



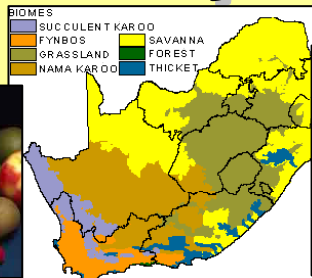
NQF Level: 1

US No: 116158

Facilitator Guide

Primary Agriculture

Apply Basic Agricultural Enterprise Selection Principles



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 basic agricultural enterprise selection principles	US No: 116158	NQF Level: 1	Credits: 2
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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 this guide as well as 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	48970	1	120	
National Certificate in Mixed Farming Systems	48971	1	120	
National Certificate in Pant Production	48972	1	120	

Please mark the learning program the learners are enrolled in:

Are you facilitating a:	Yes	No
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 four guides, namely the Learner Guide, the Learner Workbook, the 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?

The Learning Experience **6**

Enterprise Selection **6**

Learning Program Time Frames **7**

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Session 1: Natural Resources Required **10**

LG p 6: Farming Systems; Classification of Farms; Requirements for Commercial Farming; Vegetation; Climatic Conditions; Effect of Topography on Enterprise Selection; Geography and Climate of South Africa.

Session 2: Infrastructure Requirements **12**

LG p 17: Types of Infrastructure; The Role of Infrastructure in Agri-business; Infrastructure Placement.

Session 3: Appropriate Crops and/or Animals **13**

LG p 20: Identifying Appropriate Crops and/or Animals for the Relevant Enterprise; Crop Characteristics; Requirements for a Specific Crop.

Session 4: Production Cycle **14**

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Session 5: Harvest / Post-harvest Practice **15**

LG p 28: Harvest Practices in Agriculture; Post-harvest Handling; Characteristics of Harvesting and Post-harvest Practices; The Importance of Health and Hygiene during Harvest and Post-harvest; The Importance of Maintaining Quality of your Crop during Harvest and Post-harvest.

What will I do differently next time? **16**

Excerpt: SAQA Unit Standard 116158

The Learning Experience...

When learners have achieved this unit standard, they will -

- ◆ have gained knowledge about the basic principles of enterprise selection in Agri-business and will be well positioned to extend your learning and practice into crop production and animal production systems.
- ◆ will benefit the agri-business community at large and will be equipped with adequate skills to have input into enterprise selection and production to improve productivity and performance.
- ◆ will have learned to recognise and understand the importance of the application of business principles in agricultural production with specific reference to enterprise planning.
- ◆ will be capacitated to operate a farming practice as a business and will have gained the knowledge and skills to move from a subsistence orientation to an economic orientation in agriculture, thereby allowing you to gain the knowledge and skills to access mainstream agriculture through a business-orientated approach to agriculture.

Enterprise Selection

Farming is an example of a primary industry. Like a factory, a farm can be seen as a system with a series of inputs, processes and outputs. Processes are the things that go on within the farm. This includes harvesting, ploughing, rearing animals and milking.

The type of farm determines farming systems. Farms can be classified as being arable, pastoral, mixed and market gardening. Different crops grow better in different types of soil. It is therefore very important to identify which soil type is most suitable for your crop type. In South Africa we have different classifications of soil types.

Soil potential is the potential capacity of a specific piece of soil or land to support a specific type of crop in order to get the best quality and quantity produce from that type of crop. Topography is the natural factors that will influence a specific area situated in a specific place, such as the geography of the land.

In this module we are going to consider all the natural resources, infrastructural and structural considerations that you need to take into account when deciding on a type of product for you agri-business. It is also important to consider the variety of crops / products that are related to agriculture and how appropriate they might be to consider.

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)	20	8.42	11.58	-
Learner Orientation and "Ice Breaker"	0.66 (40 minutes)	0.33 (20 minutes)	0.33 (20 minutes)	N/a
Purpose, Introduction and Learner Directions	0.50 (30 minutes)	0.25 (15 minutes)	0.25 (30 minutes)	N/a
Session 1	5 (300 minutes)	1.5 (90 minutes)	3.5 (210 minutes)	1.1 – 1.4
Session 2	4 (240 minutes)	1.5 (90 minutes)	2.5 (150 minutes)	2.1 – 2.2
Session 3	2.5 (150 minutes)	1 (60 minutes)	1.5 (90 minutes)	3.1 – 3.2
Session 4	4 (240 minutes)	2 (120 minutes)	2 (120 minutes)	4.1
Session 5	2.5 (150 minutes)	1 (60 minutes)	1.5 (90 minutes)	5.1
Preparation for Assessment & revision	1.42	-	-	-

Tips for level of learning



Remember the following before you get started:

This unit standard is aimed at level 1 learners.

- ◆ A typical level 1 learner might be exposed to the world of work through this learning program for the first time.
- ◆ Explain concepts and define words in a simple, clear and concise method throughout the learning program to help the learner where possible.
- ◆ Take special care to facilitate for ALL learners. Allow them opportunities to share experiences, prior knowledge, translate into their mother tongue for each other and enjoy the learning process.
- ◆ The examples given in this resource guide might be for a different geographical area or commodity to what the learner is exposed to – please adapt your examples accordingly.

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? 	
<ul style="list-style-type: none"> ▪ Agricultural practices? 	
<ul style="list-style-type: none"> ▪ Agricultural markets? 	

1 Natural Resources Required

Session

**Learner Guide:
Page 6**

After completing this session, the learner should be able to:
SO 1: Name natural resources required for the selection of the relevant enterprise.

Concept (SO 1)	Time frame	Activities related to the concept
Soils are examined and suitability for cultivation is assessed.	60 minutes	Activity 1.1
Water sources are identified.	30 minutes	Activity 1.2
Basic vegetation types are identified.	60 minutes	Activity 1.3
The topography of the site is recognised and described.	60 minutes	Activity 1.4
Climatic conditions are identified and described.		



Please allow learners to complete Activity 1.1 – 1.4

Type of activity	Resources	Instructions to give to the learners	Conclusions
1.1: Group Brainstorming	Assessment Workbook Stationary	Explain the concept of brainstorming. Divide into groups and brainstorm words and concepts on "soil suitability and variation".	A clear definition of what soil suitability is and how soil variation affects crops.

1.2: Discuss & Discover in Pairs	Assessment Workbook Stationary	Explain the concept of discussing & discovering in pairs. Read the activity instructions from the learner workbook out loud and allow learners an opportunity to make notes on their understanding and finding after each section.	What resources are; how resources influence enterprise selection.
1.3: Individual Search & Find	Assessment Workbook Stationary	Explain to learner's instructions that are given in learner workbook. Encourage learners to explore different options and not all return with the same examples.	Conclude that South Africa has various climates, topography, geography and natural resources that influence agriculture in each area.
1.4: Individual Search & Find	Assessment Workbook Natural Environment Stationary	Explain to learner's instructions that are given in learner workbook. Encourage learners to explore different options and not all return with the same conclusions.	Differences between farms in terms of geographical position, topography, rainfall, etc. and how this contributes to the success or failure of specific crops.

My Notes ...

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Session 2 Infrastructure Requirements

**Learner Guide:
Page 17**

After completing this session, the learner should be able to:
SO 2: Describe infrastructure requirements for the selection of the relevant enterprise.

Concept (SO 2)	Time frame	Activities related to the concept
Types of infrastructure are described.	90 minutes	Activity 2.1
The role and function of infrastructure is understood.		
The availability of infrastructure is determined.		
The suitability of landscape for infrastructure is determined.	60 minutes	Activity 2.2



Please allow learners to complete Activity 2.1 and 2.2 in their workbooks

Type of activity	Resources	Instructions to give to the learners	Conclusions
2.1: Discussion with a partner to gain information	Assessment Workbook Natural Environment Stationary	Explain to learners instructions that are given in learner workbook. Encourage learners to explore different options and not all return with the same conclusions.	Differences between farms in terms of structural & infrastructure requirements. Differences in available structures & infrastructures and how they would influence enterprise selection.
2.2: Group brainstorm	Assessment Workbook Stationary	Explain to learner's instructions that are given in learner workbook. Allow an opportunity for learner to complete the questions in their workbook and swap books. Mark and give each other feedback.	The correct identification of required infrastructures and how a lack of/problems with them can influence and cause failure to agricultural enterprise.

3

Appropriate Crops and/or Animals

Session

**Learner Guide:
Page 20**

After completing this session, the learner should be able to:
SO 3: Identify appropriate crops and/or animals for the relevant enterprise.

Concept (SO 3)	Time frame	Activities related to the concept
Different livestock or crop types are described.	90 minutes	Activity 3.1 & 3.2
Characteristics of the different types are explained.		
Different uses of the different types are identified.		
The suitability of infrastructure for livestock or crops is determined.		



Please allow learners to complete Activity 3.1 and 3.2 in their workbooks

Type of activity	Resources	Instructions to give to the learners	Conclusions
3.1: Group discussion	Assessment Workbook Stationary	Explain to learner's instructions that are given in learner workbook. Allow an opportunity for learner to complete the questions in their workbook and swap books. Mark and give each other feedback.	Enterprise differences are explored and the reasons for commodity choice are understood.
3.2: Group discussion and key notes	Assessment Workbook Stationary	Explain to learners instructions that are given in learner workbook. Allow an opportunity for learner to complete the questions in their workbook and swap books. Mark and give each other feedback.	What different crops/animals are available to farm with and why a choice would be made to farm with it.

Session 4 Production Cycle

**Learner Guide:
Page 24**

After completing this session, the learner should be able to:
SO 4: Identify production cycle within relevant enterprise.

Concept (SO 4)	Time frame	Activities related to the concept
Characteristics of a production cycle are described.	120 minutes	Activity 4.1
The different production cycles are compared.		
The appropriate production cycle is described correctly.		
Implementation of the production cycle is observed and reported on.		



Please allow learners to complete Activity 4.1 in their workbooks

Type of activity	Resources	Instructions to give to the learners	Conclusions
4.1: Individual research	Assessment Workbook Subject Matter Expert/Farming Environment/ Library Stationary	Explain to learners instructions that are given in learner workbook. Allow an opportunity for learners to complete the questions in their workbook and swap books. Mark and give each other feedback.	The concept of "production cycles", the continuity of production cycles and how it influences agricultural enterprise.

My Notes ...

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5 Harvest / Post-harvest Practice

Session

Learner Guide:
Page 28

After completing this session, the learner should be able to:
SO 5 & 6: Identify harvest / post-harvest practice within the relevant enterprise.

Concept (SO 5 & 6)	Time frame	Activities related to the concept
A characteristic of harvesting practices is described.	90 minutes	Activity 5.1
Harvesting practices are understood.		
Importance of health and hygiene is understood.		
Importance of quality is understood.		
Characteristics of post harvest practices are described.		
Post-harvesting practices are understood.		
Importance of health and hygiene is understood.		
Importance of quality is understood.		
A characteristic of harvesting practices is described.		



Please allow learners to complete Activity 5.1 in their workbooks

Type of activity	Resources	Instructions to give to the learners	Conclusions
5.1: Group brainstorm	Assessment Workbook Stationary	Explain to learners instructions that are given in learner workbook. Allow an opportunity for learner to complete the questions in their workbook and swap books. Mark and give each other feedback.	What the pre-, during- and post harvesting practices are, why they are important and how it would affect the crop if it wasn't performed correctly.

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.	

Excerpt: SAQA Unit Standard: 116158 - NQF Level 1

Title: Apply basic agricultural enterprise selection principles

Field: Agriculture and Nature Conservation

Sub-field: Primary Agriculture

US No: 116158

NQF Level: 1

Credits: 2

Purpose of the Unit Standard:

Qualifying learners will be able to demonstrate an understanding the basic principles of enterprise selection. In addition they will be well positioned to extend their learning and practice into crop production and animal production systems.

This training will benefit the profession by equipping learners with adequate skills to have input into enterprise selection and production to improve productivity and performance.

Learners will understand the importance of the application of business principles in agricultural production with specific reference to enterprise planning.

They will be able to operate farming practices as businesses and will gain the knowledge and skills to move from a subsistence orientation to an economic orientation in agriculture. Farmers will gain the knowledge and skills to access mainstream agriculture through a business-orientated approach to agriculture.

Learning Assumed to be in Place

No learning assumed to be in place.

Unit Standard Range:

Whilst range statements have been defined generically to include as wide a set of alternatives as possible, all range statements should be interpreted within the specific context of application.

Range statements are neither comprehensive nor necessarily appropriate to all contexts. Alternatives must however be comparable in scope and complexity. These are only as a general guide to scope and complexity of what is required.

Specific Outcome (SO) 1:

Name natural resources required for the selection of the relevant enterprise.

Outcome Range: Natural resources include soil, water, climate, vegetation and topography.

Assessment Criteria (AC):

1. Soils are examined and suitability for cultivation is assessed.
2. Water sources are identified.
3. Climatic conditions are identified and described.
4. Basic vegetation types are identified.
5. The topography of the site is recognised and described.

Specific Outcome (SO) 2:

Describe infrastructure requirements for the selection of the relevant enterprise.

Outcome Range: Infrastructure requirements include fencing, housing, water supply, electricity, animal handling facilities and access.

Assessment Criteria (AC):

1. Types of infrastructure are described.
2. The role and function of infrastructure is understood.
3. The availability of infrastructure is determined.
4. The suitability of landscape for infrastructure is determined.

Specific Outcome (SO) 3:

Identify appropriate crops and/or animals for the relevant enterprise.

Outcome Range: All livestock or crops on the farm or garden within a community.

Assessment Criteria (AC):

1. Different livestock or crop types are described.
2. Characteristics of the different types are explained.
3. Different uses of the different types are identified.
4. The suitability of infrastructure for livestock or crops is determined.

Specific Outcome (SO) 4:

Identify production cycle within relevant enterprise.

Outcome Range: All enterprises within the boundaries of the farm within the community

Assessment Criteria (AC):

1. Characteristics of a production cycle are described.
2. The different production cycles are compared.
3. The appropriate production cycle is described correctly.
4. Implementation of the production cycle is observed and reported on.

Specific Outcome (SO) 5:

Identify harvest practice within the relevant enterprise.

Outcome Range: All enterprises within the boundaries of the farm within the community.

Assessment Criteria (AC):

1. A characteristic of harvesting practices is described.
2. Harvesting practices are understood.
3. Importance of health and hygiene is understood.
4. Importance of quality is understood.

Specific Outcome (SO) 6:

Identify post-harvest practice within relevant enterprise.

Outcome Range: All enterprises within the boundaries of the farm within the community.

Assessment Criteria (AC):

1. Characteristics of post harvest practices are described.
2. Post-harvesting practices are understood.
3. Importance of health and hygiene is understood.
4. Importance of quality is understood.

Unit Standard Essential Embedded Knowledge:

The person is able to demonstrate a basic knowledge of:
The role of natural resources.

- The role of Infrastructure.
- The role and importance of Stock.
- The importance of Production cycles.
- The importance of Harvesting practices.
- The role and importance of Post harvest practices.
- Basic farm practices.
- Basic management skills.

Critical Cross-field Outcomes (CCFO):

Working: Teamwork: relates to all specific outcomes;

Collecting: Interpreting Information: relates to all specific outcomes.

Communicating: Communication: relates to all specific outcomes;

Science and Technology: Relates to all specific outcomes;

Demonstrating: Professional development: relates to all specific outcomes;

Self-development: Relates to all specific outcomes.