TERMS OF REFERENCE
FOR SHORT-TERM CONSULTANCY

Development and operationalization of the Livestock Identification Traceability System (LITS) in Sudan

LIVE2AFRICAPROJECT
BACKGROUND

Africa is increasingly becoming a key player in generating, acquiring and applying knowledge to development challenges. Yet more needs to be done to make innovation play its part in the quest for transformation and diversification of the African economies. Sustained support is required to help Member States put in place a favourable innovation environment as well as fully utilize appropriate technologies to address their pressing needs. This support could target the green economy, industrialization, job and wealth creation.

As part of providing leadership and coordination in the sustainable development of the continent’s Animal Resources, the African Union - Inter African Bureau for Animal Resources (AU-IBAR) is implementing a 5-year project on “Sustainable Development of Livestock for Livelihoods in Africa - Live2Africa”. The project pioneers a coherent continental programme approach to build systemic capacity in seven livestock components, that include: Investment in Value Chains, Animal Health; Animal Production, Productivity and Ecosystem Management; Resilience Building; Technology adoption in the Value Chains to inputs, services and markets; and strengthening institutional capacities. One of the key project’s focus areas is to enhance innovation, generation and utilization of technologies, capacities and entrepreneurship skills of livestock value chain actors. In this regard, AU-IBAR in collaboration with the IGAD Centre for Pastoral Areas and Livestock Development (IGAD/ICPALD) is supporting the development and operationalization of a Livestock Identification and Traceability System (LITS) in Sudan. Within the scope of the Live2Africa project, AU-IBAR seeks the services of a suitably qualified and experienced consultant to design, develop and customize a multi-species Livestock Identification and Traceability System (LITS), complete with a suite of robust and field tested software modules including a database.

CONTEXT OF THE CONSULTANCY

Many of the IGAD countries are trading livestock across borders, and internationally mainly to countries in the Middle East and North Africa (MENA). To improve competitiveness, it is important to have information on animal history, performance, health status and ensure that animal welfare and sanitary standards are complied with. In addition, a system for identifying and tracking animals is a prerequisite to successfully contain or respond to outbreaks of infectious animal diseases, or monitor the production processes and performance of the animals. Livestock Identification and traceability systems are important for the control of animal diseases, support in
animal production, trade, and public health interventions. Animal identification and traceability systems are gaining worldwide attention for their provision of credible information and customer confidence in countries that import animals and animal products. Sudan is one of the IGAD Member States with the highest animal numbers of livestock in Africa and is a major exporter of live animals and animal products. The establishment of a Livestock Identification and Traceability System [LITS] in Sudan is critical as it will support compliance to international animal health and food safety standards. This will enhance Sudan’s competitiveness in the high value lucrative global trade in live animals and animal products. The project thus seeks the services of a multi-disciplinary team of consultants to design, develop and customize a multi-species Livestock Identification and Traceability System (LITS), complete with a suite of robust and field tested data base software and modules.

OBJECTIVES AND METHODOLOGY

The overall objective of the assignment is to improve the performance of the livestock sector in Sudan through development and operationalization LITs database that comply to international animal health and food safety standard. The LITS should provide a full livestock traceability, animal disease surveillance, disease response system, build customer confidence, easy access of the markets and fulfilling international trade requirements and animal rustling with a comprehensive performance recording, animal identification, movement tracking and disease surveillance capability. The LITS should further enable the government to quickly and effectively respond to emergency challenges; minimizing costs associated with disease spread, industry support, market closures and animal theft. The system should also be flexible to integrate with other existing systems in the country with no or minimal cost (e.g. disease surveillance systems, market information systems)

The consultancy’s specific objectives will be undertaken in under the three main components;

1. NEEDS ASSESSMENT AND DATA CONTENT IDENTIFICATION

For this output, the specific objectives are to;
• Conduct a comprehensive needs assessment on the LITS information requirements by various stakeholders and partners and relevant government departments
• Review and interrogate existing reports and specific literature on development and operationalization on Sudan’s LIT system
• Propose a structure/blueprint of the content of the LIT system. This will include aspects on identification, ownership, source, and the site of recruitment amongst others
• Design and propose technically and operationally feasible LITS that meets Sudan’s production systems requirements with room for future expansion

II. SYSTEM DEVELOPMENT AND OPERATIONALIZATION

For this output, the specific objectives are to;

• Design the system including data model, centralized database design, specifying interfaces among components and external systems and devices, user interface and menus design in the manner that is friendly to all group and level of users
• Develop and test the envisioned database and complementary application software system that satisfies the needs of Sudan;
• Provide recommendations on technology specifications i.e. server, and ICT infrastructure, hardware, software and database technology for administrators and users.
• Prepare User Manual which serves as a guide for the system users together with installation and configuration manual for ICT specialists

III. TRAINING AND PILOTING OF LITS

For this output, the specific objectives are to;
• Develop a training manual for end users (Extension officers and other relevant stakeholders)
• Co-ordinate and facilitate training of trainers in close consultation with the responsible ministry
• Provide technical support and maintenance during the piloting phase of the LITS in Sudan.
EXPECTED OUTPUTS

Working closely with the national LITS team, IGAD and AU-IBAR the expected outputs of the consultancy will be:

- A comprehensive needs assessment report and LITs blueprint addressing Sudan’s specific needs
- An operational Livestock Identification and Traceability System (LITS) for Sudan
- Validated User Manual for the LITS specific to the ICT specialists
- Validated User Manual for the LITS specific to the end users
- Trained users in Sudan

Inception Report (IcTR)

- An Inception Report (IcTR) within 2 weeks of commencing duty. The IcTR of not more than 10 pages should include the proposed methodology, the timeline/calendar and programme of activities and an outline of the contents of the Final Technical Report.

Progress Reports

- The progress reports must be submitted bi-weekly to the CVO Sudan; AU-IBAR and IGAD technical staff.

Interim Technical Report (InTR)

The interim Technical Report is perceived to be the First Draft of the Final Technical Report (FTR), before a final clean copy of the FTR is formally and officially submitted to and for acceptance by AU-IBAR

Final Technical Report (FTR)

- The Final Technical Report (FTR) should take into account contributions and comments from the relevant stakeholders and AU-IBAR. The draft final report must be submitted at the end of the period of implementation of the tasks.
Technical Proposal

Applicants should submit a Technical Proposal that should include:

- Outline of the methodology, for conducting the consultancy as per the tasks and indicate the number of days to accomplish each task.
- Profile and CVs of the consultant(s) team undertaking the work indicating relevant academic qualifications and professional experience.
- Information showing past experience in related fields, demonstrating an inventory of past and current assignments of similar nature.
- Contact addresses (Postal, email and telephone) of at least three referees or any other information that may show the consultant’s ability to carry out the assignment to satisfaction.

Evaluation Criteria

Technical Scoring

The technical proposal will weigh 80% and will be evaluated against the following criteria:

i. At least five years’ experience in livestock development specific to the African continent
ii. Proficiency in livestock identification and traceability systems and utilization
iii. Familiarity in development of databases
iv. Successful experience on similar tasks conducted
v. Excellent writing skills
vi. Proficient in English and/or Arabic language, spoken and written
vii. Relevant qualifications and experience of staff
viii. Experience in Stakeholder consultations
ix. Adequacy of the proposal, work plan and approach

The multi-disciplinary team of consultants must fulfil the mandatory requirements and score at least 70/100 in order to be considered for further evaluation.

Financial Evaluation

The financial proposal will weigh 20 percent. The financial proposal will be evaluated on the basis of total cost, cost realism and used in combination with the assessment of the technical quality to determine the best value.

Location

Home based with possibility of travel to selected countries subject to the lifting of travel restrictions due to the COVID-19 pandemic.
Qualifications

Education:

The successful multi-disciplinary team of consultants shall have experts with University degrees in (i) veterinary science or animal science preferably specializing in livestock identification and traceability system designing and utilization or a closely related field; (ii) Computer Information technology/systems or Computer Science specializing in Database development systems, web portal development and other relevant disciplines. Knowledge in animal genetic resources and utilization of the ODK software will be an added advantage. PhD in either degree will be an added advantage.

Competences and experience

- At least five years’ experience in livestock identification and traceability systems development and use within the African continent
- Proficiency in design and operationalization of the livestock identification and traceability systems
- Advanced knowledge of system modeling, design and implementation.
- Ability to work efficiently and independently under pressure, handle multi-tasking situations with strong delivery orientation
- Strong critical thinking skills
- Excellent writing skills
- Proficient in English/French language, spoken and written
- Proficient in Arabic language, spoken and written will be an added advantage
- Creativity and attention to detail is essential

Timeframe:

The team of consultants will devote a period not exceeding a maximum of 90 (ninety) calendar days spread over 6 months.

The present work will start immediately after signature of the contract by both parties.

SUPERVISION

The team of consultants will work under the overall guidance of the Director, AU-IBAR supervised by the Technology, Innovations and Skill development expert and Animal Health Expert (AU-IBAR) in collaboration with Sudan CVO and IGAD focal person.

MEDICAL COVER

The consultants will be responsible for their medical and life insurance cover during the assignment.
HOW TO APPLY

Interested consultancy firms are required to provide Technical and financial Proposals by 24th August 2020 to the Director of AU-IBAR, Kenindia Business Park, Museum Hill, Westlands Road, PO Box 30786-00100 Nairobi, Kenya or email at procurement@au-ibar.org clearly indicating in the subject line “Development and operationalization of the Livestock Identification Traceability System (LITS) in Sudan” Only short-listed candidates will be notified.