



NQF Level: 3

US No: 116218

# Facilitator Guide

## Primary Agriculture

# Production Management



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:

<b>Title:</b>	Explain the Planning and Scheduling of Tasks in a Production Environment		
<b>US No:</b>	<b>116218</b>	<b>NQF Level:</b>	<b>3</b>
		<b>Credits:</b>	<b>3</b>

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



# 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 the use of day to day planning and scheduling for optimal production in the agricultural processing environment.
- ◆ Make useful inputs in the planning and scheduling process. In addition they will be well positioned to extend their learning and practice into other areas of agriculture and management, creating a valuable human resource within the agricultural sector.
- ◆ Understand the importance of the application of business principles in agricultural production with specific reference to production/conversion.
- ◆ Operate farming practices as businesses and will gain the knowledge and skills to move from a subsistence orientation to an economic orientation in agriculture.

### Learners will specifically be able to:

- ◆ Explain production planning and the different levels of planning that can be used in production planning activities.
- ◆ Demonstrate an understanding of scheduling.
- ◆ Demonstrate production optimisation techniques.
- ◆ Demonstrate the ability to make meaningful comments on the planning and scheduling process.

### Learners will also gain basic knowledge of:

- ◆ The procedures to follow with production planning and scheduling.
- ◆ The purpose of production planning and scheduling.
- ◆ The various production methods encountered in agricultural processing.
- ◆ Basic statistics.
- ◆ Basic presentation skills.
- ◆ Basic meeting procedure.
- ◆ Scheduling techniques.
- ◆ Planning methodologies.
- ◆ Interpersonal relations.
- ◆ The purpose of learning about production / conversion planning.
- ◆ Data recording and analysis techniques.

### Learning Assumed to be in Place:

- ◆ It is expected of the learner attempting this unit standard to demonstrate competence against the unit standard:
- ◆ NQF 2: Define and understand production systems and production management.



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
<b>Complete Program (including summative assessment)</b>	30 hours	11 hours	19 hours	4
<b>Learner Orientation and "Ice Breaker"</b>	30 minutes	30 minutes	-	N/A
<b>Purpose, Introduction and Learner Directions</b>	30 minutes	30 minutes	-	N/A
<b>Revision of Level 2</b>	1 hour	30 minutes	30 minutes	-
<b>Session 1</b>	8 hours	3 hours	5 hours	1
<b>Session 2</b>	8 hours	3 hours	5 hours	2
<b>Session 3</b>	5 hours	2 hours	3 hours	3
<b>Session 4</b>	5 hours	1 hour	4 hours	4
<b>Preparation for Assessment &amp; revision</b>	2 hours	30 minutes	1 hour 30 minutes	-

## Tips for the Facilitator



- It is essential that all the learners understand the material delivered on level 2 well, before moving on to level 3.
- Consult the level 2 learner and assessment guides in detail and summarize key-concepts for learners. It is the ideal time to allow learners to reflect their knowledge. Be creative, play a quiz game, or hold a level 2 share-your-trivia session with learners.
- Use this opportunity as a diagnostic assessment and make notes detailing any additional revision and learner support that might be necessary for specific learners.



# Facilitator's Checklist & Training Aids

Learner support strategies:
<p><b>Learners are supplied with all resources and aids as required by the programme – including:</b></p> <ul style="list-style-type: none"> <li>▪ Objects &amp; devices such as equipment, protective clothing, safety gear, etc.</li> <li>▪ Learner Guides and Learner Workbook</li> <li>▪ Visual aids, etc.</li> </ul>

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
<b>Qualification Knowledge</b> – I have familiarised myself with the content of the applicable qualification		
<b>Unit Standard Knowledge</b> – I have familiarised myself with the content of all aspects of the applicable unit standard		
<b>Content Knowledge</b> – I have sufficient knowledge of the content to enable me to facilitate with ease		
<b>Application knowledge</b> – I understand the programme matrix & have prepared for programme delivery accordingly		
<b>Contextualisation</b> – I have included information which is specific to the commodity and practices related to the commodity		
<b>Ability to respond to learners background &amp; experience</b> – I have studied the learner demographics, age group, experience & circumstances & prepared for programme delivery accordingly		
<b>Enthusiasm &amp; Commitment</b> – I am passionate about my subject & have prepared my programme delivery to create a motivating environment with real commitment to success		
<b>Enterprise knowledge</b> – 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"> <li>Commodity specific?</li> </ul>	
<ul style="list-style-type: none"> <li>Operating procedures of the farm?</li> </ul>	
<ul style="list-style-type: none"> <li>Agricultural practices?</li> </ul>	
<ul style="list-style-type: none"> <li>Agricultural markets?</li> </ul>	

## Revision of Level 2

### ■ Production systems

- ◆ Production systems is about using production practices to convert resources to products so that they would be acceptable to the market, in other words to achieve production objectives.
- ◆ Production management is about coordinating production systems.
- ◆ Meeting market requirements consistently, ultimately determines the success of the farming operation. (The export market is the most important in citrus production).
- ◆ Resources are either fixed (natural) or mobile.
- ◆ Fixed resources are expensive and limited.
- ◆ Crop farming implies being in competition with nature, and agricultural practices must always be such that it has a minimal impact on the environment, while still achieving the required yield and quality targets.
- ◆ Resources, especially limited natural resources, must be employed optimally.

### ■ Basic managerial tasks

- ◆ The basic managerial tasks are setting objectives, planning, scheduling, organising, implementation, coordination and monitoring
- ◆ Setting objectives is about finding answers to the question "What do we want to achieve?"
- ◆ Planning is about working out how to achieve an objective.
- ◆ Scheduling is about working out how a plan can be implemented.
- ◆ Organising is about arranging the various actions that has been planned and scheduled so that they can be performed within the required timeframe.
- ◆ Implementation is about carrying out the agreed plan according to the agreed schedule.
- ◆ Coordination is about bringing in the various players at the appropriate times and in the most effective way in pursuit of the agreed objective.
- ◆ Monitoring involves control, feedback, adaptation and correction.

## ■ Additional production management tasks

- ◆ Additional management tasks are decision-making, leadership, communication, motivation, delegation, discipline and human resource management.
- ◆ Decision-making is about weighing all the options and selecting the best course of action. There are various techniques to assist managers in this task.
- ◆ Leadership is about giving direction, aligning people, motivating and inspiring people, and introducing change.
- ◆ Good communication is about ensuring that everyone involved in a task or project knows what to do, why they are doing it, how to do it, how well to do it, and how well they are doing it.
- ◆ Motivation is about helping people to be passionate about their work.
- ◆ Delegation is about entrusting authority for performing a task to a subordinate, while retaining responsibility for the outcome.
- ◆ Discipline is about doing what you are supposed to, when you are supposed to do it and how you are supposed to do it.
- ◆ Disciplinary action is taken against an employee who does not do what is required from them.
- ◆ The functions of human resource management is staff selection and recruitment, succession planning and career path development, staff training, setting remuneration policy, setting and monitoring performance management policy, ethics and disciplinary procedures, and industrial relations.

## ■ Setting goals and objectives

- ◆ The different types of goals are: long-range goals, shorter-term goals, business goals, outcome goals, performance goals, activity and personal goals.
- ◆ Goals, set at various levels for various purposes, must all be aligned towards meeting the overall goal or vision of the organisation.
- ◆ There are various mechanisms to assist with goal-setting, one of the most useful being a SWOT analysis, which analysis the strengths, weaknesses, opportunities and threats to the organisation.
- ◆ Goals in a crop production environment can be overall goals, such as production targets, or specific goals relating to specific production practices.

Session

# 1 Production planning

**Learner Guide:  
Page 10**

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

**SO 1: Explain production planning and the different levels of planning that can be used in production planning activities.**

Concept (SO 1)	Time frame	Activities related to the concept
The different levels of planning encountered in the agricultural production process is described.	8 hours	Activity 1
Enterprise and product options are described.		
Factors influencing the planning process are explained.		
The relationship between income and expenditures, costing, budgeting are explained.		



**Please allow learners to complete Activity 1 in their Learner Guides**

Type of activity	Resources
Research report.	Supply learners with research materials relevant to cultivars and market specifications, trade journal articles regarding current market trends export standards (such as Eurepgap, HACCP, ISO). Learner Guide, stationary.
<b>Instructions to give to the learners</b>	
As per instructions in Learner Guide.	

# Tips for the Facilitator



- Remember that Production Management is a concept that will help level 3 learners to grow into being able to deal with the pressures of managing other people and facing the key functions of management, such as planning. This session is aimed at introducing the value and methodology of planning. Introduce the concepts with extra attention to detail and terminology. Try not to use jargon without taking extra time to explain and define it for learners.
- Try to find some current examples of production plans for small, medium and large enterprises and give learner groups an opportunity to familiarise themselves with these plans. Allow learners to brainstorm the value and application of each of the different examples that you have presented.
- Revise the 4 P's of marketing briefly and allow learner groups to explore the value of planning for the right product. It would be a good idea to have flash cards with the 4 P's displayed. Ensure that you emphasise the timeframe related to a crop production cycle vs. international and local market trends. Try to do a short exercise in long-term goal setting and how to draft a plan accordingly.
- Level 3 learners may have difficulties understanding the factors influencing planning, and find it challenging, as this might be their first exposure to real planning duties. Spend a bit of extra time on this concept.
- The definitions below could be considered financial and accounting based. Take extra time introducing the value of these financial terms in management and planning. Level 3 learners may encounter these financial management concepts here for the first time. Take a bit of extra time to explain this.
- The summary is an opportunity to check the progress that learners have made.
- Allow time for the learners to read through the summary and to gauge their own progress. Make sure that each and every learner gets an opportunity to ask questions.

## My Notes ...

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**Session**

# 2 Scheduling

**Learner  
Guide:  
Page 15**

*After completing this session, the learner should be able to:*  
**SO 2: Demonstrate an understanding of scheduling.**

Concept (SO 2)	Time frame	Activities related to the concept
Scheduling is explained.	8 hours	Activity 2
The different scheduling techniques are described.		
Forward and backward scheduling is described.		
The importance of control over schedules is explained.		



**Please allow learners to complete Activity 2 in their Learner Guides**

Type of activity	Resources
Production calendar.	Supply learners with A1-size sheets and explain the concepts of calendar scheduling. Revise the specific inputs, processes and outputs of citrus farming. Encourage learners to be creative in the presentation by using methods such as colour coding, plotting, pictures and sketches. Learner Guide, stationary.
<b>Instructions to give to the learners</b>	
As per instructions in Learner Guide.	

# Tips for the Facilitator



- This session is aimed at introducing the value and methodology of scheduling. Introduce the concepts with extra attention to detail and terminology. Try not to use jargon without taking extra time to explain and define it for learners.
- An easy way to explain the concept of scheduling is to let the learners simulate performing a simple task such as making coffee. Let the learners do this in teams and elect a supervisor for each team. The supervisor is to write down all the different tasks on flash cards. Each member should be given only one task to do at a time. Let the learners then move forward to complete their task in the sequence that it has been given to them. Allow learners the opportunity to explore the consequences of scheduling mistakes, or lack of scheduling specific tasks. Allow learners to make the link between sequence, participation, teamwork and planning. Allow learners an opportunity to relate a similar situation for different types of schedules such as irrigation, planting, fertilisation, and the spray program.
- The different techniques of scheduling are important. Allow different learner groups an opportunity to research and present different techniques, with visual explanations and drawings, or practical examples. Allow the learner groups to work from a context that they are familiar with and then give them an opportunity to link it to maize specific scheduling tasks.
- The summary is an opportunity to check the progress that learners have made.
- Allow time for the learners to read through the summary and to gauge their own progress. Make sure that each and every learner gets and opportunity to ask questions.

## My Notes ...

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Session

# 3 Production optimization techniques

**Learner  
Guide:  
Page 21**

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

**SO 3: Demonstrate production optimisation techniques.**

Concept (SO 3)	Time frame	Activities related to the concept
An understanding of the recording of agricultural inputs and the measurement against parameters and goals are demonstrated.	5 hours	Activity 3
An understanding of the recording of agricultural production and process data and the measurement against goals is demonstrated.		
The ability to record agricultural production output data and measure it against parameters and goals is demonstrated.		
The basic ability to statistically analyse recorded data and to analyse productivity of agricultural processes based on the analysis is demonstrated.		
The ability to adapt agricultural inputs and processes to achieve required output is demonstrated.		



**Please allow learners to complete Activity 3 in their Learner Guides**

Type of activity	Resources
Production team interviews	Inform the members of the production team that learners would be approaching them and brief them on the support the learners will require. Allow the team members an opportunity to prepare by supplying them with a copy of the types of questions that learners will be asking them. Learner Guide

**Instructions to give to the learners**

As per instructions in Learner Guide

## Tips for the Facilitator



- This section is aimed at exploring the concepts of “how we can optimise” our crop for quality and profitability through the production management functions of planning and scheduling. Introduce the concepts with extra attention to detail and terminology. Try not to use jargon without taking extra time to explain and define it for learners.
- Explain this concept with practical examples from the learner context such as: “Predicting in time when you are going to run out of milk for your coffee” and what the appropriate actions would be to take, considering the market, the supply, the demand and sustainability principles. Throw in “off-the-wall” suggestions such as “pass a law against milk in coffee”, and gauge the group reaction.
- Spend only a brief time on exploring the importance of data and measuring of inputs. Learners will spend a lot more time on the reasons in the Agri-data modules. Spend more time on practical examples and practicing this in the field, as listed below.
- Explore the consequences on the profitability of a crop farm of bad planning, bad scheduling, and failure to react to crises quickly and appropriately through allowing the learners to share bad experiences from their past, for example failed crops, retrenchments, and dismissals.
- Try to find some practical examples of output data, from local farms our production units. Ask different groups to look at and discuss the following for each example:
  - What the value of it is?
  - Who would be involved in producing such a report?
  - What kind of input would be required to produce it?
  - How frequently it has to be produced in order to add value to the production management function?
- Use the same examples as previously (with statistical analysis) and follow through on the concepts of statistical info. Allow groups to evaluate in the same way again as previously. Allow them an opportunity to compare data with national and international statistical information.
- Use the same examples as previously and follow through on the concepts of how the reports and statistics are linked to physical inputs in the production cycle. Now allow learners an opportunity to make recommendations on how they would change the inputs to influence the outcomes of the reports and statistics.
- The summary is an opportunity to check the progress that learners have made.
- Allow time for the learners to read through the summary and to gauge their own progress. Make sure that each and every learner gets and opportunity to ask questions.
- Ensure that learners schedule appointments in a structured manner. This is a good opportunity for integrated assessment, and CCFO Communication to be developed and / or observed.

**Session**

# 4 The planning and scheduling process

**Learner  
Guide:  
Page 28**

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

**SO 4: Demonstrate the ability to make meaningful comments on the planning and scheduling process.**

Concept (SO 4)	Time frame	Activities related to the concept
An understanding of production planning is demonstrated.	5 hours	Activity 4
An understanding of scheduling by making useful inputs with regard to the activities and timeframes, in the planned schedule is demonstrated.		
The implementation of various management decisions regarding planning, implementing and optimisation agricultural production processes is demonstrated.		



**Please allow learners to complete Activity 4 in their Learner Guides**

Type of activity	Resources
Report analysis.	Ensure that all learners swap plans. Learner Guide, stationary.
Instructions to give to the learners	
As per instructions in Learner Guide.	



# 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.	