SET
Skills for Employment Tanzania

Trainer Guide

Feedlot Supervisor

July 2025

Funded by:

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Embassy of Switzerland in Tanzania

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DISCLAIMER

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Swisscontact

Swisscontact works in Tanzania as a facilitator in skills development to complement government efforts in youth empowerment.

Economic, social, and academically disadvantaged youth are supported through tailor-made vocational skills development opportunities to increase their employment chances and entrepreneurship opportunities. Projects are guided by a unique youth and market-driven learning group model, which is focused on sub-sectors and jobs which have a potential to offer (self-)employment opportunities. These are agriculture/agribusiness, and other rural trades or services.

Swisscontact projects in Tanzania employ an Inclusive Markets system approach which considers the limits and opportunities of the existing vocational skills development system. Projects seeks to improve the prospects of self-employment among the youth through a sustainable and systemic contribution to improved access, relevance, and quality of vocational skills development. Since ownership is critical for sustainability, our projects apply a participatory approach which involves joint action planning with partners.

Introduction for Trainers

This training course is designed to prepare participants for supervisory roles in livestock feedlot operations, with a focus on cattle and goats. The training targets young Tanzanians—particularly those from rural and peri-urban areas—who have basic education and an interest in livestock farming or agribusiness. Many of these participants face economic barriers and limited access to formal training. This course equips them with practical skills to manage feedlot operations and contribute to profitable and sustainable meat production.

This training is part of Swisscontact's broader initiative to improve youth employment opportunities by supporting vocational training that is practical, market-driven, and responsive to local economic activities. The course places strong emphasis on hands-on experience, with 70% of the learning hours dedicated to practical work in real or simulated feedlot environments.

By the end of this 16-week course, learners will be able to supervise feedlot operations, ensure the health and welfare of livestock, manage feeding and hygiene routines, keep accurate records, and communicate effectively with feedlot teams and management. Participants will also explore related opportunities such as animal supply, basic extension services, or entering the market as livestock brokers.

As trainers, your role is essential in helping learners build both technical competence and the confidence to perform as responsible supervisors in a working feedlot environment.

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Course Information

Training Objectives

This training will equip participants to work as Feedlot Supervisors for cattle and goats. They will gain practical and theoretical knowledge in animal nutrition, feedlot operations, animal health, hygiene, staff supervision, and environmental responsibility. After completing the training, participants may be employed as feedlot supervisors or start small-scale feedlot operations.

The training also opens secondary economic opportunities such as:

- Providing feedlot supplies (e.g. feed, supplements, veterinary equipment)
- Providing basic extension services e.g. advice on animal healthcare and feeding
- Linking buyers and sellers as brokers
- Collaborating with nearby communities on animal health and grazing issues

Learning Outcomes

By the end of this course, the learner will be able to:

1. Explain the role and responsibilities of a feedlot supervisor
2. Understand ruminant digestion and nutritional needs for cattle and goats
3. Identify different types of feed and formulate appropriate feeding plans
4. Perform routine feedlot operations such as onboarding animals, daily inspections, and growth monitoring
5. Maintain hygiene standards for feeding areas, pens, and water points
6. Implement animal health protocols including vaccination, parasite control, and treatment of sick animals
7. Keep records of feedlot operations including feeding, health, and inventory data
8. Communicate effectively with staff, management, and community members
9. Supervise staff, allocate tasks, and manage incidents and attendance
10. Practice environmental responsibility, including managing manure and preventing overgrazing
11. Handle emergencies such as injured or missing animals, fires, and natural disasters

Job profile: A feedlot supervisor assesses and sorts animals; provides and controls appropriate nutrition for cattle and goats; measures the progress of animal growth; monitors the health and welfare of animals while ensuring a safe environment for animals and workers by following operating protocols, supervising people, keeping records and reporting on operations, and taking corrective action when needed to ethically maximise meat quality and quantity for the market and ensure business profitability and sustainability.

Training Plan

Training model: This training is delivered at a feedlot premise, with the theory training being conducted in a training room or venue and the learners being actively involved in day-to-day activities on the feedlot, learning to apply the theory as they go. Topics may be delivered in different sequence, depending on the activities of the feedlot at the time.	
Practical: 80%	**Theory:** 20%
Group size	Maximum 20 trainees
Training venue	This training may be delivered at an operational feedlot that also provides a suitable space for classroom-based theory sessions, alongside access to practical feedlot facilities.
Course duration	16 weeks | 4 months | 80 days | 560 hours

Entry requirements	• Any of the following:
	  ○ Degree in Animal Science
	  ○ Diploma in Animal Husbandry
	  ○ Certificate in Animal Health and Production
	  ○ Qualification in Veterinary Medicine
	  ○ 3 years of work experience on a cattle/goat farm and minimum Form 4 education
	• Up to the age of 25 years

Attendance:	80% needed for certificate of attendance

Course Content

Course content:	Theory hours	Practical hours	Total
Module 1: Animal Feeding	26	68	94
Module 2: Routine feedlot activities	11	66	77
Module 3: Feedlot hygiene	6	48	54
Module 4: Animal Health	21	76	97
Module 5: Feedlot administration	9	42	51
Module 6: Communicate feedlot operations	13	46	59
Module 7: Supervise feedlot staff	14	42	56
Module 8: Practice Environmental responsibility	4	24	28
Module 9: Handle emergencies	8	38	46
Total	**112**	**448**	**560**

Elective modules: to be developed in future

- Module 10: Design a feedlot
- Module 11: Acquire feedlot stock animals

Assessment

The emphasis is on practical workplace assessment to ensure that trainees acquire practical and applied skills for the job.

1. **Practical, formative assessment**: a practical Assessment Logbook, lists the practical on-job assessments that have been included in the curriculum. These will be signed off by the trainer in the workplace once the trainee has conducted the practical task to the satisfaction of the trainer. This is weighted at 60 – 70% of the total assessment mark.

2. **Final summative assessment**: trainees will write a theory exam at the end of the course. This is weighted at 30 – 40% of the total assessment mark.

Training Programme

Training days will include both theory and practical lessons. The timetable should fit around the daily work of the feedlot. For example, if feeding and cleaning must happen in the early morning, then lessons can take place afterwards for about two hours.

There are two types of lessons:

- **Theory lessons** with key knowledge concepts being taught, and demonstrations of feedlot tools and activities
- **Practical lessons** where learners practise real feedlot tasks

Learners will take part in daily feedlot activities as part of their training. They will help with tasks such as caring for animals, feeding, cleaning, and handling animals that are arriving or leaving the feedlot. They will complete their logbooks during the course of their training, logging what they are learning and completing the exercises required.

The following suggested Training Plan is a guideline on how to teach the curriculum, with modules integrated so that various feedlot activities can be learned and applied as soon as possible to get the learners actively involved in the operations of the feedlot. Trainers may devise and follow their own training schedules based on their needs and context of their feedlots or training environment.

Suggested Training Plan

Week 1	Week 2	Week 3	Week 4
Orientation **Module 1:** Animal Feeding **Module 2:** Routine Feedlot Activities	**Module 1:** Animal Feeding **Module 2:** Routine Feedlot Activities	**Module 1:** Animal Feeding **Module 2:** Routine Feedlot Activities	**Module 1:** Animal Feeding **Module 2:** Routine Feedlot Activities
Week 5	**Week 6**	**Week 7**	**Week 8**
Module 3: Feedlot Hygiene **Module 2:** Routine Feedlot Activities	**Module 3:** Feedlot Hygiene **Module 2:** Routine Feedlot Activities	**Module 4:** Animal Health **Module 2:** Routine Feedlot Activities	**Module 4:** Animal Health **Module 2:** Routine Feedlot Activities
Week 9	**Week 10**	**Week 11**	**Week 12**
Module 4: Animal Health **Module 2:** Routine Feedlot Activities	**Module 4:** Animal Health **Module 5:** Feedlot Administration	**Module 5:** Feedlot Administration **Module 6:** Communicate Feedlot Operations	**Module 5:** Feedlot Administration **Module 6:** Communicate Feedlot Operations
Week 13	**Week 14**	**Week 15**	**Week 16**
Module 7: Supervise Feedlot Staff	**Module 7:** Supervise Feedlot Staff	**Module 8**: Practice Environmental Responsibility	**Module 9:** Handle Emergencies **Assessment**

Important Note:

The Trainer Guide provides suggestions on how to teach the **theory** content and give ideas for engaging and interactive activities to conduct in the classroom, and also on the feedlot (e.g. administering vaccinations). This accounts for 20% of the training time.

Practical training: 80% of training time is allocated to working in the feedlot, conducting ongoing operational activities until learners are familiar with these tasks and activities and are competent at them, having built up experience over the 16 weeks.

The time indications in the following training instructions reflect only the classroom based and actual teaching time (including activities), not the time in the feedlot operations.

Module 1: Animal Feeding

This module is quite heavy on theory as it creates the foundational understanding of feeding in feedlots. A thorough understanding of the science of nutrition and feeding must be built in the classroom. Other modules will be more practically orientated.

Topic	Time	Training Instructions	Resources

1.1 Ruminant digestion	1 hour	Explain the main parts of a ruminant digestive system and their functions.
		Videos to show:
		• Ruminant Digestive System: https://www.youtube.com/watch?v=E1ieh_c5N3g
		• How a Rumen Works: https://www.youtube.com/watch?v=muf8ZA3F2mA
		
		Activity 1: Ruminant Digestive System Diagram
		
		1. Provide learners with a blank diagram of the ruminant digestive system
		2. Learners:
		  • Label each part correctly
		  • Write the main function next to each part
		3. Check learners' diagrams and provide corrections where needed.
			Diagram of the ruminant digestive system

1.2 Animal nutrition	3 hours	Lessons on animal nutritional needs, sources of different nutrients, relative costs of different sources of nutrients; effects of dietary deficiency ***and deficiency diseases and symptoms***.	

Topic	Time	Training Instructions	Resources
		Activity 2: Flashcards: Match feed types to nutrients 1. Place the feed type cards on one side of the table. 2. Place the nutrient cards on the other side. 3. Tell learners that each type of feed gives animals one or more important nutrients. The task is to match each feed type to its correct nutrient. 4. **Demonstrate an example** • Show the *fish meal* card and explain that it gives *protein*. • Match the *fish meal* card to the *protein* card. 5. Let learners work in small groups. • They take turns picking a feed card and discussing which nutrient it gives. • They then place it next to the correct nutrient card. 6. Once all matches are made, check them as a class.	Flashcards of feed types and of main nutrients.
1.3 Types of feed	5 hours	Present lessons on all the different types of feed, with examples, advantages, disadvantages. Start off by running an 'identification test' to introduce the different types of feed and feed ingredients. **Activity 3: Identification Test** 1. On a table or clean floor, lay out a selection of feed types and ingredients. 2. Put a small number next to each item.	• **Identification test**: physical samples of different feeds including additives, fish meal, BSF, seedcake, etc. • Bags or small dishes/plates

Topic	Time	Training Instructions	Resources
		3. Give each learner a sheet of paper and ask them to write numbers down the left margin. 4. Instruct them to try to identify each of the items laid out and write their name and their use on their sheet of paper. 5. Give them 10 minutes to do this. 6. After 10 minutes, starting with number 1, ask them what they think the item is. 7. Make it fun like a TV quiz. If they identify it correctly, they get a point; if they understand and have noted its use in feed, they get another point. 8. Go around asking and explaining, showing what all the items are. 9. Allow learners see, touch, smell or even taste some items to become familiar with them. 10. At the end, ask who got the highest number of points, and give them a small prize e.g. some wrapped sweets. Explain feed labels and how they are composed. Show feed analysis reports and explain how they work. **Activity 4: Feed Label Analysis and Interpretation** 1. Show the learners different feed labels and read and interpret feed labels/lab analysis. 2. Divide the learners into groups of 5 and give each group a couple of empty feed bags 3. Each group must work together to read and interpret the label and answer the questions:	to place the different samples in or on. Feed analysis reports – various • Samples of labels from different types of feed and different brands of feed. Collect a lot of empty feed bags

Topic	Time	Training Instructions	Resources
		a. What is the protein source for each feed? b. Which one has the highest protein value? c. What additives have been included in the feed? d. What is the source of carbohydrate in each feed? e. What is the source of oil/fat in each feed? 4. Each group must report back on their findings. 5. The whole group must discuss which one is best, if any (each will have pros and cons).	
1.4 Pastures	16 hours	Theory talks before the field visit, explain: • What pasture feeding is and why it is important. • The difference between good and poor-quality grazing. • How overgrazing affects the land and animals. • Common signs of pests, parasites, and weeds in pastures. Use simple pictures or examples if possible. **Activity 5: Pasture Visit and Inspection** 1. Take the learners to a nearby pasture. This could be: a. On the feedlot premises, or b. On nearby farmland (with permission). 2. Ask the learners to walk through the pasture and observe. They should: a. **Look at the grass**: Is it short or tall? Green or dry?	Local pasture or grazing area Examples of rotational grazing plan Template for grazing plans

Topic	Time	Training Instructions	Resources
		b. **Check for pests or weeds**: Are there insects, damaged leaves, or unwanted plants? c. **Look for damage**: Are there bare patches, animal tracks, or signs of soil erosion? 3. Let learners take notes during the inspection. 4. Back in the classroom or under shade: 5. Ask each learner (or group) to write a short report. 6. The report must include: a. Grass condition and height b. Any pests, parasites, or weeds found c. Any signs of overgrazing or erosion d. Simple recommendations for improvement	
1.5 Hay and silage	12 hours	Explain and demonstrate: • Hay baling • Silage making • Storage of hay and silage • Recording stock: hay and silage **Activity 6: Hay and Silage Demonstration and Practice** 1. Learners practice making a bale using available materials and tools 2. Learners prepare a small silage pit or drum, chop and compact forage, seal properly 3. Learners complete a simple stock record showing quantities made	Hay, baling equipment Silage feed, drums, chopping equipment Stock record form

Topic	Time	Training Instructions	Resources
		4. Discuss challenges and check if learners followed correct steps	
1.6 Grazing Plans	10 hours	Explain the principles and practices of rotational grazing. Discuss land carrying capacity, stocking rate and soil types as elements to consider when drawing up grazing plans. Refer to pasture inspection as an input to grazing plans. Explain risks and contaminants in grazing Emphasise the prevention of overgrazing and the risk of erosion and loss of topsoil. **Activity 7: Design a rotational grazing plan** 1. Demonstrate how to design a grazing plan using all the inputs and calculations such as carrying capacity. 2. Refer to the Pasture Inspection Reports produced in Activity 5. 3. In groups, learners must develop a rotational grazing plan for goats or cattle: 1. Design a basic rotational grazing plan for goats or cattle. 2. The plan must explain: • Number of paddocks • Days in each paddock • Resting period for grass 3. Calculate carrying capacity and stocking rate.	**Assessment**: • Pasture inspection reports from Activity 5 • Template for grazing plans

Topic	Time	Training Instructions	Resources
		4. Each group must present their plan with reasons for their decisions	
1.7 Feed formulation	17 hours	Lessons on the formulas and requirements for different feed formulations, with demonstrations of feed analysis reports and feed formulas. **Activity 8: Feed Analysis Reports and price lists** 1. Provide learners with **sample feed analysis reports and price lists for different feeds** 2. Instruct learners to: o Compare the quality of feeds using the analysis results (protein, energy, fibre) o Calculate which feeds best meet ABM standards for the target animals (simple comparison) o Compare prices of feeds o **Make a recommendation on which feed to buy**, giving reasons based on quality, suitability, and price	• Feed analysis report/s • Price lists for different feeds • Calculators (on smartphones)
1.8 Manage concentrated feed	12 hours	Present content on how to manage concentrated feeds. **Activity 9: Complete Feedstock Record Sheets** 1. Hand out copies of the feed record cards 2. Write the following info on the flip/board**:** o Maize bran:	Feed stock Record Cards found in Activity Resources section

Topic	Time	Training Instructions	Resources
		▪ Received: 23 July: 100kg ▪ Issued: 24 July: 60kg o Rice bran: ▪ Received: 18 July: 50kg ▪ Issued: 24 July: 60kg 3. Learners must: • Complete the feed stock records accurately. • Note the balance of feed for both items. • Identify any actions to be taken (the rice ban is below minimum quantity and needs to be ordered)	
1.9 Design and execute a feeding plan	10 hours	Teach, explain and demonstrate how to calculate design and follow a feeding plan for both cattle and goats. **Activity 10: Practical Exercise: Develop a weekly feeding plan** 1. Calculate the full daily and weekly feed needs for a goat or cattle herd (use given weights and herd size). 2. Prepare a weekly feeding plan showing daily quantities and total weekly requirement – use the feed plan template/form from the feedlot. 3. Produce a simple feed consumption forecast for one month and determine when to place the next order based on lead time	Data on goat or cattle herd: weights and herd sizes Blank feeding plan template from feedlot

Topic	Time	Training Instructions	Resources
1.10 Monitor feeding patterns and adjust feeding plans and practices	8 hours	**Activity 11: Field Activity: Monitor Feeding Patterns and Recommend Actions** 1. Learners visit a herd or watch a video showing different feeding behaviours 2. Observe and note: • Dominant vs dormant animals • Underfed or shy animals • Selective feeding or refusal to eat 3. Compare observations to feeding records (provided by trainer) 4. Based on the findings, learners: • Identify gaps between planned and actual feed intake • Recommend revisions to feeding plans (e.g. more feeding points, separating weak animals, changing feeding times)	Observation sheets from the feedlot or notes in field book Feeding record

Module 2: Routine Feedlot Activities

Topic	Time	Training Instructions	Resources
2.1 Onboard incoming animals	11 hours	Discuss and explain onboarding activities followed by participation in an actual onboarding process of a group of animals arriving at the feedlot. **Activity 12: Field Activity: Onboarding Animals** 1. Participate in a simulated onboarding process (or real if animals are available) 2. Trainer to demonstrate each process, then the learners practice: • Spraying and deworming safely • Tagging or marking animals • Weighing animals and recording data • Applying quarantine procedures • Providing hay and water **3.** Trainer observes and gives feedback on handling, health procedures, marking, recording, and quarantine setup	**Equipment for**: • Weighing • Spraying and deworming • Tagging or marking animals • Quarantine facilities • Hay and water with feeders Recording sheets
2.2 Daily headcounts	13 hours	Discuss reasons for headcounts; explain and demonstrate how to conduct daily headcounts. **Activity 13: Demo and Practice: Perform Daily Animal Headcount**	Headcount recording sheets or field book

Topic	Time	Training Instructions	Resources
		Trainer: demonstrates how to conduct a headcount in situ **Learners:** 1. Practice conducting a live headcount (or use a simulation) 2. Record the findings on a headcount sheet or field book **3.** Review and verify accuracy with the trainer **Note:** this is a long-term ongoing activity as part of daily feedlot operations that the learners will conduct daily.	
2.3 Animal inspections	14 hours	Discuss the reasons and principles of animal inspections. **Activity 14: Demo and Practice: Conduct Animal Inspections** **Trainer**: Demonstrate animal inspections in situ. **Learners:** 1. Observe animals in the feedlot using observation elements 2. Submit completed observation records or field book 3. **Trainer** checks for accuracy of observations and recording procedures **Note:** this is a long-term ongoing activity as part of feedlot operations that the learners will conduct daily.	Inspection and observation reporting sheets

Topic	Time	Training Instructions	Resources

2.4 Weight recording	14 hours	Class presentation on the importance of weight recording in terms of production management; principles and practices of weigh recording.
		
		Activity 15: Demo and Practice of Weight Recording
		
		1. **Trainer** demonstrates weighing procedures and weight recording.
		2. **Learners**:
		  1. Practice weighing animals using appropriate equipment
		  2. Record weights in a sample field book correctly
		  3. Check accuracy and ensure records are clear and complete
		  4. Enter sample weight data into a spreadsheet
		  5. Calculate average weights, identify variability, and calculate standard deviation
		  6. Identify animals needing corrective action or special attention
		  7. Recommend whether animals are ready for market or need more fattening
		Note: this is a long-term ongoing activity as part of feedlot operations that the learners will conduct regularly.
			Weighing equipment
			Recording equipment

2.5 Growth performance analysis	14 hours	Following from the weight recording, explain how the weight records are used to analyse the growth performance of animals over time. Explain and show the procedures and formulas for calculating and analysing results. Discuss corrective actions to be taken based on results.	Computer and projector Formatted Excel Spreadsheets

Topic	Time	Training Instructions	Resources
		Activity 16: Demonstration of Growth Performance Analysis 1. Using a formatted spreadsheet with sample data, demonstrate how to enter data and analyse results. Use data for a number of different animals with different performance levels. 2. Divide learners into groups to discuss the findings and make recommendations on corrective actions to take. 3. Each group must report their recommendation for one of the animals to the class and consensus must be reached on the best course of action for that animal. **Note:** this is a long-term ongoing activity as part of feedlot operations that the learners will conduct regularly after weight recording.	
2.6 Off-board animals	11 hours	Explain and discuss all elements of offboarding animals from a feedlot. **Activity 17: Demonstrate and Practice Off-boarding animals** Learners to participate in an offboarding event/activity on the feedlot including: 1. Practice segregating animals for market 2. Move them to lairage 3. Complete required documents (use sample transport permits and health records) 4. Practice safe and calm loading procedures onto a transport vehicle	Lairage equipment and cleaning equipment Records

Module 3: Feedlot Hygiene

Topic	Time	Training Instructions	Resources
3.1 Feed and water stations	11 hours	Discuss the importance of feed and water stations, and why they must be kept clean and disinfected. **Activity 18: Clean and fill feed and water stations** **Trainer:** 1. Demonstrate how to clean and fill feed and water stations and a treat water in troughs**.** **Learners**: 2. Clean cattle and goat water troughs using correct methods 3. Clean cattle feeding troughs and sweep out leftovers 4. Clean goat feeding pens, remove debris, wash, and apply disinfectant (where available) **Note:** this is a long-term ongoing activity as part of feedlot operations that the learners will conduct daily.	• Feed and water stations • Cleaning equipment and materials; disinfectant • Fresh feed and water
3.2 Control weeds and undesirable plants	12 hours	Discuss and explain the control of weeds and undesirable plants in a feedlot or pasture. Show physical examples (go and pick them before the class)	• Samples of weeds and undesirable plants.

Topic	Time	Training Instructions	Resources
		Activity 19: Practical: Weeds and Undesirable Plants **Trainer:** 1. Collect samples of weeds and undesirable plants (IAPs and toxic plants) before the class. 2. Show and explain the classes of plants and examples of each. Point out their identifying characteristics. Allow learners to feel, touch, smell the plants (e.g. lantana has a distinctive smell). 3. Explain the best way to remove each one – demonstrate with correct tools and equipment. **Learners**: 4. Walk the feedlot and paddock areas 5. Identify and name common weeds and undesirable plants 6. Practise safe removal using tools or by hand 7. Collect removed plants and dispose of them correctly **Note:** this is a long-term ongoing activity as part of feedlot operations that the learners will conduct regularly.	• Weed control equipment
3.3 Manure management	16 hours	Explain the importance of manure management, and the principles of how to do it. Include the value of manure as a farming input (e.g. crops, fish) and the sale thereof. Prepare necessary tools: shovels, forks, wheelbarrows, or tractor and trailer (if available).	Equipment for manure management: shovels, wheelbarrow, other.

Topic	Time	Training Instructions	Resources
		Identify and prepare the designated manure storage or compost area. **Activity 20: Demo and Practice: Manure Management** **Trainer:** 1. Show learners the correct tools and how to use them safely. 2. Demonstrate the correct technique for clearing manure: 3. Explain how to avoid cross-contamination (e.g. keeping tools clean, wearing PPE) 4. Divide learners into small groups. **Learners:** 5. Each group to practice clearing manure from the pens or goat houses. 6. Observe and correct any unsafe or incorrect techniques. 7. Ensure manure is transported properly to the storage or compost area. **Note:** this is a long-term ongoing activity as part of daily feedlot operations that the learners will conduct regularly.	
3.4 Pest control	13 hours	Explain the importance of controlling flies and rodents in livestock areas. Show pictures or samples of different fly traps (e.g. bottle traps, sticky traps, bait traps) and rodent traps (e.g. mechanical, pipe traps). **Activity 21: Demonstration and Practice: Fly and Rodent Traps**	• Plastic bottles • Fly bait (sugar water, meat scraps) • String • PCV pipes/pieces of bamboo

Topic	Time	Training Instructions	Resources
		Trainer: • Show learners how to make a **simple bottle fly trap** using a plastic bottle, bait (e.g. sugar water, meat scraps), and string. • Demonstrate how to make **rodent pipe traps** using simple PVC pipes or bamboo and bait. **Learners:** 1. **Fly traps**: Learners make at least one fly trap each using local materials. 2. **Rodent traps**: Learners make at least two rodent traps each (target 30 traps for the whole group). **3.** Trainer observes the making of traps, corrects methods, and checks for safety practices.	• Bait

Module 4: Animal Health

Topic	Time	Training Instructions	Resources
4.1 Biosecurity protocols for disease control	12 hours	Explain the importance of biosecurity controls and the procedures and practices for biosecurity on a feedlot. **Activity 22: Demonstrate Feedlot Biosecurity Measures** **Trainer**: Walk learners through the feedlot. **Learners**: 1. Identify biosecurity risks (e.g. open gates, mixing animals, dirty areas, visitors without records). 2. Practice: • Setting up footbaths or hand-washing stations at entrances. • Separate equipment (label feed tools and manure tools separately). • Planning an animal quarantine or isolation area. **Note:** this is a long-term ongoing activity as part of feedlot operations that the learners will conduct daily.	• Footbaths, handwashing stations • Biosecurity equipment
4.2 Animal vaccinations	12 hours	Discuss the importance of animal vaccinations; the different types of vaccinations and the schedules, protocols, and equipment for administering them.	Vaccination table to complete in

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<tr><th>Topic</th><th>Time</th><th>Training Instructions</th><th>Resources</th></tr>
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Activity 23: Demonstration and Practice Sessions: Animal Vaccinations

Trainer:
1. Conduct a series of demonstrations of vaccination protocols as they come up on the feedlot calendar for different batches of animals. This may take a few weeks to complete.
Learners:
1. Learners complete a table matching disease vaccine and protocol (provided by the trainer). Example:
<table>
<tr><th>Vaccine Name</th><th>Protocol</th></tr>
<tr><td>Foot and mouth</td><td></td></tr>
<tr><td>CBPP</td><td></td></tr>
<tr><td></td><td></td></tr>
</table>
2. Learners Demonstrate:
• Corralling animals into chute or crush.
• Safe handling and restraint.
• Correct vaccine preparation, measuring, and administration.
• Use of PPE and safe injection techniques.
• Safe disposal of medical waste.
• Vaccination recording (as per feedlot recording system)
3. Use a tick box checklist to follow procedures (corralling, restraining, vaccinating, safety, record keeping).
</td>
<td>Activity Resources section

Vaccines
Vaccination equipment e.g. vax gun; gloves; disposal container, cool boxes

Tick box checklist of procedures</td>
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<tr><th>Topic</th><th>Time</th><th>Training Instructions</th><th>Resources</th></tr>
<tr><td></td><td></td><td>Note: this is a long-term ongoing activity as part of feedlot operations that the learners will conduct when vaccinations are due based on the feedlot calendar.</td><td></td></tr>
<tr><td>4.3 Parasite control</td><td>12 hours</td><td>Discuss the different types of parasites and the control and treatment measures for each.

Activity 24: Parasite Control

Trainer:
1. Demonstrated the different protocols for parasite control.
Learners:
2. Learners complete the following table:
<table>
<tr><th>Parasite</th><th>Drug</th><th>Protocol</th></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td></tr>
</table>
3. Practise deworming and spraying/dipping procedures using safe handling and correct techniques.
4. Use a tick box checklist to confirm steps (restraining, measuring, applying, safety, disposal).

Note: this is a long-term ongoing activity as part of feedlot operations that the learners will conduct when parasite controls are due based on the feedlot calendar.</td><td>Equipment:
• Application equipment
• Gloves
• Drugs/control meds
• Tick box checklist.

Table found in Activity Resource section</td></tr>
</table>

Topic	Time	Training Instructions	Resources
4.4 Disease detection and containment	16 hours	Spend significant time on explaining all the common diseases that may affect animals in a feedlot. Explain symptoms, causes, treatment and control of each. Use visuals/photos/slides to show what they look like to ensure they can be recognised. **Activity 25: Demonstration and Practice: Head-to-tail animal inspection** 1. **Trainer** demonstrates a **head-to-tail inspection on an animal or using clear images/videos.** 2. Highlight areas where symptoms may appear. 3. **Learners**: • Conduct a head-to-tail inspection on animals (real or simulated). • Use a tickbox checklist to ensure all inspection points are checked. • Observe pen/paddock and note abnormal signs. 4. Discuss findings in small groups and recommend: Containment actions: separation, isolation, or movement to a sick pen. **Note:** this is a long-term ongoing activity that the learners will conduct regularly as part of feedlot operations.	Field book
4.5 Treatment for sick and injured animals	13 hours	Discuss the treatment for a range of illnesses or injuries that may affect feedlot animals **Activity 26: Demonstration and Practice: Veterinarian First Aid**	Veterinarian first aid supplies to treat wounds or injuries.

Topic	Time	Training Instructions	Resources
		Trainer: Demonstrate veterinarian first aid on a simulated wound or model animal. 1. Show correct: • Cleaning and disinfecting procedures. • Application of bandages or dressings. • Administration of appropriate drug doses (using dummy syringes for practice). **Learners**: 2. Practise treating a simulated wound or injury under supervision. 3. Apply correct cleaning, treatment, and drug administration. 4. Identify signs of different diseases or injuries (through case studies or visual aids). 5. Recommend correct treatment protocols.	Medicines and drugs Safety and hygiene equipment e.g. latex gloves.
4.6 Postmortems on dead animals	10 hours	Discuss why postmortems are conducted on dead animals. Explain the procedures and how to record and interpret findings of postmortems. **Activity 27: Analysis of Postmortem Reports** 1. Provide learners with sample previous PM reports and data. 2. Learners: • Read reports. • Summarise key findings: common causes of death, patterns, and frequencies. • Suggest possible farm management improvements based on the data. **Additional Activity: Conduct a Postmortem**	Copies of postmortem reports and results (drawn from existing feedlot records)

Topic	Time	Training Instructions	Resources
		1. If there is a dead animal, the trainer can demonstrate the postmortem process and recording with the learners as observers. 2. If additional animals die, the learners can conduct postmortem/s under the supervision of the trainer.	
4.7 Animal health records	12 hours	Explain types of animal health records and the forms of records e.g. hard copy, digital. **Activity 28: Demonstration and practice: Animal Health Records** **Trainer:** 1. Show learners **sample record books and completed examples.** 2. Demonstrate how to transfer data from the **field book into specialist books.** **Learners** 3. Practice filling out field book entries during a simulated farm activity (e.g. treatments, vaccinations, PM, observations). 4. Transfer data from the field book into the vaccination book, treatment book, and postmortem record file. 5. Ensure all entries are correct, neat, and complete. **Note:** this is a long-term ongoing activity that the learners will conduct regularly as part of feedlot operations.	A range of animal health records on the feedlot. Samples/examples of the set of 5 books used in a feedlot.

Topic	Time	Training Instructions	Resources
4.8 Manage veterinary supplies	10 hours	Explain types of medical supplies and stock procedures **Activity 29: Practical: Manage Veterinary Supplies** **Learners**: ongoing activity as part of monthly feedlot operations 1. Perform a monthly stock-take of medical supplies using a stock record template. 2. Check and record: • Quantities. • Expiry dates. • Condition of medicines and equipment. 3. Identify any expired or damaged items for disposal. 4. Demonstrate correct PPE use while handling supplies. 5. Review the cold storage area and check temperatures. 6. Safely separate any items for disposal following guidelines.	Veterinary supplies: first aid items: PPE, equipment and medications; disinfectant, etc.

Module 5: Feedlot Administration

Topic	Time	Training Instructions	Resources
5.1 Feedlot records	14 hours	Following from all the health records in Module 4, build on this to show how this is part of overall record keeping on feedlots. **Activity 30: Demonstration and Practice: Feedlot records** **Trainer:** 1. Draw a diagram on the board/flipchart showing the records kept in a feedlot and how they relate to each other 1. Include all key records and linkages (e.g. feed records affect performance records). 2. Demonstrate how to conduct procedures (e.g. stock taking) to obtain the data that will be captured on the records. 3. Show how to record different kinds of data on different records. 4. **Note**: use real feedlot records that are in use in the feedlot operations 5. **Note**: this may be a series of separate demonstrations and practices for different recording activities. **Learners:** ongoing recordkeeping activity 6. Conduct inventory/stock-taking of animals, feed, medical supplies, and equipment (real or simulated). 7. Follow correct protocols: 8. Use correct forms. 9. Apply FIFO for feed and medicines. 10. Check for losses, spoilage, or damage.	Samples of completed feedlot records Copies of blank feedlot records for practice purposes.

Topic	Time	Training Instructions	Resources
		11. Record data in appropriate/relevant record books or spreadsheets.	
5.2 Feedlot suppliers	13 hours	Discuss feedlot suppliers: different types for different supplies; how the feedlots engage with, manage, purchase and pay them. **Activity 31: Practice: Supplier Engagement** 1. Identify a scenario (e.g. need to buy feed, medicine, request transport). 2. Practice: • Completing a **quotation request form** for an external supplier. • Completing an **internal requisition form** for an internal department. 3. Review sample supplier lists and discuss selection criteria (price, quality, reliability). **Activity 32: Guest Speaker: Feedlot Supplier** 1. Invite a supplier to come and talk to the learners about their products and services and how their business relationship and processes with the feedlot operators. This includes things like catalogues, order forms, invoices, etc. 2. Arrange a small thank you gift for the speaker, and for one of the learners to present it with a thank you speech.	Purchasing documents Guest speaker invitation and briefing. Small gift.

Topic	Time	Training Instructions	Resources
5.3 Herd Management Software (HMS)	12 hours	Explain the management of herds using dedicated software including apps on hand-held devices. Show/project screenshots of animal records, data inputs and reports and explain how the software works. **Activity 33: Demonstration (and practice): HMS** **Trainer:** 1. Demonstrate Herd Management software or App using accessible devices (e.g. phone or tablet) 2. If you do not have it, show a training video as an example. A link is attached in the Resources column. **Learners:** if this is possible and they have access to HMS 1. Practise entering sample data into HMS (or spreadsheet template). 2. Generate reports (animal health, feed consumption, weight performance). 3. Analyse the data to spot any issues (e.g. weight loss, sickness trends). 4. Suggest management actions based on the analysis.	HMS as used at the feedlot. Smartphone with HMS app Farmbrite Training Videos
5.4 Feedlot facility maintenance	12 hours	Discuss the importance of ongoing maintenance of the feedlot facility, tools, equipment, grounds and general environment. Show pictures of neat vs untidy feedlots.	Inspection report

Topic	Time	Training Instructions	Resources
		Activity 34: Maintenance Inspection 1. Conduct a walk-around inspection of facilities, pens, fencing, equipment, and tools. 2. Record any faults, damages, or hygiene issues. 3. Perform simple maintenance tasks: • Clean tools and equipment. • Sweep and tidy pens and storage areas. • Repair small damages (e.g. tighten, oil, patch). 4. Manage rubbish collection and disposal. **Note:** this is a long-term ongoing activity that the learners will conduct regularly as part of feedlot operations.	

Module 6: Communicate Feedlot Operations

Topic	Time	Training Instructions	Resources
6.1 Operational feedback from feedlot staff	15 hours	*Discuss the types of operational feedback that should be provided to feedlot staff, including how, when, and where it should be delivered* **Activity 35: Role Play: Daily feedback** 1. Divide learners into 5 groups and give each group a role-play scenario card. 2. Each group must play out the scenario for the other groups. 3. After each scenario, discuss a **short action plan** covering: • Who to inform. • What instructions to give. Which suppliers or authorities to contact.	Printed copies of scenario cards
Role Play Scenarios			
Scenario 1: Sudden Storm Warning **Prompt:** The weather report shows a strong storm approaching. The pen areas are already muddy, and staff are worried about animal stress and movement.			

Role Play:

- The weather observer reports conditions.
- Supervisor decides what to do (e.g. move animals, add bedding, prepare emergency feed).
- Action plan: inform animal care staff, check shelter areas, contact owner if damage expected.
- Supervisor allocates actions to team members

Scenario 2: Signs of Illness in Young Stock

Prompt:
The animal health officer notes that several calves are showing signs of diarrhoea and are not feeding well.

Role Play:

- Health team reports the issue.
- Supervisor decides what to do: isolation, increased monitoring, or vet contact.
- Action plan: inform vet, instruct health staff to clean affected areas, notify management.
- Supervisor allocates actions to team members

Scenario 3: Pasture Area Too Wet to Use

Prompt:
The pasture manager reports that the back paddock is too waterlogged to be used. Moving animals there will cause damage.

Role Play:

- Pasture team reports field conditions.
- Supervisor decides to delay grazing or rotate to another area.
- Action plan: inform feeding team to adjust rations, update grazing schedule, log condition.
- Supervisor conveys decisions and allocates actions to team members

Scenario 4: Worker Injury During Feeding

Prompt:
During morning feedout, a worker slipped and hurt their ankle. They can't continue their shift.

Role Play:

- Team leader reports the incident.
- Supervisor responds by arranging First Aid and cover for feeding tasks.
- Action plan: report to management, ensure injury log is completed, monitor safety conditions.
- Supervisor conveys decisions and allocates actions to team members

Scenario 5: Feed Quality Concern

Prompt:
A new batch of feed smells strange and the animals are refusing to eat it.

Role Play:

- Feed manager reports issue.
- Supervisor group decides whether to return feed, test it, or switch to backup.
- Action plan: contact supplier, inform staff not to use batch, log supplier complaint.
- Supervisor conveys decisions and allocates actions to team members

Topic	Time	Training Instructions	Resources
6.2 Performance reports	16 hours	**Explain how to consolidate reports:** • Combine individual animal data into a collective report. • Identify **general trends** (e.g. Average Daily Gain (ADG) for the batch) and **outliers** **Activity 36: Practice: Performance Calculations and Reports** 1. Provide **sample individual performance reports (weight, feed records)** and a **blank summary report form** to the learners**.** 2. They must work on their own to calculate Average Daily Gain (ADG) and Feed Conversion Ratio (FCR) for each animal. 3. Consolidate their data into a **summary report.** 4. Identify trends and outliers. 5. Prepare **recommendations and actions** (e.g. improve feed, isolate underperforming animals, adjust feeding strategy).	Copies of performance reports – different ones. Calculators on phones

		6. Facilitate a feedback session getting answers from different learners and discussing the best options in terms of recommendation and actions.	
6.3 Operational feedback to management or owners	10 hours	Explain why and how the owners or management must be provided with feedback and updates on feedlot operations and growth performance. Show a sample operational report template. • Explain how to gather data from various records (health, feed, inventory, incidents). • Demonstrate how to fill in each section clearly and professionally. **Activity 37: Practice: Monthly Reporting** 1. Learners must use sample feedlot records and data (provided by the trainer). 2. Complete a monthly operational report template, including all sections. 3. Write actions taken and provide reasons. 4. Trainer checks accuracy, completeness, and logical reporting.	Monthly operational report template with the relevant sample information and data
6.4 Market trends and conditions	8 hours	Discuss the importance and methods of following market trends and conditions with relation to prices (buying and selling), health issues; broader weather patterns and their impacts, and how to gather information on such trends. **Activity 38: Practice: Sourcing data to identify market trends and conditions** 1. Research and record current buying prices for steers, heifers, and goats. 2. Research and record current selling prices for steers, heifers, and goats.	Market prices for buying and selling cattle (steers and heifers) and goats

		3. Include the source of information and date of research. 4. Discuss any observed price trends or influencing factors (e.g. disease, weather). 5. Completed market price research report, showing: • Buying and selling prices for cattle and goats. • Source of information. • Simple comments on market conditions. 6. Research any current health issues affecting cattle and goats in Tanzania; report briefly on these. 7. Research any weather patterns affecting farming in Tanzania and East Africa; report briefly on these.	
6.5 Relationships with local communities & response to community issues	10 hours	Explain the importance of working within the context of a specific community and how to engage with the community in various ways, and on different issues. **Activity 39: Discussion: Local communities and community issues** 1. Ask learners: "*What can happen if a feedlot does not engage or has conflicts with the local community?*" 2. Facilitate a discussion about: • Risk of disputes over land, grazing, or water. • Poor cooperation during disease outbreaks or emergencies. • Missed business opportunities with local farmers. • Damaged reputation or legal issues.	

Module 7: Supervise Feedlot Staff

Topic	Time	Training Instructions	Resources
7.1 Supervise staff	14 hours	Present and discuss the various elements of staff supervision that a feedlot supervisor would be responsible for in day-to-day operations. **Activity 40: Simulation/Practice: Staff Supervision** **Note:** This is ongoing learning and experience gaining for learners as they participate in these activities over their time in the feedlot. 1. Learners participate in a **simulated weekly team meeting**, acting as managers, supervisors, and operations staff. 2. Prepare a **simple work plan for the week**, including tasks, responsibilities, and timelines. 3. Practise issuing work instructions and adjusting work based on weather. 4. Conduct **follow-up checks on simulated tasks** and address any performance or attitude issues through feedback and coaching.	
7.2 Staff timesheets and work attendance	12 hours	Explain the importance of timekeeping and tracking staff work attendance as a key cost to the feedlot. Discuss the procedures of tracking attendance and performance. **Activity 41: Practice: Timesheet completion**	• Blank weekly timesheets • Blank leave forms

Topic	Time	Training Instructions	Resources
		1. Learners submit: a. Completed **weekly time sheet.** b. Correctly filled **attendance and leave log.** 2. Trainer assesses: a. Accuracy, neatness, and completeness. b. Correct recording of absenteeism and leave.	
7.3 Staff incidents and situations	8 hours	Explain that supervisors are also responsible for dealing with staff incidents and situations. Give examples and ways of dealing with them, including mistreating of animals, conflict, substance abuse, alcohol, absenteeism, sleeping on duty, theft and sexual harassment. Give examples from own experience. **Activity 42: Group Discussion** 1. Ask learners: "*What happens if incidents like animal mistreatment, theft, or harassment are ignored on a feedlot?*" 2. Discuss: • Damage to animal welfare and farm reputation. • Poor staff morale and productivity. • Legal risks and possible penalties.	

Topic	Time	Training Instructions	Resources
		• Financial losses.	

7.4 Occupational health and safety on feedlots	18 hours	Discuss and explain Occupational Health and Safety on feedlots, covering
		• **Safe work procedures and practices:**
		  ○ Safe animal handling practices
		  ○ Safe chemical handling protocols (e.g. disinfectants, acaricides, meds, others)
		  ○ Safe handling of equipment
		• Safety equipment and PPE
		• Procedures in case of emergencies e.g. fire, accidents
		• **First Aid:**
		  ○ Maintain a properly stocked first aid kit
		  ○ Apply basic first aid for workplace injuries
		• **Fire Safety**
		  ○ Extinguishers: use and maintenance/servicing
		  ○ Basic firefighting procedures
		
		Activity 43: Case Study: Green Pastures Feedlot
		
		1. Divide learners into groups.
		2. Hand out copies of the case study.
		3. The learners must read the case studies and determine the causes ***what went wrong*** for each one.
		4. They must identify the 'Lessons Learned' and make recommendations on overall Occupational Health and Safety on Green Pasture Feedlot.
			Material Safety Data Sheets (MSDS)
			Safety equipment and PPE
			First Aid Kit
			Firefighting equipment
			
			Copies of case study

Topic	Time	Training Instructions	Resources
		Answers: **Incident 1: Animal Handling Injury** On Monday morning, a new stockman named **Ezekiel** was helping to move cattle into the weighing pen. He stood directly behind a nervous steer, waving a stick to move it forward. The steer kicked backward and struck Ezekiel in the thigh. He fell and couldn't stand. **What went wrong:** • Ezekiel had **no training in safe animal handling**. • He approached the animal from its blind spot. • No staff were supervising new workers during handling tasks. **Result:** Ezekiel suffered a muscle injury and was taken to a clinic. The feedlot had no written report of the incident, and no follow-up safety briefing was held. **Incident 2: Chemical Burns** On Wednesday, **Rehema**, the feeder, was asked to mix an acaricide (tick spray) for use on newly arrived animals. She had no gloves or protective eyewear. While mixing, the wind blew some liquid into her eyes and onto her skin. She panicked and washed with dirty water from the trough. **What went wrong:** • No **chemical handling training** was provided. • **No PPE** (Personal Protective Equipment) was used. • The chemical mixing area was not clearly marked or controlled. **Result:** Rehema experienced redness and stinging in her eyes. She was taken to the	

Topic	Time	Training Instructions	Resources
		hospital later that day. The feedlot had **no Material Safety Data Sheet (MSDS)** or instructions available for the chemical used. **Incident 3: Equipment Cut Injury** On Thursday, **Hamisi**, a general worker, was asked to repair a loose board on a feed trough using a knife. While cutting, the blade slipped, and he sliced his hand. **What went wrong:** • No one assessed the task as risky. • Hamisi was not given **safe tools or gloves**. • The **first aid kit was incomplete**, with no disinfectant or plasters available. **Result:** The wound was wrapped in a cloth, and Hamisi continued working. The wound later became infected, and he needed antibiotics. **Incident 4: Fire Near Feed Store** On Friday evening, a **small fire broke out** near the feed store when a worker burned old feed sacks too close to stacked hay. The fire was spotted early and put out using water, but it came dangerously close to the main feedstock. **What went wrong:** • No **fire extinguishers** were available or functional. • Workers were **not trained in fire safety** or basic firefighting. • Burning was done **without supervision** near flammable material. **Result:** The fire was controlled, but 10 bales of hay were damaged, and the scare highlighted a serious risk. **Lessons Learned:** The Green Pasture Feedlot had several safety gaps:	

Topic	Time	Training Instructions	Resources
		• No **safe work procedures** were in place for handling animals, chemicals, or tools. • Workers had **no PPE** for routine tasks. • The **first aid kit** was incomplete and not checked regularly. • There were **no fire extinguishers or fire training** provided. • There was **no emergency plan** for accidents or fire. **Recommendations:** • Train all staff in **safe animal handling, equipment use, and chemical handling**. • Provide and enforce the use of **PPE** (gloves, boots, aprons, goggles). • Maintain a **fully stocked first aid kit** and post **basic first aid steps** in the work area. • Install **fire extinguishers** and train staff on how to use them. • Develop and share **emergency procedures** for injuries, fires, and other incidents. • Keep written records of all incidents and use them to improve safety practices.	
7.4 Occupational health and safety on feedlots (continued)		**Activity 44: Identification Test: First Aid Kit** 1. On a table or clean floor, lay out a selection of first aid items from the kit. 2. Put a small number next to each item. 3. Give each learner a sheet of paper and ask them to write numbers down the left margin. 4. Instruct them to try to identify each of the items laid out and write their name and their use on their sheet of paper. 5. Give them 10 minutes to do this.	Contents of a well-equipped first aid kit

Topic	Time	Training Instructions	Resources
		6. After 10 minutes, starting with number 1, ask them what they think the item is. 7. Make it fun like a TV quiz. If they identify it correctly, they get a point; if they understand and have noted what it is used for and how, they get another point. 8. Go around asking and explaining, showing what all the items are and how they are used to treat injuries, wounds and illnesses. 9. Allow learners handle the items to become familiar with them. 10. At the end, ask who got the highest number of points, and give them a small prize e.g. some wrapped sweets.	
7.4 Occupational health and safety on feedlots (continued)		**Activity 45: Practice Safety on the Feedlot** 1. Practise safe animal handling, including during vaccinations and deworming. 2. Practise safe handling of chemicals and equipment. 3. Use correct PPE during all activities. 4. Trainer observes and uses a checklist for: • Animal handling. • Administering vaccines. • Chemical handling. • Equipment use. • Use of PPE. **Note:** this is a long-term ongoing activity that the learners will demonstrate regularly as part of feedlot operations.	PPE

Topic	Time	Training Instructions	Resources
7.5 Staff recruitment	4 hours	Explain that supervisors are often responsible for recruiting and selecting staff for vacant positions on the feedlot. Discuss their responsibilities in this regard. **Activity 46: Group Work: Interview questions** 1. Divide learners into groups. 2. Assign each group a position in the feedlot for which they have to recruit and interview a new staff member, e.g. a herdsman, security guard, record keeper, feeder/feed attendant, other relevant positions. 3. In groups, learners must draw up a list of questions to ask in an interview for the position allocated to them and presents them to the larger group. 4. Class assesses and gives feedback on the relevance and appropriateness of the questions.	

Module 8: Practice Environmental Responsibility

Topic	Time	Training Instructions	Resources
8.1 Overgrazing	9 hours	Discuss the issue of overgrazing: use slide images to show the signs and effects of overgrazing. Explain the effects of overgrazing on the environment Discuss the prevention of overgrazing using grazing plans Explain how to restore overgrazed areas – use images to show before and after photos. **Activity 47: Assess Grazing Condition** 1. Conduct a field visit to compare the feedlot grazing areas and nearby communal grazing areas. 2. Different groups of learners can visit different locations on the feedlot or in the local area and report on findings. 3. Observe and record: • Grass condition (leafy, bare, eaten to the ground). • Signs of soil erosion or bare patches. • Presence or absence of different grass species. 4. Write a **short report on observations** from both sites. 5. Make **recommendations on how to prevent or restore overgrazed areas**, including grazing plans or resting.	Images of overgrazing and restoration Access to feedlot grazing areas, or other pasture areas in the local area/vicinity.

Topic	Time	Training Instructions	Resources
8.2 Responsible disposal of carcasses	9 hours	**Activity 48: Discussion: Carcass Disposal/ Visit to Disposal Pit** 1. Facilitate a discussion by asking the learners: "*What are the dangers if dead animals are left exposed?*" 2. Discuss: • Spread of diseases to other animals, people, and the environment. • Attraction of predators, flies, and scavengers. • Contamination of water sources and soil. • Bad odours affecting nearby communities. 3. Present a lesson on the responsible disposal of carcasses. 4. Take learners to the disposal pit and show them how carcasses must be disposed of.	Carcass disposal pit
8.3 Responsible disposal of hazardous waste	10 hours	Discuss the types of hazardous waste, with examples, and the health and environmental risks of hazardous waste and medical waste. **Activity 49: Practical Application: Disposal of Hazardous Waste** 1. Identify different types of hazardous waste on the feedlot. 2. Sort waste suitable for incineration. 3. Practise **safe loading and operation of an incinerator** (demo or simulation if no live fire permitted or no incinerator).	Samples of hazardous waste Incinerator

Topic	Time	Training Instructions	Resources
		4. Check and clean the incinerator area after use. 5. Safely dispose of remaining ash.	

Module 9: Handle Emergencies

Topic	Time	Training Instructions	Resources
9.1 Animal injuries and incidents	12 hours	Present a lesson, with examples and photos of typical injuries and incidents that may happen on a feedlot. Discuss how to handle common injuries and incidents. **Activity 50: Case studies: Animal Injuries and Accidents** 1. Hand out the case study sheets to the learners. 2. Give them 10 minutes to read them and discuss in pairs or small groups how to deal with each of these, using the discussion prompts. 3. Facilitate feedback on the case studies; give each group report back on just one of the scenarios. 4. The larger group can evaluate their recommendations based on their own discussions and the group must reach consensus on the best way to handle each scenario incident.	Printed sheets with case study info and prompts.
Case Study 1: Cow Tangled in Fence **Scenario:** During the morning round, a worker finds a cow with its hind leg badly tangled in a barbed-wire fence. The animal is distressed and has several deep cuts, with some bleeding.			

Discussion questions:

1. What immediate first aid should be given?
2. When should the vet be called?
3. If the leg is badly injured, how do you decide whether to treat or euthanise?
4. How can this kind of incident be prevented?

Case Study 2: Animal Hit by Feed Tractor

Scenario:
A young steer was accidentally hit by the feed tractor while lying in a blind corner near the feeding path. It has a visible limp and is not standing up.

Discussion questions:

1. What steps should be taken immediately?
2. Who should be informed?
3. How do you assess whether it can recover or needs to be euthanised?
4. What safety changes can be made to avoid this type of accident?

Case Study 3: Calf Shocked by Electric Wire

Scenario:
A calf in the back paddock received an electric shock from a damaged power line. It is now on the ground, shaking and breathing heavily.

Discussion questions:

1. What are the first safety steps for humans and animals?
2. What are the signs that veterinary help is needed?
3. If it does not recover, who decides on euthanasia?
4. What can be done to prevent similar incidents?

Case Study 4: Cow Stuck in Muddy Dam

Scenario:
After heavy rain, a cow wandered into a low area and became stuck in thick mud. The team struggles to get it out, and the animal is exhausted.

Discussion questions:

1. What is the best way to rescue a stuck animal?
2. How do you care for the animal after the rescue?
3. When do you call for vet help?
4. How long is too long for an animal to be stuck before it risks death?

Case Study 5: Severe Foot Infection

Scenario: A steer has a severe hoof infection that hasn't responded to treatment. It is limping badly, losing weight, and is no longer eating properly. **Discussion questions:** 1. What action should be taken? 2. When do you call for vet help? 3. What are the steps to take if euthanasia is required? 4. How should the team be informed and supported?			
9.2 Missing animals and stock theft	13 hours	Discuss the issues of missing animals and stock theft. Use examples of previous incidents that have happened on the feedlot – refer to existing incident reports. Present real or simulated previous incidents of missing animals or theft (examples can include reports, photos, or summaries). **Activity 51: Case studies: Missing Animals or Stock Theft** 2. Hand out copies of the case study to the learners. 3. Give them 10 minutes to read and answer questions on their own or in small groups. Review the case(s) carefully. 4. Discuss:	Incident reports on missing animals and stock theft from the feedlot (or other feedlots)

		○ What happened and how the situation was handled. ○ What were the outcomes (animal recovered, police involved, no resolution). ○ What were the weaknesses in the response or prevention. 5. Make recommendations on how to prevent similar incidents, such as: ○ Improved patrols and checks. ○ Better fencing and gates. ○ Community awareness and cooperation. ○ Use of surveillance or technology (where available). ○ Keeping accurate records and early reporting.	

🐄 **Case Study 1: Missing Animal – Protocol in Action**

Scenario:
In a feedlot near Morogoro, the morning headcount shows that one heifer is missing from Pen 3. The gate was closed, and there are no signs of damage or attack. The herdsman is unsure when the animal was last seen.

The supervisor informs the security team and the herdsmen. They begin a quiet search but do not find the animal. After 24 hours, the animal is officially reported as missing. The team searches the area again and finds no carcass or remains. The missing animal is recorded in the daily logbook.

Discussion Questions:

1. What was done correctly?
2. Why is it important to wait 24 hours before reporting officially?

3. What else could be done to prevent missing animals?			
🐂 **Case Study 2: Suspected Stock Theft** **Scenario:** In a feedlot in the Dodoma region, two young bulls are missing from the paddock. The night guard reports that the back fence was cut. There are tyre tracks near the fence, and a spent bullet casing is found on the ground. The security team alerts the supervisor, who informs the local police. A report is made, and the animals are recorded as stolen in the stock records. Some community members mention seeing a strange vehicle in the area the night before. **Discussion Questions:** 1. What signs showed that this was not just a missing animal case? 2. Why is it important to involve the police immediately? 3. What can the feedlot do to reduce the risk of theft?			
9.3 Safety and security risks	11 hours	Discuss the types of safety and security risks on a feedlot and how to recognise/identify and assess them. Discuss safety risk mitigation strategies such as fire breaks, fire drills, lightning rods. Discuss security risk mitigation strategies such as access control and security guards **Activity 52: Practical Activity: Fire Drill**	

		1. Participate in a planned fire drill under trainer supervision. 2. Follow evacuation routes, assemble at the safe point. 3. Review drill performance and discuss improvements.	
9.4 Natural incidents and disasters	10 hours	Discuss natural incidents and disasters that may affect feedlots in Tanzania. Distribute the handout and work through the different elements with the learners. Discuss Disaster Response Plans (Template in Training Manual) as a tool to deal with disasters. Discuss and show the Disaster Incident Report (template in Training Manual) on how to record the situation for reporting and future reference. **Activity 53: Practical Application: Natural Incidents and Disasters** **Learners:** 1. Work in small groups to develop a simple **disaster response plan** covering: • Bush fires. • Predators (dogs). • Snakes. • Poisonous plants. **2. Include in the plan:** • Prevention steps.	Copies of examples of natural incidents and disasters Disaster response plan template (from training manual)

		• Immediate response actions. • Who to alert (authorities, managers, vets). • First aid steps (where applicable). • Safety procedures for staff and animals.	

🌾 **1. Bush Fires**

- **Recent impact:** In 2022–23, Tanzania experienced reduced bushfire rates—740 ha burned in 2023 versus 3,700 ha in 2022—thanks to improved detection and community strategies.
- **Risks to feedlots:** Padlocked feed and grazing areas near forest edges are vulnerable. Fires can spread to pens, destroy fencing, and displace livestock.
- **Protocol & equipment:** Use fire beaters, water hoses, fire blankets; maintain cleared firebreaks; have radios to alert authorities and notify team members.
- **Alert:** Promptly inform local forest services and fire departments.

🐍 **2. Snake Incursions**

- **Hazard:** Snakes bite in farm areas, especially during rainy seasons and bush clearing.
- **Impact on livestock:** Snakebites can poison cattle and calves; livelihoods are affected.
- **Prevention strategies:** Keep grass and brush trimmed around pens, feed areas, and buildings to remove snake habitat.
- **Response:** Train staff to identify venomous species, access clinics with antivenom (e.g., Meserani Snake Park Clinic), and administer first-aid such as immobilizing the bitten limb and getting veterinary care fast

🐕 3. Stray Dogs / Predators

- **Threat:** Stray dogs or predators entering pens can injure or kill young stock, cause stress, and spread disease.
- **Prevention:** Secure fencing, patrol perimeters daily, lock feed and water sources.
- **Response:** Immediately remove predators safely, treat injured animals, notify authorities (e.g. local livestock offices), and check for carcasses or blood traces.

☠️ 4. Plant Poisoning

- **Hazard:** Natural toxic plants (e.g., *Acokanthera* or *Ricinus communis*) may be present in grazing areas and pose poisoning risks.
- **Prevention:** Walk paddocks to identify/remove toxic plants; clear undergrowth and fence-off suspect vegetation.
- **Response:** At signs of poisoning (drooling, shaking, collapse): remove access, administer veterinary first-aid (activated charcoal, fluids), and call a vet immediately.

Facilities and Equipment

Facilities

1 Theory training venue

A classroom or meeting space is required where trainees can participate in theoretical lessons, group discussions, and presentations. This may be:

- A converted office or storeroom at the feedlot itself – or in the administration/management building (training centre)
- A classroom at an agricultural college or vocational training centre
- A training hall at a government extension office or NGO facility

The theory venue should ideally have:

- Chairs and tables for all participants
- A whiteboard or flipchart
- Good ventilation and lighting
- Access to electricity for projector or laptop use

2 Practical training site

Practical training must take place at an operational or demonstration feedlot that includes both cattle and goat handling facilities. This site should allow access to:

- Animal pens and handling areas
- Feed and water stations
- Manure storage and removal systems
- Equipment for weighing, feeding, cleaning, and veterinary care
- Safe space for observing and practising animal handling, vaccination, deworming, and inspections
- Pasture areas for grazing and weed control demonstrations (if possible)

If a fully operational feedlot is not available nearby, partnerships should be made with local farmers or agricultural colleges to use their facilities during the training period.

3 Support facilities

Additional facilities required to deliver the training effectively:

- **Storage space** for training equipment, animal health kits, PPE, and feed samples
- **Clean water supply** for handwashing, cleaning, and animal hydration
- **Toilets and sanitation** for trainees and staff (separate for male and female where possible)
- **Biosecurity controls** such as footbaths and restricted access signs at entry points
- **Animal treatment area or crush** for safely practising procedures like vaccination or inspection
- **Secure carcass disposal area** or designated disposal pit for postmortem training or demonstrations
- **Emergency first aid area or corner** with a stocked kit and fire extinguisher available

Tools and Equipment

Basic information needed for costing	
Curriculum	Feedlot Supervisor
Number of weeks	16
No of days	80
Number of participants	20
Number of teachers	1
Number of groups	4 or 5

Item	Quantity	Purpose/Use
Classroom facilities		
Flipchart stand or whiteboard	1	For theory lessons and group work presentations
Flipchart paper (rolls)	3	For visual aids, lesson summaries, diagrams
Permanent markers (assorted colours)	3	Writing on flipchart or whiteboard
Notebooks and pens	20	For learner note-taking
First Aid Kit	2	Emergency use during practical sessions and in the feedlot
Feedlot Operational Equipment, Tools and Consumables		
Vaccine gun/applicators	5	Administering vaccines

Item	Quantity	Purpose/Use
Drenching gun	5	Administering oral dewormers
Sprayers or dip applicators	5	External parasite control (ticks, flies)
Disposable gloves	100	For handling animals, medical and hygienic procedures
Animal treatment kit	5	Includes bandages, antiseptic, syringes (demo), scissors
Cool box with ice packs	2	Cold storage of vaccines and medicines
Medical waste bin with lid	2	Safe disposal of sharps and medical waste
Animal health record books/forms	20	Recording vaccinations, treatments, inspections
Postmortem knives/scalpels (demo)	2	For postmortem demonstrations
Protective clothing (aprons, boots)	10	Used during animal health and PM demonstrations
Plastic sheets or table	1	Postmortem surface
Biohazard waste bags	10	Disposal of postmortem remains
Feed sample kits (sealed)	1	Identification and testing of feeds
Digital animal scale	1	Weighing animals and recording growth
Weigh tape (backup or for goats)	5	Alternative method for weight estimation

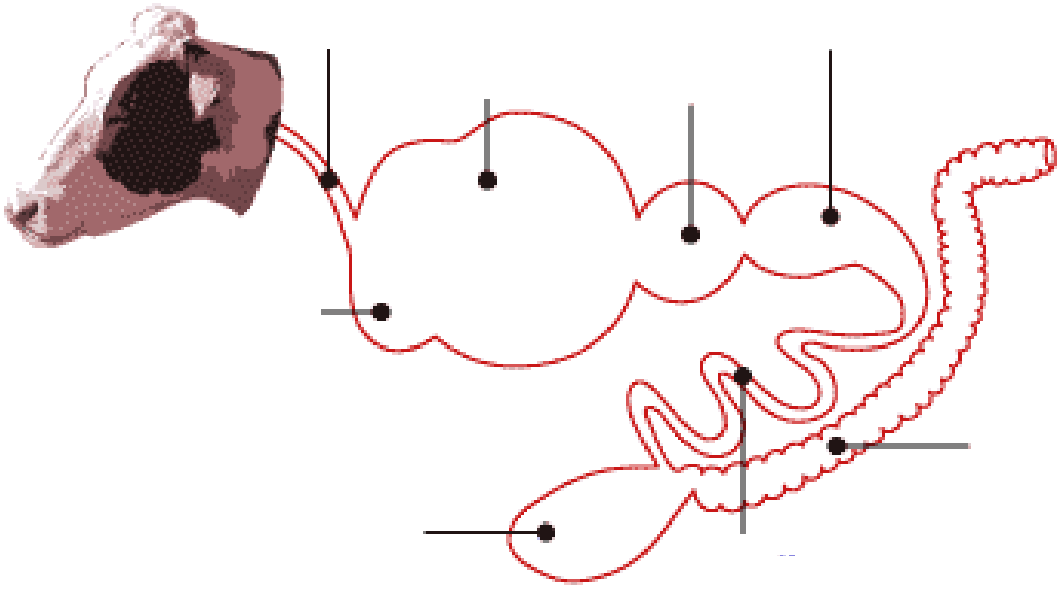
Item	Quantity	Purpose/Use
Buckets and scrubbing brushes	10	Cleaning feed and water stations
Water troughs (demo or access)	2	Demonstrate maintenance and cleaning
Feed troughs (demo or access)	2	Demonstrate maintenance and cleaning
Weed slasher or hoe	5	Manual weed control
Wheelbarrow and spade	2	Manure collection and transport
Rake and shovel	5	Feedlot pen cleaning and manure handling
Fly traps (demo kits)	5	Control flies in feedlot
Rodent traps (pipe or snap traps)	5	Rodent control
Footbaths	2	Disinfection at entry points
Disinfectant and spraying bottles	4	Sanitise equipment and areas
Signage: 'Authorised personnel only'	2	Restrict access to sensitive areas
Designated disposal pit (dug or marked)	1	Disposal of carcasses and medical waste
Fire extinguishers	2	Fire emergency preparedness
Emergency signage	2	Mark exits and emergency contacts
First aid training dummy or poster	1	Demonstrate emergency first aid

Item	Quantity	Purpose/Use
Feed sample display kit (sealed)	1	Identification of feed types (roughage, concentrates, additives)
Sample animal health record books/forms	20	Practice filling out animal records (field books, vax, treatment, etc.)
Animal anatomy charts (laminated)	2	For teaching ruminant digestion and health topics
Hay bales (mini/demo size if possible)	3	For hay handling and baling demonstrations
Silage demo drum/barrel (small)	2	For teaching silage production and storage
Feed mixing container (bucket or basin)	5	Group activity for feed formulation and mixing
Measuring tools (scoops/cups)	5	Measuring and mixing feed ingredients
Manual fly traps and rodent traps	5	Practical on pest control and trap making
Veterinary kit (demo set)	1	Includes syringes (demo), gloves, safe disposal box, thermometer, etc.
PPE for practical (overalls, gumboots, gloves, safety glasses)	10	Used during animal handling and treatment demonstrations
Mock-up or access to feedlot space with cattle/goats	1	Essential for real-world practice: inspections, feeding, hygiene, etc.
Buckets, scrapers, shovels	5	For pen cleaning and hygiene sessions

Item	Quantity	Purpose/Use
Postmortem demonstration kit (if applicable)	1	Includes gloves, scalpel (blunt/demo), photos of organs for learning
Laptop and projector (optional)	1	For presentations, videos, spreadsheets, and data input
Printed worksheets and handouts	20	For assessments, case studies, and data entry exercises
Sample herd management software (demo or free version)	1	Teaching HMS data entry and report generation
Risk assessment forms and checklists	20	For use in environmental and safety modules

Activity Resources

Activity 1: Ruminant Digestion Diagram



Activity 2: Flashcards: Feeds and Nutrients

Protein	Energy (Carbohydrates)
Fats (Lipids)	Vitamins
Minerals	Water
Fish meal	Sunflower cake
Soybean meal	Lucerne hay
Cotton seed cake	Maize grain
Sorghum	Molasses
Wheat bran	Sunflower oil
Cottonseed oil	Lucerne (fresh or hay)
Green pasture grasses	Mineral lick block
Salt lick	Rice bran

Activity 9: Feed Stock Records

Bin Card No.	123	Min stock	50kg
Item	Maize bran	Unit of Measure	kg

Date	Reference No. / Invoice No.	Received (Qty)	Issued (Qty)	Balance	Received By	Issued To	Remarks
12 July			20kg	40			

Bin Card No.	456	Min stock	50kg
Item	Rice bran	Unit of Measure	kg

Date	Reference No. / Invoice No.	Received (Qty)	Issued (Qty)	Balance	Received By	Issued To	Remarks
23 June			40kg	90kg			
10 July			30kg	50kg			

Activity 23: Vaccination Table

Vaccine Name	Protocol

Activity 24: Parasite Control Table

Parasite	Drug	Protocol

Activity 35: Daily Feedback and Responses: Role Play Scenario Cards

Role Play Scenarios
Scenario 1: Sudden Storm Warning The weather report shows a strong storm approaching. The pen areas are already muddy, and staff are worried about animal stress and movement. **Role Play:** • The weather observer reports conditions. • Supervisor decides what to do (e.g. move animals, add bedding, prepare emergency feed). • Action plan: inform animal care staff, check shelter areas, contact owner if damage expected. • Supervisor allocates actions to team members
Scenario 2: Signs of Illness in Young Stock The animal health officer notes that several calves are showing signs of diarrhoea and are not feeding well. **Role Play:** • Health team reports the issue. • Supervisor decides what to do: isolation, increased monitoring, or vet contact. • Action plan: inform vet, instruct health staff to clean affected areas, notify management. • Supervisor allocates actions to team members
Scenario 3: Pasture Area Too Wet to Use The pasture manager reports that the back paddock is too waterlogged to be used. Moving animals there will cause damage. **Role Play:** • Pasture team reports field conditions. • Supervisor decides to delay grazing or rotate to another area.

- Action plan: inform feeding team to adjust rations, update grazing schedule, log condition.
- Supervisor conveys decisions and allocates actions to team members

Scenario 4: Worker Injury During Feeding

During morning feedout, a worker slipped and hurt their ankle. They can't continue their shift.

Role Play:

- Team leader reports the incident.
- Supervisor responds by arranging First Aid and cover for feeding tasks.
- Action plan: report to management, ensure injury log is completed, monitor safety conditions.
- Supervisor conveys decisions and allocates actions to team members

Scenario 5: Feed Quality Concern

A new batch of feed smells strange and the animals are refusing to eat it.

Role Play:

- Feed manager reports issue.
- Supervisor group decides whether to return feed, test it, or switch to backup.
- Action plan: contact supplier, inform staff not to use batch, log supplier complaint.
- Supervisor conveys decisions and allocates actions to team members

Activity 43: Case Studies: Green Pastures Feedlot

Incident 1: Animal Handling Injury

On Monday morning, a new stockman named **Ezekiel** was helping to move cattle into the weighing pen. He stood directly behind a nervous steer, waving a stick to move it forward. The steer kicked backward and struck Ezekiel in the thigh. He fell and couldn't stand.

Result:
Ezekiel suffered a muscle injury and was taken to a clinic. The feedlot had no written report of the incident, and no follow-up safety briefing was held.

Incident 2: Chemical Burns

On Wednesday, **Rehema**, the feeder, was asked to mix an acaricide (tick spray) for use on newly arrived animals. She had no gloves or protective eyewear. While mixing, the wind blew some liquid into her eyes and onto her skin. She panicked and washed with dirty water from the trough.

Result:
Rehema experienced redness and stinging in her eyes. She was taken to the hospital later that day. The feedlot had **no Material Safety Data Sheet (MSDS)** or instructions available for the chemical used.

Incident 3: Equipment Cut Injury

On Thursday, **Hamisi**, a general worker, was asked to repair a loose board on a feed trough using a knife. While cutting, the blade slipped, and he sliced his hand.

Result:
The wound was wrapped in a cloth, and Hamisi continued working. The wound later became infected, and he needed antibiotics.

Incident 4: Fire Near Feed Store

On Friday evening, a **small fire broke out** near the feed store when a worker burned old feed sacks too close to stacked hay. The fire was spotted early and put out using water, but it came dangerously close to the main feedstock.

Result:
The fire was controlled, but 10 bales of hay were damaged, and the scare highlighted a serious risk.

Activity 50: Case studies: Animal Injuries and Accidents

Case Study 1: Cow Tangled in Fence

Scenario:
During the morning round, a worker finds a cow with its hind leg badly tangled in a barbed-wire fence. The animal is distressed and has several deep cuts, with some bleeding.

Discussion questions:

1. What immediate first aid should be given?
2. When should the vet be called?
3. If the leg is badly injured, how do you decide whether to treat or euthanise?
4. How can this kind of incident be prevented?

Case Study 2: Animal Hit by Feed Tractor

Scenario:
A young steer was accidentally hit by the feed tractor while lying in a blind corner near the feeding path. It has a visible limp and is not standing up.

Discussion questions:

1. What steps should be taken immediately?
2. Who should be informed?
3. How do you assess whether it can recover or needs to be euthanised?
4. What safety changes can be made to avoid this type of accident?

Case Study 3: Calf Shocked by Electric Wire

Scenario:
A calf in the back paddock received an electric shock from a damaged power line. It is now on the ground, shaking and breathing heavily.

Discussion questions:

1. What are the first safety steps for humans and animals?
2. What are the signs that veterinary help is needed?
3. If it does not recover, who decides on euthanasia?

4. What can be done to prevent similar incidents?

Case Study 4: Cow Stuck in Muddy Dam

Scenario:
After heavy rain, a cow wandered into a low area and became stuck in thick mud. The team struggles to get it out, and the animal is exhausted.

Discussion questions:

1. What is the best way to rescue a stuck animal?
2. How do you care for the animal after the rescue?
3. When do you call for vet help?
4. How long is too long for an animal to be stuck before it risks death?

Case Study 5: Severe Foot Infection

Scenario:
A steer has a severe hoof infection that hasn't responded to treatment. It is limping badly, losing weight, and is no longer eating properly.

Discussion questions:

1. What action should be taken?
2. When do you call for vet help?
3. What are the steps to take if euthanasia is required?
4. How should the team be informed and supported?

Activity 51: Case studies: Missing Animals or Stock Theft

Case Study 1: Missing Animal – Protocol in Action

Scenario:
In a feedlot near Morogoro, the morning headcount shows that one heifer is missing from Pen 3. The gate was closed, and there are no signs of damage or attack. The herdsman is unsure when the animal was last seen.

The supervisor informs the security team and the herdsmen. They begin a quiet search but do not find the animal. After 24 hours, the animal is officially reported as missing.

The team searches the area again and finds no carcass or remains. The missing animal is recorded in the daily logbook.

Discussion Questions:

1. What was done correctly?
2. Why is it important to wait 24 hours before reporting officially?
3. What else could be done to prevent missing animals?

🐂 **Case Study 2: Suspected Stock Theft**

Scenario:
In a feedlot in the Dodoma region, two young bulls are missing from the paddock. The night guard reports that the back fence was cut. There are tyre tracks near the fence, and a spent bullet casing is found on the ground.

The security team alerts the supervisor, who informs the local police. A report is made, and the animals are recorded as stolen in the stock records. Some community members mention seeing a strange vehicle in the area the night before.

Discussion Questions:

1. What signs showed that this was not just a missing animal case?
2. Why is it important to involve the police immediately?
3. What can the feedlot do to reduce the risk of theft?

Activity 53: Handout: Natural Incidents and Disasters

🌾 **1. Bush Fires**

- **Recent impact:** In 2022–23, Tanzania experienced reduced bushfire rates—740 ha burned in 2023 versus 3,700 ha in 2022—thanks to improved detection and community strategies.
- **Risks to feedlots:** Padlocked feed and grazing areas near forest edges are vulnerable. Fires can spread to pens, destroy fencing, and displace livestock.
- **Protocol & equipment:** Use fire beaters, water hoses, fire blankets; maintain cleared firebreaks; have radios to alert authorities and notify team members.
- **Alert:** Promptly inform local forest services and fire departments.

🐍 2. Snake Incursions

- **Hazard:** Snakes bite in farm areas, especially during rainy seasons and bush clearing.
- **Impact on livestock:** Snakebites can poison cattle and calves; livelihoods are affected.
- **Prevention strategies:** Keep grass and brush trimmed around pens, feed areas, and buildings to remove snake habitat.
- **Response:** Train staff to identify venomous species, access clinics with antivenom (e.g., Meserani Snake Park Clinic), and administer first-aid such as immobilizing the bitten limb and getting veterinary care fast

🐕 3. Stray Dogs / Predators

- **Threat:** Stray dogs or predators entering pens can injure or kill young stock, cause stress, and spread disease.
- **Prevention:** Secure fencing, patrol perimeters daily, lock feed and water sources.
- **Response:** Immediately remove predators safely, treat injured animals, notify authorities (e.g. local livestock offices), and check for carcasses or blood traces.

☠️ 4. Plant Poisoning

- **Hazard:** Natural toxic plants (e.g., *Acokanthera* or *Ricinus communis*) may be present in grazing areas and pose poisoning risks.
- **Prevention:** Walk paddocks to identify/remove toxic plants; clear undergrowth and fence-off suspect vegetation.
- **Response:** At signs of poisoning (drooling, shaking, collapse): remove access, administer veterinary first-aid (activated charcoal, fluids), and call a vet immediately.