



NQF Level: 3

US No: 116216

Facilitator Guide

Primary Agriculture

Advanced Breeding Practices for Farm Animals



Facilitator:

Company:

Commodity: Date:

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agriculture

Department:
Agriculture
REPUBLIC OF SOUTH AFRICA



Before you get started...

Dear Facilitator,

This Facilitator Guide (together with the relevant Learner Guide) is aimed at facilitators who will be assisting learners wishing to complete the following unit standard:

| |
|--|
| Title: Apply advanced breeding practices for farm animals |
| US No: 116216 NQF Level: 3 Credits: 4 |

This guide contains all necessary facilitation instructions to ensure that learners will attain the expected competencies required by the above-mentioned unit standard. This guide is designed to be used during the presentation of a learning session based on this unit standard. The full unit standard is attached at the end of the relevant Learner Guide. Learners are advised to read the unit standard at their time. Please discuss the unit standard with the learners to ensure that they understand what is expected from them to achieve the outcomes of the unit standard.

This unit standard is one of the building blocks in the qualifications listed below. Please mark the qualification you are currently facilitating, because that will be determined by the context of application:

| Title | ID Number | NQF Level | Credits | Mark |
|---|-----------|-----------|---------|--------------------------|
| National Certificate in Animal Production | 49048 | 3 | 120 | <input type="checkbox"/> |
| National Certificate in Plant Production | 49052 | 3 | 120 | <input type="checkbox"/> |

Please mark the learning program the learners are enrolled in:

| Are you enrolled in a: | Y | N |
|------------------------|--------------------------|--------------------------|
| Learnership? | <input type="checkbox"/> | <input type="checkbox"/> |
| Skills Program? | <input type="checkbox"/> | <input type="checkbox"/> |
| Short Course? | <input type="checkbox"/> | <input type="checkbox"/> |

Note to Facilitator:

If you are presenting this module as part of a full qualification or learnership, please ensure that you have familiarised yourself with the content of the qualification.

Please explain the above concepts to the learner.

There are three guides, namely the Learner Guide (with activities), Assessor Guide and the Facilitator Guide.

These guides have been developed to address specific aspects of the learning experience. You therefore need to use these guides complementally to one another.

Make this an enjoyable learning experience!

Context of Application ...

Primary Agriculture is a diverse sector and a wide range of commodities is being produced for both national and international market. Each commodity has its own production requirements and practices. You will be facilitating the learning process within a specific context where a specific agricultural commodity is being produced. The learning material has been written in a **generic** manner, as it is aimed to be available on national level and should be relevant to be applied within a variety of commodities. It is therefore inclusive of all agricultural commodities and crop in this field. Therefore, the examples that are being used in the materials may not always be applicable to your specific community, commodity, environment or region.

This presents you, the facilitator, with the challenge to **contextualise** the learning material. It is imperative that you, the Facilitator and Assessor interpret and present activities, case studies and projects related to the material in such a way that learners can easily identify and apply their knowledge within their own context. This will require from you to add examples of crop, which are applicable to the community or farm. Learners must be guided with examples from their own communities, commodities, environment or regions. This should be done by complementing the learning material with:

- Examples relevant to the commodity,
- Including commodity specific requirements,
- Including operating procedures of the farm,
- Including agricultural practice specific requirements,
- Agricultural markets,
- Guiding learners to write these specifics down in the learning guide, etc.

The contextualisation of the learning material is a very important step in preparing for and facilitating the learning experience and enough time and effort should be put into this exercise.

According to the qualifications mentioned on page 2, this module could be contextualised to fit the following groups of commodities:

| Plant Production | Animal Production | |
|---|---|--|
| <ul style="list-style-type: none"> • Organic production, • Hydroponic production, • Perma-culture production, • Agronomy, • Horticulture, • Natural resources harvesting. | <ul style="list-style-type: none"> • Small stock production, • Large stock production, • Dairy production, • Pig production, • Poultry production, • Game, • Aqua / mari culture, • Commercial insects • Animal fibres harvesting, • Bee keeping, | <ul style="list-style-type: none"> • Natural resources harvesting, • Organic production, • Perma-culture production, • Eco/Agri Tourism, • Agro Chemicals, • Horse Breeding, • Etc. |

How to use this guide ...

Throughout the guide information is given specifically aimed at you, the facilitator, to **assist** in the actual presentation of the learning material and/or facilitation of the learning process. Although this guide contains all the information required for attaining competency in this unit standard, references to additional resources, both printed and electronic, are provided for additional reference by the facilitator and further study by the learner.

Please note that the purpose of this information is merely to **guide** you, the facilitator, and is provided as a suggestion of possibilities. It remains the responsibility of every facilitator to re-assess the learner/s in each learning situation throughout the learning process in order to stay in touch with their specific learning needs. This should be the determining factor in the choice of the learning approach to follow.

Use the different boxes listed below for identification purposes:



Instructions regarding **activities**, whether group or individual activities will be described in this box.



Facilitators' Tip ...

My Notes ...

You can use this box for your own notes/comments.

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What & How will you be Facilitating?

| | |
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The Learning Experience...

On completion of this module, the learners will be able to:

- ◆ To use and apply advanced breeding practices
- ◆ To use the reproductive cycles of farm animals as management and decision-making tools

Learners will specifically be able to:

- ◆ Identify and classify the signs of giving birth and problem births in female breeding animals.
- ◆ Demonstrate an understanding of the different breeding methods in farm animals.
- ◆ Demonstrate an understanding of the basic reproductive cycles of farm animals.
- ◆ Define the factors affecting the reproductive cycles of farm animals.

Learners will also gain basic knowledge of:

- ◆ Reproductive cycles and breeding methods.
- ◆ Factors affecting the reproductive cycles of farm animals.
- ◆ The advantages and disadvantages of different breeding methods.
- ◆ The effect of nutritional, health, seasonal and environmental factors on reproduction.
- ◆ Breeding procedures and breeding programmes.
- ◆ Purpose of this is to improve knowledge and inclusion of reproductive cycles and breeding methods into a breeding programme.
- ◆ Communication and reporting skills.
- ◆ Record keeping skills.
- ◆ Understanding the correct procedures and policies to be followed for the breeding season.

Learning Assumed to be in Place:

- ◆ US 116074 (NQF 2): Observe and inspect Animals health.
- ◆ US 116107 (NQF 2): Identifying breeding practices for farm animals.
- ◆ US 116173 (NQF 2): Evaluate external basic animal anatomy and morphology.

My Notes ...

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Learning Program Time Frames

| | Total time allocated (hours) | Theoretical learning time allocated (hours) | Practical learning time allocated (hours) | Activities to be completed |
|--|------------------------------|---|---|----------------------------|
| Complete Program (including summative assessment) | 40 hours | 9 hours | 31 hours | 5 |
| Learner Orientation and "Ice Breaker" | 1 hour | 1 hour | 0 | N/A |
| Purpose, Introduction and Learner Directions | 1 hour | 1 hour | 0 | N/A |
| Session 1 | 7 hours | 2 hours | 5 hours | 1 |
| Session 2 | 14 hours | 2 hours | 12 hours | 2 & 3 |
| Session 3 | 14 hours | 2 hours | 12 hours | 4 & 5 |
| Preparation for Assessment & revision | 3 hours | 1 hour | 2 hours | N/A |

Tips for the facilitator



Learners will study the more detailed concepts of the signs of birth and the various behavioural changes and events that occur during the different phases of the birth process. Some problems that occur during and after birth are also discussed in **Session 1**.

Session 2 describes the different breeding methods used on livestock production farms. These methods vary in their complexity and differ in their advantages and disadvantages.

Knowledge and understanding of the breeding cycles of different livestock species is important for farm planning. These concepts are carried through to the practical development of a breeding program and incorporating the various management activities that need to take place during the breeding program. **See Session 3**.

Tips for level of learning



Remember the following before you get started:

Typically, a learning programme leading to the award of a qualification or unit standards at level 3 should develop learners who demonstrate an ability to:-

- Operate within clearly defined contexts.
- Work and learn within a managed environment.
- Actively contribute to team effectiveness.
- Take position on available information, discuss the issues and reach a resolution; produce a coherent presentation and report, providing explanations for positions taken.
- Summarise and interpret information relevant to the context from a range of sources.
- Use their knowledge to select appropriate procedures to solve problems within given parameters.
- Apply skills in measuring the environment using key instruments and equipment operational literacy and numeracy skills; use basic procedures and operations to complete complex tasks.
- Understand the organisational and operating environment as a system.
- Understand one or more fields or discipline's key concepts and knowledge, in addition to the fundamental areas of study.

Facilitator's Checklist & Training Aids

Learner support strategies:

Learners are supplied with all resources and aids as required by the programme – including:

- Objects & devices such as equipment, protective clothing, safety gear, etc.
- Learner Guides and Learner Workbook
- Visual aids, etc.

Use this checklist below during your preparation to ensure that you have all the equipment, documents and training aids for a successful session.

| Preparation: | Yes | No |
|--|-----|----|
| Qualification Knowledge – I have familiarised myself with the content of the applicable qualification | | |
| Unit Standard Knowledge – I have familiarised myself with the content of all aspects of the applicable unit standard | | |
| Content Knowledge – I have sufficient knowledge of the content to enable me to facilitate with ease | | |
| Application knowledge – I understand the programme matrix & have prepared for programme delivery accordingly | | |
| Contextualisation – I have included information which is specific to the commodity and practices related to the commodity | | |
| Ability to respond to learners background & experience – | | |

| | | |
|--|--|--|
| I have studied the learner demographics, age group, experience & circumstances & prepared for programme delivery accordingly | | |
| Enthusiasm & Commitment – I am passionate about my subject & have prepared my programme delivery to create a motivating environment with real commitment to success | | |
| Enterprise knowledge – I know & understand the values, ethics, vision & mission of the workplace & have prepared my programme delivery, reporting & administrative tasks accordingly. | | |
| Equipment check: | | |
| Learner guides x 1 per learner | | |
| Assessment guides x 1 per learner | | |
| Writing materials & stationary (facilitator & learner) | | |
| White board & pens | | |
| Flip chart paper | | |
| Proxima projector & screen | | |
| Laptop & programme disk | | |
| Sample Hand-outs and examples of laws and other relevant documents | | |
| Safety gear as prescribed by unit standard and applicable legislation | | |
| Documentation checklist: | | |
| Attendance Register | | |
| Course Evaluation | | |
| Learner Course Evaluation | | |
| Portfolios of evidence | | |

Contextualisation of Content!

Go through this module and indicate what specific **information / activities / examples** should be included in this module?

| Contextualisation | |
|---|--|
| <ul style="list-style-type: none"> Commodity specific? | |
| <ul style="list-style-type: none"> Operating procedures of the farm? | |

Session

1 Signs of giving birth and problem births in female breeding animals

**Learner Guide:
Page 7**

After completing this session, the learner should be able to:

SO 1: Identify and classify the signs of giving birth and problem births in female breeding animals.

| Concept (SO 1) | Time frame | Activities related to the concept |
|---|----------------|-----------------------------------|
| Signs of the normal birth process are identified and classified in a group of female breeding animals | 7 hours | Activity 1 |
| Birth problems are classified and the level of assistance with such problems is correctly determined | | |
| Signs of any abnormal behaviour in the birth process is recognised and recorded. | | |
| Animals that are observed to have completed parturition and those that had birth problems are identified and recorded | | |
| Basic assistance to the animals that are having birth problems are rendered. | | |



Please allow learners to complete Activity 1 in their Learner Guides

| Type of activity | Resources |
|--|--|
| 1. Individual written homework assignment. | Learner Guide, oral instruction, library or internet reference material. |
| Instructions to give to the learners | |
| As per learner guide. | |
| Assist learners to have resources available. | |

Session

2 Different breeding methods in farm animals

Learner Guide:
Page 20

After completing this session, the learner should be able to:
SO 2: Demonstrate an understanding of the different breeding methods in farm animals.

| Concept (SO 2) | Time frame | Activities related to the concept |
|--|-----------------|-----------------------------------|
| The different breeding methods of farm animals are explained. | 14 hours | Activity 2 & 3 |
| Appropriate breeding methods are applied. | | |
| Advantages and disadvantages of a breeding method are explained according to the enterprise. | | |



Please allow learners to complete Activity 2 & 3 in their Learner Guides

| Type of activity | Resources |
|--|---|
| 2. Group written assignment and class presentation | Learner Guide, oral instruction, library or internet reference material |
| Instructions to give to the learners | |
| As per learner guide. Assist learners to have resources available. | |
| Type of activity | Resources |
| 3. Group field trip, individual report and written assignment, multiple choice questions answered. | Learner Guide, oral instruction, library or internet reference material |
| Instructions to give to the learners | |
| As per learner guide. Assist learners to have resources available. | |

3 Basic reproductive cycles of farm animals

Session

Learner Guide:
Page 25

After completing this session, the learner should be able to:

SO 3: Demonstrate an understanding of the basic reproductive cycles of farm animals.

| Concept (SO 3) | Time frame | Activities related to the concept |
|--|-----------------|-----------------------------------|
| Oestrus cycles of female farm animals are described and explained. | 14 hours | Activity 4 & 5 |
| The length of the oestrus cycle in the different species of farm animals are defined and compared | | |
| The significance of oestrus cycles is explained and applied to a breeding programme. | | |
| The reproductive cycles of male farm animals are explained and integrated into the breeding programme. | | |



Please allow learners to complete Activity 4 & 5 in their Learner Guides

| Type of activity | Resources |
|--|---|
| 4. Group written homework assignment | Learner Guide, oral instruction, library or internet reference material |
| Instructions to give to the learners | |
| As per learner guide. Assist learners to have resources available. | |
| Type of activity | Resources |
| 5. Four individual breeding programmes | Learner Guide, oral instruction, library or internet reference material |
| Instructions to give to the learners | |
| As per learner guide. Assist learners to have resources available. | |

What will I do differently next time?

Take some time to **reflect** on your own activities as facilitator of this Unit Standard. Then write down five of the most important lessons you have learnt and include a motivation:

| What will I do differently next time? | Motivate how or why (Give examples, reasons, etc.) |
|---------------------------------------|---|
| 1. | |
| 2. | |
| 3. | |
| 4. | |
| 5. | |

As facilitator, you have hands on experience in the application of the unit standard. And you might experience difficulties with the unit standard that the developers did not anticipate. Also, the unit standard will be revised at the end of the registration period. Your comments below can be an important contribution in the revision process and should be brought to the attention of either the AgriSETA ETQA manager or the SGB chairperson.

Please take some time to reflect on your experience and list a few of the difficulties you had to address.

| Difficulties I had with the Unit Standard | Recommended Changes to Address the Difficulty |
|---|---|
| 6. | |
| 7. | |
| 8. | |
| 9. | |
| 10. | |