed markets and lacking marketing infrastructure. Ruminant animals are the predominant species and production systems vary markedly.

The livestock population in SADC is estimated at 60.6 million cattle, 33.4 million sheep, 42.9 million goats, 8.9 million pigs, 1.7 million donkeys and horses and 250 million poultry. Available livestock figures indicate a very low or negative growth for cattle, but reasonable growth for small ruminants (goats and sheep).

## **1.5 Related programmes and other donor activities**

- The Financing Agreement of the SADC Foot and Mouth Disease (FMD) Project was signed on 28<sup>th</sup> July 2006. Its main purpose is to reduce the spread of FMD and its negative impact on both livestock producers and intra/extra regional trade of livestock and livestock products. The project has implementation components in Zimbabwe, Malawi and Mozambique
- The Protocol Agreement on the SADC Trans-boundary Animal Diseases (TADs) Risk Management was signed on 13<sup>th</sup> December 2006. The Project's overall objective is to strengthen veterinary institutions for the risk management of TADs in the SADC region. The project is funded under the African development Bank (AfDB) and is operational in Angola, Malawi, Mozambique, Tanzania and Zambia.
- An EU/SADC project for building capacity in the region on Maximum Residue Levels was signed in June 2007
- The Trade, Industry, Finance and Investment (TIFI) Directorate of the SADC Secretariat is currently working on the finalisation of the Sanitary and Phytosanitary (SPS) Annex to the SADC Protocol on Trade. The overall objective of the Annex is to harmonise SPS measures across SADC MS in order to improve trade in food, plant, animal and products, for the economic benefits of the citizens of the SADC region and to expand external trade.

It is in this context that the proposed study is expected to contribute.

## **2. OBJECTIVES AND EXPECTED RESULTS**

### **2.1 Overall objectives**

The overall objective of the PRINT Livestock Project is to contribute to poverty reduction in the SADC region through increased productivity and trade flows in the traditional livestock sub sector.

The feasibility study on zoning for animal disease control and implementation of animal identification and traceability systems is aimed at facilitating inter- and intra-regional trade in livestock and livestock products.

### **2.2 Specific objectives**

The specific objective of this service contract is to analyze how zoning, animal identification and traceability contribute to animal disease control strategies and foster intra-regional and international trade in livestock and livestock products in the SADC region. By reviewing experiences in Botswana and Swaziland, the feasibility of expanding the initiatives to other MS will be explored; for those that have export potential in livestock and livestock products e.g. Madagascar, Tanzania and Zambia.

### 2.3 *Results to be achieved by the Study*

The expected results of the study are two-fold:

- Result 1. A detailed analysis of existing export zones in livestock and livestock products and implementation of animal identification and traceability systems in Botswana and Swaziland conducted and documented.
- Result 2. The feasibility of expanding the initiatives of zoning for export trade and implementation of the corresponding animal identification and traceability systems in Zambia, Madagascar and Tanzania established and documented.

## 3. ASSUMPTIONS & RISKS

It is assumed that Member States are willing to engage in this exercise and to give free access to documentation (including GIS data) and other relevant information.

## 4. SCOPE OF THE WORK

### 4.1 Definitions

For the purpose of this service contract, the OIE definition of zoning shall be strictly adhered to as follows:

*“Zone”* means a clearly defined part of a country containing an animal *sub-population* with a distinct health status with respect to a specific *disease* for which required surveillance, control and biosecurity measures have been applied for the purpose of *international trade*

To date there is no full international agreement on the definition of traceability, although it is under intense discussion at the Codex Alimentarius Commission, World Trade Organisation (WTO), World Organisation for Animal Health (OIE) and the International Organisation for Standardisation (ISO). With respect to livestock and livestock products, *animal identification and traceability* refers to the completeness of information on the identity of an animal from birth and about every step in the process chain from stable to table.

### 4.2 General

#### 4.2.1 *The SADC Context*

The major disease constraints to trade in livestock and livestock products are Foot and Mouth Disease (FMD) and Contagious Bovine Pleuropneumonia (CBPP). Achievements in bringing FMD and CBPP under control vary widely among Member States. Accordingly, Member States fall into three categories with respect to zoning either for disease control and / or export trade.

The first category comprises countries that have established OIE and / or EU recognized disease-free export zones for intra-regional or international trade (e.g. to EU), notably:

- Namibia
- Swaziland
- Botswana
- South Africa
- Zimbabwe

The second category comprises countries that have a declared formal programme for establishing recognized disease-free export zones, notable examples being Madagascar and Mauritius

The third category comprises countries that have no declared formal programme for establishing recognized disease-free export zones.

Some countries in the first and second categories were allocated under the Lome Agreement, quotas of boneless beef exports per calendar year as shown below.

- Botswana (18,916 tons)
- Madagascar (7,579 tons)
- Swaziland (3,363 tons)
- Zimbabwe (9,100 tons)
- Namibia (13,000 tons)

In order to promote intra-regional trade it is necessary for Member States in the second and third categories to progress to the status of those in the first category that have been successful in establishing zones that have permitted exports of livestock and livestock products to Europe and other lucrative markets and have led to higher prices for livestock and income to farmers.

The SADC region has unique characteristics which give it a comparative advantage for expanding and establishing zones for export trade. These include the following:

- the absence of pastoral production systems (except the northern part of Tanzania) means that livestock herds or flocks are essentially "sedentary" and can be subjected to movement restrictions through zoning;
- the countries currently exporting to the EU are not meeting their quota, hence there is potential for other Member States to fill the gap;
- the creation of acceptable zones / compartments in Member States would facilitate trade flows with South Africa which has a huge demand for meat that is often met by imports from outside the region, probably at a high cost;
- Article 6 of the Sanitary and Phytosanitary (SPS) Annex to the SADC Protocol on Trade provides for the recognition of zones / compartments for trade purposes.

#### *4.2.2 Geographical area to be covered*

As close liaison will be necessary with a wide variety of stakeholders involved in zoning and implementation of animal identification and traceability systems, the

consultancy will make country visits to Botswana, Swaziland, Zambia, Madagascar and Tanzania. The consultants will also need close liaison with the PRINT Livestock Project based in Gaborone, Botswana, particularly at the start of the study and while visiting countries.

#### *4.2.3 Target groups and beneficiaries*

The direct target groups of the study will be stakeholders involved in livestock development, i.e. Departments of Veterinary and Livestock Services, producers, export companies, meat retailers, consumer and farmers' associations, suppliers of veterinary medicinal products, suppliers of animal identification devices, livestock product processors, parastatal organisations (e.g. marketing boards) and other private stakeholders in the livestock sector.

Beneficiaries include the livestock sector in SADC and Member States.

### **4.3 Specific Activities of the Study**

The specific activities are designed to achieve the result areas outlined under 2.3 above i.e. to facilitate extension of the achievements of Member States with established export zones to other Member States that are seeking or have the potential to develop export zones.

The feasibility study will be conducted in five Member States, namely, Botswana, Swaziland, Madagascar, Zambia and Tanzania. In each of the selected Member States, the assignment will comprise in country **DESK STUDIES** and **INTERVIEWS**. In the organization and methodology, the tenderer should clearly explain how these approaches will be documented in the final report. Interviews will target but will not be restricted to the stakeholders highlighted in section 4.2.3 above. It is important to note that interviews will be conducted face to face and not by questionnaire or other indirect means.

In Member States belonging to the first category, (Botswana and Swaziland) the primary objective will be to establish the current status with respect to the concepts or initiatives under study.

In Member States in the second and third categories, (Zambia, Madagascar and Tanzania) the objective will be to assess the feasibility of implementing the same in view of lessons learnt from the former. The focus will be to assess potential for increased intra-regional trade through the creation of export zones and implementation of suitable traceability systems.

The activities will focus on the **beef sector** as follows:

- make an inventory of the different types of zones used in SADC and provide their GIS based description for **Botswana** and **Swaziland** focusing on the different interfaces created. This should include a description of the geographical arrangements of the different types of zones in these selected MS, literature review of geographical methods of zoning and the computation of the geographical indices;

- describe the animal production potential in the different zones in **Botswana and Swaziland**, focusing on sustainability of the export potential;
- create a GIS database on zones using data from **Botswana and Swaziland** as initial input;
- describe the epidemiological uniqueness and risk management procedures (including a description of the epidemiological surveillance system(s) for trade-sensitive TADs) in place in **Botswana and Swaziland** which qualify the demarcated areas as export zones focusing on population sizes and distribution, recent trans-boundary animal disease (TADs) dynamics, and animal production and movement control systems;
- explore the usefulness of containment strategies and various types of existing zones and recommend improvements with reference to recent TADs outbreaks, particularly FMD;
- identify the driving or motivating factors for the creation and sustenance of these zones in **Botswana and Swaziland** and the implementation of the corresponding animal identification and traceability systems;
- describe how zoning is integrated in the existing animal health control systems i.e. the level of competence for the application of animal health measures, availability of appropriate policies, strategies and legislation, surveillance systems, import control systems, laboratory testing systems etc. in **Botswana and Swaziland**;
- analyze the cost structures for the development and sustenance of the zones and traceability systems in **Botswana and Swaziland**;
- describe to what extent the traditional livestock sectors are involved in the zoning initiatives in **Botswana and Swaziland**;
- describe the animal identification and traceability systems in the selected Member States (**Botswana and Swaziland**) in terms of the quantity of information captured (*breadth*), extent to which traceability is used to trace either backwards or forwards within the LLPs supply chain (*depth*) and details of information recorded for any activity in the supply chain (*precision*) ( it is important to include in the description as to who pays for what in the supply chain);
- explore alternative individual animal based traceability systems suitable for the SADC region in compliance with OIE standards;
- identify areas with economic potential for the establishment of disease control and / or export zones in **Zambia, Madagascar and Tanzania**;
- assess the feasibility of expanding the zoning, animal identification and traceability initiatives to **Zambia, Madagascar and Tanzania** based on the findings from **Botswana and Swaziland**;
- develop recommendations / roadmap for the expansion of zoning and animal identification and traceability initiatives in **Zambia, Madagascar and Tanzania** supported by data on different GIS layers; and
- produce a final report including all the relevant annexes.
- present the study results at a two days workshop to be organized and paid by PRINT Livestock Project in Gaborone, Botswana

The work will involve extensive travel to and within the selected MS and consultations with a wide variety of relevant stakeholders and institutions.



As zoning concepts are multidisciplinary in nature, tenderers should clearly explain in their Organisation and Methodology how they intend to deploy experts representing each of the three distinct disciplines in each of the study countries (Botswana, Tanzania, Madagascar, Zambia and Swaziland). Tenderers should propose how they intend to address the issue of communication in French speaking Madagascar.

#### **4.4 Management of the study**

For the day to day implementation of the study, the consultant and its partners (where applicable) will be the fully responsible body. The consultancy shall nominate a coordinator (team leader) to take responsibility of the consultancy. Close collaboration with the PRINT Livestock Project shall be established.

### **5. LOGISTICS AND TIMING**

#### **5.1 Location**

Implementation of the study will be in Botswana, Swaziland, Zambia, Madagascar and Tanzania. An initial visit will be made to PRINT Livestock Project in Gaborone, Botswana in addition to any other necessary visits during the course of the study.

#### **5.2 Commencement date and period of execution**

It is expected that the contract will be signed around end April 2008. The total period of execution shall be **5 calendar months with 2.5 months** as the actual duration of the study. There are important milestones to be considered.

### **6. REQUIREMENTS**

#### **6.1 Qualifications and skills**

There is a need for a multidisciplinary approach to the study. The study will require three experienced experts in the relevant fields with strong institutional support.

#### **6.2 Specific minimum requirements**

##### **Team Leader**

##### ***Qualification and skills***

- A Degree in Veterinary/Animal Science or equivalent from a recognised learning institution.

##### ***General professional experience***

- At least ten years general professional experience.

##### ***Specific professional experience***

- Post graduate qualifications in applied veterinary epidemiology will constitute an added advantage

- Working experience in the SADC region
- Understanding of the SADC livestock production systems and Trans-boundary Animal Diseases (TADs) situation will constitute an added advantage.
- He/she should be a highly qualified expert with good technical skills, good team management and communication skills.

### **GIS/Information Management Expert**

#### ***Qualification and skills***

- A Diploma in Geographical Information Systems or **equivalent** from a recognised learning institution

#### ***General professional experience***

- At least **3 years** general professional experience.

#### ***Specific professional experience***

- Proven experience in setting up GIS based databases
- Experience in developing GIS layers with special reference to disease control and trade in SADC region will be an added advantage
- Good report writing skills
- Having participated in other similar multi-country studies will constitute an added advantage.

### **Livestock/Animal Health Economist**

#### ***Qualification and skills***

- A Degree in Agricultural/Livestock/Animal Health Economics or **equivalent** from a recognised learning institution

#### ***General professional experience***

- At least **3 years** general professional experience.

#### ***Specific professional experience***

- Proven experience in evaluating economic performance of livestock production systems in developing countries, preferably in SADC region
- Understanding of livestock commodity (value) chains
- Good report writing skills
- Having participated in similar multi-country studies will constitute an added advantage.

The CVs for the three key experts should be supplied with this application in the attached format.

### **6.3 Other requirements**

Proficiency in English is compulsory for all of the three consultants.

### **6.4 Support staff and backstopping**

The cost of supplementary backstopping from the consultant's head office is to be included in the expert fees rates. Any backstopping personnel can be provided by the consultant and can complement or support the profiles of the main experts. If provided, the consultant shall explain their role in the organisation and methodology.

Furthermore the consultancy shall describe the capacity within the institution that will administer the contract and manage the funds.

### **6.5 Facilities to be provided by the Consultant**

The consultant shall ensure that experts are adequately supported and equipped. In particular it shall ensure that there is sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. It must also transfer funds as necessary to support its activities under the contract.

Furthermore it shall organise the transport / accommodation of its own staff during the study, and facilitate all the logistics for the necessary interviews with key stakeholders in MS.

### **6.6 Equipment**

No equipment is to be purchased as part of this service contract

## **7. REPORTING REQUIREMENTS**

Within a reasonable period upon commencement of the contract, the consultants will be expected to submit an inception report. The consultants must submit an **interim aide memoire** to the PRINT Livestock Project during a debriefing meeting to be held in Gaborone at the end of country. Comments will be made by PRINT before the final report is produced.

The Consultants shall produce the final report following their visits to Botswana, Swaziland, Madagascar, Zambia and Tanzania as follows (three hard copies and one electronic version):

- desk study and interviews detailing the current status of zoning and implementation of traceability systems in Member States in the first category (Botswana and Swaziland);
- desk study and interviews detailing the findings of the feasibility of expanding the initiatives under study in Member States belonging to second and third categories (Madagascar, Tanzania and Zambia);
- relevant annexes in particular the GIS layers and database for existing zones and proposed expansions in widely used GIS formats e.g. shape and tab files

The report shall be submitted in English in **twenty** hard copies to the SADC Secretariat in Botswana, with their electronic copies.

The final report and a final invoice at the end of the period of execution shall include a financial report with the invoice for activities carried out during the study. The financial report must contain details of the time inputs of the experts. **Payment will be made after the approval of the final report.**

## **8. MONITORING AND EVALUATION**

The Consultants shall provide PRINT with technical and financial reports as detailed under item 7. Based on the reports, an internal evaluation will be carried out at the end of the contract (evaluation of deliverables), by PRINT Livestock Project staff.