



NQF Level: 2

US No: 116115

Facilitator Guide

Primary Agriculture

Production systems in an agri-business



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:	Define and understand production systems and production management		
US No:	116115	NQF Level:	2
		Credits:	2

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	48976	2	120	<input type="checkbox"/>
National Certificate in Mixed Farming Systems	48977	2	120	<input type="checkbox"/>
National Certificate in Plant Production	48975	2	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 four guides, namely the Learner Guide, 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, • Permaculture 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, • Permaculture production, • Eco/Agri Tourism, • Agro Chemicals, • Horse Breeding, • Etc.

What & How will you be Facilitating?

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The Learning Experience...

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

- ◆ Understand basic production systems, managerial tasks and management objectives in the agri-business environment.
- ◆ Understand the importance of the application of business principles in agricultural production with a specific reference to production and conversion.

Learners will specifically be able to:

- ◆ Understand production systems in an agri-business environment
- ◆ Understand and define basic managerial tasks.
- ◆ Understand and define the additional production management tasks.
- ◆ Understand the process of setting goals and objectives related to systems within an agricultural business.

Learners will also gain basic knowledge of:

- ◆ Purpose of goals and objectives
- ◆ Aspects of the managerial tasks
- ◆ The structure of various agricultural production systems
- ◆ Basic presentation skills
- ◆ The basic components of managerial skills
- ◆ The setting of goals and objectives within an agricultural production set-up
- ◆ The purpose of learning about agricultural production and conversion systems
- ◆ The purpose of learning about management
- ◆ Understanding systems

Learning Assumed to be in Place:

- ◆ Define production and understand the basic activities of production conversion in the agri-business process (NQF Level 1) or equivalent.



Remember to do a diagnostic assessment of the learner's prior learning and ensure that they are starting at the correct level.

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	9 hours, 30 minutes	10 hours, 30 minutes	6
Learner Orientation and "Ice Breaker"	30 minutes	15 minutes	15 minutes	N/A
Purpose, Introduction and Learner Directions	30 minutes	15 minutes	15 minutes	N/A
Session 1	3 hours	1 hour	2 hours	1-2
Session 2	3 hours, 30 minutes	2 hour	1 hour 30 minutes	3
Session 3	4 hours, 30 minutes	2 hours	2 hours 30 minutes	4
Session 4	4 hours	2 hours	2 hours	5
Preparation for Assessment & revision	4 hours	2 hours	2 hours	N/A

My Notes ...

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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 2 should develop learners who demonstrate an ability to:-

- Work and learn in a disciplined manner in a well-structured and supervised environment.
- Manage their time effectively.
- Develop sound working relationships and an ability to work effectively as part of a group.
- Express an opinion on given information clearly in spoken and written form.
- Collect, organise and report information clearly and accurately.
- Use their knowledge to select and apply known solutions to well-defined routine problems.
- Use a variety of common tools and instruments; apply literacy and numeracy skills to a range of different but familiar contexts.
- Understand the environment within which he/she operates in a wider context.
- Gain knowledge of one or more areas or fields of study, 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	
▪ Commodity specific?	
▪ Operating procedures of the farm?	
▪ Agricultural practices?	
▪ Agricultural markets?	

Session

1 Production systems in an agri-business environment

Learner Guide:
Page 7

After completing this session, the learner should be able to:
SO 1: Understand production systems in an agri-business environment.

Concept (SO 1)	Time frame	Activities related to the concept
The interaction with the market	1 hour for theory 30minutes Act. 1 1 hour plus 30 mins presentation for Activity 2	Activity 1: Individual activity – can be done in the learner’s own time Activity 2: Group investigation on a Production Plan
The difference between the input market and the output market		
The relationship between production systems and the input/output markets		
The impact that the limited nature of natural resources has on production		
The reciprocal interaction between agricultural processes and environmental factors		
Optimal usage of resources for optimisation of outputs		



It would probably be useful and helpful for the learners to begin this module with an introduction to production systems by using their own context.

Have a number of pre-written cards with words such as MARKET, SOIL, WATER, NATURAL RESOURCES, TRANSPORT, PACKING HOUSE (if appropriate), WATER, RAINFALL, PACKAGING, etc. ready. Choose words that are relevant for the context in which the learners are working.

Ask the learners to describe what they know about the agri-business in which they are working. Use the pre-printed cards to re-create a visual representation of Fig.1.1. Go into as much details as possible, explaining concepts as they are encountered. Ask ‘What if...?’ questions to draw out particular issues. Such as, What if there is a drought and there is not dam water for irrigation? Or, What if a floods wash away bridges? What if the staff goes on strike during the harvest?

You can add other questions that are relevant to the local context. The idea is to take the concepts that appear in this section and related them to the working world in which the learners operate.



Facilitators' Tip ...

Divide the learners into small groups. Their task is to take a Production Plan provided by the facilitator and use soil and climate information, as well as their experience, to assess the viability of the plan using the following questions. It is insufficient to answer straight 'yes' or 'no' - each answer must be motivated. Once the group has made their decisions, they must present their answers to the rest of the group, together with motivation for their decision.

QUESTION	YES	NO
1. Is the land of sufficient size to support the required plantings?		
2. Is the land located in the right climatic area to support the desired varieties?		
3. Is the land free from this crop's pests and diseases?		
4. Does the land have sufficient areas of the required soil type and quality?		
5. Does the land have a sufficient supply of high quality water (as required by the crop)?		
6. Is the land located close to sources of skilled and unskilled labour?		
7. Is the land situated at an appropriate and manageable distance from packing and transport facilities?		

If the facilitator selects a piece of land and a form of production that is not a straight forward case then it will provide the learners with a far richer learning experience. Alternatively, the facilitator can give different production plans to each group for the same piece of land in reality.

My Notes ...

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Please allow learners to complete Activity 3 in their workbooks

Type of activity	Resources
Small group activity – build an egg tower	Sellotape, masking tape, One piece of flipchart paper per group, Presstick, stapler and staples, rubber bands, one hard-boiled egg per group. One pair of scissors per group
Instructions to give to the learners	
<p>The objective is to build a paper structure that is strong enough to hold up an egg. The egg may not be attached to the tower in anyway – in other words, no glue, Presstick or similar materials may be used to 'stick' it onto the tower. You have 45 minutes to plan your project, after which you have twenty minutes to complete it. Before your planning time is up you must submit your resources list to your facilitator to 'buy' your resources. Your purchasing budget is R10. You must make sure that you 'buy the materials you need within your budget and that you have all your resources ready before starting to build.</p> <p>Learners must discuss this objective in your group and use the notes below to record their application of management principles.</p>	
Conclusions	
<p>You can tell the learners that the eggs are raw – not cooked – it will make them more cautious. However, using cooked eggs does prevent a huge mess if eggs do fall off the towers.</p> <p>The learning that can come out of an activity such as this is almost limitless. There are issues that will come up during this that can be drawn on for Session 3.</p>	

My Notes ...

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Facilitators' Tip ...

Make sure you have enough staplers and Presstick so that if each group decides to use these as their only resource, they can do so.

- Stapler plus as many staples as they want: R10
- Rubber bands: 50c each
- Sellotape / Masking tape: 50c / 10 cm
- Presstick: R10 per pack

Make sure that groups only start building once each group has received their resources. If you wish, you can turn it into a competition

Walk around the room whilst the learners are busy and see who is sticking to their plan. Where things are going wrong, make sure to remember where the best learning experiences are to draw on later. Do not interfere in the group dynamics; it is through overcoming challenges that the groups will have their most profound 'ah-ha' moments.

When one group says that their tower is ready they must balance the egg on top. You can turn this into a competition if you like and have a chocolate or something similar for each participant in the winning group.

Conclude the activity by asking question such as:

- What made your group achieve success?
- What do you think contributed to your group not being able to complete the tower?
- What went wrong – why did your tower not stand up straight?
- How well did you stick to your plan?
- Did you plan the right amount of resources?
- How effective was your plan?

Keep asking questions and getting the learners to reflect on the experience until all the learning opportunities have been drawn out. Then ask the learners to identify the similarities between the kind of miniature project management they have just done and management tasks in their working environments.

Ask what would happen if management on the farm made similar mistakes to what had been made in the groups (not enough resources / ineffective communication / not enough technical skills).

Put up a price list as early as possible so that the groups can decide what they want to order.

Session

3 Additional production managerial tasks

Learner Guide:
Page 26

After completing this session, the learner should be able to:
SO 3: Understand and define the additional production management tasks

Concept (SO 3)	Time frame	Activities related to the concept
The purpose and various steps involved in the decision-making process	4 hours, 30minutes	Activity 4
The importance of good communication		
Motivation		
Coordination		
Delegation		
Leadership		
Discipline is defined and explained		
Elementary Human Resource Management		



Please allow learners to complete Activity 4 in their workbooks

Type of activity	Resources
Individual questionnaire on Management qualities	Learner Guide
Instructions to give to the learners	
Read through the questions and answer in your own words.	
Conclusions	
This can be done by the learner outside of the formal learning programme.	

4 Goals and objectives in Agri-business

Session

Learner Guide:
Page 36

After completing this session, the learner should be able to:
SO 4: Understand the process of setting goals and objectives related to systems within an agricultural business

Concept (SO 4)	Time frame	Activities related to the concept
Business goal setting	4 hours	Activity 5
Various mechanisms and processes that enable goals to be set such as a SWOT analysis.		
The parameters and structure of various agricultural production systems		
Set and discuss basic theoretical goals using a variety of techniques for a variety of basic agricultural production systems		
Integrating basic goals for agricultural systems within an agricultural enterprise		

My Notes ...

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Please allow learners to complete Activity 5 in their workbooks

Type of activity	Resources
Small group activity	A scenario, ideally realistic and based on the farm where the learners are working; Paper (scrap) for recording the timeline; Flip chart paper; Marker pens
Instructions to give to the learners	
<p>You are going to participate in a group activity during which you will set goals and develop an action plan to achieve these goals. Your facilitator will give you a scenario such as the one below and in your group you will discuss this and record your application in the spaces provided below.</p>	
Conclusions	
<p>At the end of this activity, as the learners present, allow the other learners to identify gaps and also to add to issues. Draw it all together to reiterate the key concepts. Relate it back to the context where the learners are working.</p>	



The success of this activity depends on how realistic the scenario is. Speak to managers on the farm to find a situation that is relevant, topical and fairly easy to apply. The secret is: Keep it simple. It is better that the learners work on a less complex issue in order to help them understand the concept better.

My Notes ...

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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.	