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TERMS OF REFERENCE FOR

**TRAINER (S) TO PROVIDE TRAINING ON ANIMAL ANATOMY AND PHYSIOLOGY FOR
46 TUTORS FROM AGRICULTURAL TRAINING INSTITUTES (ATIs) AND LIVESTOCK
TRAINING AGENCIES (LITAs)**

July 2026
SUSTAINABLE AGRICULTURE TANZANIA
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1.0. Overview

Sustainable Agriculture Tanzania (SAT) is seeking to hire a Trainer(s) to conduct Animal Anatomy and Physiology training for 46 tutors from Agricultural Training Institutes and Livestock Training Agencies. The trainer (s) is free to use any workable methodologies to conduct the training. These Terms of Reference (ToR) serve as a request for proposals from individual consultants/firms interested in conducting this training.

2.0. About Sustainable Agriculture Tanzania (SAT)

SAT is a local organization registered in June 2011 and complying with the NGOs Act 2002 as amended in 2019 with registration number 00NGO/R/833. SAT's vision is that "the majority of farmers are using acknowledged agroecological methods to improve their livelihoods, conserve the environment, and reduce pressure on natural resources". SAT collaborates with different stakeholders including farmers, Ministry of Agriculture (MoA), universities, organizations, companies and government extension officers to carry out its activities. This holistic approach establishes an Innovation Platform, where dissemination of knowledge, research, application and marketing and networking build the main pillars. SAT headquarters are in Morogoro with branch offices in 4 regions and operates all over Tanzania. SAT runs its operations through a number of donor-funded projects and the CISTI project is one of them.

3.0. About CISTI project

Sustainable Agriculture Tanzania (SAT), in collaboration with the Division of Training and Research (DTR) of the Ministry of Agriculture and the Directorate of Training, Research and Extension Services (DTRE) of the Ministry of Livestock and Fisheries (MLF), with support from the Liechtenstein Development Service (LED), is implementing the Curriculum Implementation Support for Training Institutes (CISTI) Project. The project aims to strengthen the production of competent technical professionals in Tanzania's crop, livestock, and fisheries sectors who are equipped to meet labour market demands, promote the adoption and scaling of agroecological practices, and contribute to improved livelihoods for smallholder farmers and pastoralists.

4.0. Objective of the assignment

The main objective of Animal Anatomy and Physiology training is to equip 46 tutors from ATIs and LITAs with knowledge and skills on Animal Anatomy and Physiology. Training of tutors responsible to train students on Animal Anatomy and Physiology is an important step towards enabling effective delivery of the curriculum. After the training, the tutors are expected to work together to prepare a draft compendium/training manual on Animal Anatomy and Physiology. The developed compendium will be used as a teaching and learning resource to both tutors and students.

5.0. Scope of Animal Anatomy and Physiology Training

The facilitator may navigate in length, width and depth regarding the field of Animal Anatomy and Physiology, but they should focus on the aspects described in section 5.1 below, as they are reflected in the curricula implemented in Agricultural Training Institutes (ATIs) and Livestock Training Agencies (LITAs) to certificate and diploma students. The aim of offering this training to

students is to enable them to Apply animal anatomy and physiology principles in livestock production and health management.

5.1 Summary of learning outcomes

Students who will be trained on Anatomy and Physiology are expected to be able to apply the principles of animal anatomy and physiology to enhance livestock production and health management.

5.1.2 Enabling Learning Outcomes

Under this standardized module, the learning outcomes of this standardized module will cover the learning outcomes stipulated in two main programmes namely agriculture production and animal health and production. The enabling learning outcomes include the following:

- Apply principles of animal anatomy and physiology in livestock production and health management.
- Use anatomical and physiological techniques to assess body systems, structures, and functional mechanisms in domestic animals (including avian species)
- Apply cytological and histological knowledge in evaluating animal tissues, health conditions, and productivity performance.
- Utilize anatomical terminology, nomenclature, and topographic references in identifying animal species, breeds, and body structures.
- Integrate anatomy and physiology knowledge in decision-making related to animal nutrition, health, and production systems.

5.1.3. Sub-Enabling Outcomes

Under this module, there are seven consolidated sub-enabling outcomes, representing key competency areas to be achieved through theoretical and practical learning. These are further elaborated through related tasks in the table below.

- Apply comparative gross anatomy techniques in identifying and differentiating animal species.
- Apply topographic anatomy and anatomical terminology in describing animal body structures.
- Apply animal anatomy knowledge in identifying body structures, systems, and their functions.
- Apply animal physiology principles in determining functions, regulation, and requirements of body systems.
- Assess functional mechanisms and integration of animal body systems.
- Apply cytological knowledge in understanding cellular structure and function in animal health.
- Apply histological skills in evaluating animal tissues and diagnosing health conditions.

The table below gives more details of these sub-enabling outcomes by breaking them down into related tasks. Related tasks are the more refined content areas that are derived from each sub-enabling outcome.

Sub-Enabling Learning Outcomes	Related Tasks
Apply Comparative and Gross Anatomy in Identifying Animal Species	a) Identify and outline major body systems (musculoskeletal, cardiovascular, respiratory, digestive, nervous, endocrine, urinary, reproductive, lymphatic, integumentary). b) Compare basic body structures among domestic animals (bovine, caprine, ovine, equine, canine, avian). c) Classify bones (long, short, flat, irregular) and identify parts of the skeleton. d) Identify anatomical locations of organs in different species. e) Classify animals according to digestive systems (ruminants, monogastrics, pseudo-ruminants, avian). f) Identify distinguishing breed and species characteristics.
Apply Topographic Anatomy and Anatomical Terminology	a) Define and apply anatomical directional terms (dorsal, ventral, cranial, caudal, medial, lateral, proximal, distal, aboral, etc.). b) Identify planes of reference (median, sagittal, transverse, longitudinal, vertical). c) Locate anatomical landmarks and salient points of domestic animals.
Apply Animal Anatomy in Identifying Structures and Functions	a) Identify tissues, organs, joints, and skeletal components. b) Describe functions of body systems and associated organs. c) Identify accessory organs (e.g., pancreas, salivary glands) and explain their roles. d) Outline branches of anatomy (gross, microscopic, embryology).
Apply animal physiology principles in determining functions, regulation, and requirements of body systems	a) Explain functions of body systems (digestive, respiratory, reproductive, urinary, nervous, endocrine, cardiovascular, musculoskeletal, lymphatic). b) Compare physiological functions among ruminants, monogastric, and pseudo-ruminants. c) Describe physiological requirements under different conditions (growth, pregnancy, lactation, disease). d) Explain hormonal regulation of body functions. e) Describe estrus cycle of domestic animals f) Explain role of physiology in climate adaptation
Assess Functional Mechanisms and Integration of Body Systems	a) Explain mechanisms of digestion, respiration, circulation, reproduction, urination, and excretion.

	b) Describe coordination among body systems (respiratory, cardiovascular, nervous, endocrine, musculoskeletal). c) Assess mechanisms such as thermoregulation, milk let-down, feed digestion and absorption, and reflex actions. d) Explain coordination of reproductive and urinary systems
Apply Cytological Knowledge in Animal Health Assessment	e) Identify animal cell structures and organelles. f) Describe cell division processes. g) Identify body fluid compartments. h) Apply cytology knowledge in basic health assessment.
Apply Histological Skills in Evaluating Animal Tissues and Health Conditions	a) Identify epithelial, connective, and nervous tissues. b) Differentiate tissue types based on histological features. c) Conduct basic histopathological assessment. d) Examine tissue conditions in relation to animal health status.

6.0. Methodology

The facilitator is at liberty to use any workable methodologies based on his/her experiences in facilitating and teaching Animal Anatomy and Physiology to mid-cadre professionals. The bottom line is that whatever techniques that will be used, the trainees should get the most out of the contents to be delivered by the facilitator/trainer.

7.0. Expected deliverables

The following deliverables are expected from the facilitator/trainer.

- i. Inception report indicating the detailed training methodologies, training contents, sources, five-day training program and training materials will be discussed and approved by SAT team before training starts.
- ii. Carry out face-to-face training to trainees for 5 days
- iii. Comprehensive training report of the training assignment
- iv. Deliver notes which may be shared in soft or hard copy materials
- v. An electronic copy of all training materials and contents including presentations, videos and other resource relevant materials on Animal Anatomy and Physiology.
- vi. Technical advice on Animal Anatomy and Physiology compendium development to SAT management and the task team.
- vii. Proof-reading of the draft compendium on Animal Anatomy and Physiology once developed by the Task Team

Note:

The training report will be produced after one week from the date of the training closure. Training notes and other resource materials should be provided during or at the end of the training.

8.0. Time span of the training

This training is expected to be carried out for a period of 5 days (from 3rd to 7th August 2026).

9.0. Profile/Consultancy requirements

- A minimum of a master's degree in veterinary medicine, Animal Sciences, and Animal Health and Production, or a closely related field, relevant to the objectives and scope of the assignment as outlined in Sections 4.0 and 5.0.
- At least three (3) years of proven practical and/or teaching experience in animal anatomy and physiology, including application in livestock production, animal health management, and training environments.
- Demonstrated experience in training, facilitation, or capacity building for Agricultural Training Institutes (ATIs), Livestock Training Institutes (LITAs), extension services, or related programmes, particularly in animal anatomy, physiology, and livestock systems.
- Proven expertise in animal body systems, structures, and functional mechanisms, including comparative anatomy of domestic animals (bovine, caprine, ovine, equine, canine, and avian species).
- Sound understanding of animal physiological processes, including digestion, respiration, circulation, reproduction, endocrine regulation, thermoregulation, and adaptation to different production and environmental conditions.
- Demonstrated knowledge and practical experience in cytology and histology, including identification of animal cells, tissues, and basic histopathological assessment relevant to animal health and productivity.
- Proven experience in integrating anatomy and physiology knowledge into livestock production systems, including linkages to animal nutrition, health, breeding, and management decisions.
- Proven experience in developing training manuals, compendiums, curricula, or other teaching and learning materials, particularly for competence-based education and training (CBET) systems.
- Evidence of having successfully completed similar training assignments, including delivery of short courses and development of training resources, with at least three (3) references from previous clients or institutions.
- Excellent analytical, facilitation, communication, interpersonal, and report-writing skills, with the ability to deliver both theoretical and practical (hands-on) sessions
- Demonstrated experience working with government institutions, training agencies, and non-governmental organizations, preferably within the agricultural and livestock sectors.
- Familiarity with the Tanzanian agricultural and livestock training curricula, CBET approach, and relevant policies and regulatory frameworks in animal health and production will be an added advantage.

10.0 Proposed modality of payment

Upon signing of the contract and prior to commencement of the assignment, a first instalment of seventy percent (70%) of the agreed contract sum shall be paid. A second instalment of ten percent (10%) shall be paid upon submission and acceptance of the training report. The third instalment of twenty percent (20%) shall be paid upon submission of the proofread compendium.

11.0. Points for consideration in evaluating expression of interests

- Demonstration of clear understanding of the scope of the assignment
- Demonstration of the trainer's expertise, capacity and capability to undertake the assignment
- Clear budget cost for the entire assignment
- Evidence of past similar works done through samples and references
- Demonstration of innovative approaches/methodologies of undertaking the assignment
- Timely submission of the Expression of Interest (EOI)
- Clear proposed plan/timetable of the assignment

12.0. Sustainable Agriculture Tanzania (SAT) has a zero tolerance to:

- **Sexual Exploitation, Abuse and Harassment**

Protection from Sexual Exploitation, Abuse and Harassment (PSEAH) is everyone's responsibility, and all staff, consultants and partners are required to adhere to the Code of Conduct, that enshrines principles of PSEA, always (both during work hours and outside work hours). Familiarization with, and adherence to, the Code of Conduct is an essential requirement of all staff, consultants and partners in addition to related mandatory training. All staff, consultants and partners must ensure that they understand and act in accordance with this clause.

- **Corruption and bribery**

The consultant shall comply with all applicable laws, statutes, regulations relating to anti-bribery and anti-corruption including but not limited to the Prevention and Combating of Corruption Act No. 11 of 2007 and not engage in any activity, practice or conduct which would constitute an offence under the Act.

13.0 Equality

Sustainable Agriculture Tanzania (SAT) is committed to encouraging equality and inclusion. Qualified consultants and firms regardless of their gender, religion, age or ethnicity who meet the minimum requirements are encouraged to apply.

14.0. Application and Documentation

Interested qualified trainers are invited to submit their applications. Trainers who meet the requirements should submit the following: application letter (EOI), Curriculum Vitae, conceptual inception report showing how you intend to achieve the stated objectives, previous experience (sample work and references), proposed five days training program and budget for undertaking the assignment. Please send your application electronically via consultancy@kilimo.org by **22nd July 2026** with the subject line of email **Animal Anatomy and Physiology Training**. **NB:** Deadline for submission of EOI will be on **22nd July 2026 at 1700hrs East African Time**. Late EOIs and portions of EOI, shall not be accepted for evaluation irrespective of the circumstances. Only awarded consultant(s) will be contacted.

We are open to receive questions for clarifications if any through consultancy@kilimo.org until 19th July 2026 after which no further questions will be received. No in-person or phone follow up is accepted.