



NQF Level: 3

US No: 116268

Facilitator Guide

Primary Agriculture

Crop harvesting



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: Monitor and co-ordinate the harvesting of agricultural products |
| US No: 116268 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. |

What & How will you be Facilitating?

| | |
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The Learning Experience...

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

- ◆ Monitor and apply basic control of insects, plant diseases and common weeds, in a specific agricultural enterprise. In addition they will be able to report their findings to management or advisors.
- ◆ Learners will gain an understanding of sustainable agricultural practices as applied in the animal-, plant and mixed farming sub fields. This unit standard focuses on the application of pest control practices in primary agriculture.

Learners will specifically be able to:

- ◆ Monitor the common insects associated with the specific agricultural enterprise.
- ◆ Demonstrate a basic knowledge of trapping, monitoring and recording the incidence of pests, diseases and weeds
- ◆ Collect insects not familiar and that had been identified.
- ◆ Monitor the symptoms of disease associated with the agricultural enterprise.
- ◆ Monitor and report the incidence of weeds in the agricultural enterprise.

Learners will also gain basic knowledge of:

- ◆ Basic safety requirements related to the propagation environment, tools and procedures.
- ◆ Basic hygiene requirements for the propagation environments.
- ◆ Growing media - wet and dry.
- ◆ Weeds, pest and diseases.
- ◆ The safe handling of hormone and Chemicals preparations (rooting powders and plant protection substances).

Learning Assumed to be in Place:

- ◆ It is assumed that a learner attempting this unit standard will show competence against the following unit standards or equivalent:
- ◆ NQF 2: Harvest Agricultural crops: Procedures.
- ◆ NQF 3: Explain the planning and scheduling of tasks in a production environment.
- ◆ NQF 2: Utilise and perform minor repairs and maintenance tasks on implements, equipment and infrastructure.
- ◆ NQF 3 Demonstrate a basic understanding of the physiological functioning of the anatomical structures of the plant.



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

Aims and Objectives

■ Aims

You will learn about the following in this module:

- ◆ Select and use appropriate tools / equipment for pre-determined harvesting method.
- ◆ Carry out sampling for maturity indexing according to established and familiar procedures
- ◆ Harvest crops.
- ◆ Harvest crops considering the necessary health, hygiene and safety during the procedure.
- ◆ Ensure the collection and transportation of waste.
- ◆ Care and maintain equipment used in cooperation with and guiding others.

■ Objectives

You will be expected to be able to do the following:

- ◆ The type of tools needed to harvest the crops in the specific agricultural enterprise is described.
- ◆ The use and coordination of harvesting equipment during the harvesting process is explained.
- ◆ The process that is implemented to enable workers to report any malfunction of the harvesting equipment is described
- ◆ A problem solving strategy is described.
- ◆ The maturity-indexing plan that is implemented for the specific agricultural enterprise is described and explained.
- ◆ The collection of samples and responsibility of collection is explained.
- ◆ The recording of maturity indexing information is explained.
- ◆ The different factors that can influence the harvesting of the crop are explained
- ◆ The harvesting process of the crop and how a harvesting plan is implemented are described.
- ◆ The importance of a harvesting plan with relation to the other operations of the enterprise is explained.
- ◆ Management of the harvesting process to ensure a quality product reaches the shelf or processing plant is described.
- ◆ Special requirements for harvesting are described
- ◆ The main components of the organisations health, hygiene and safety plan are explained
- ◆ The relationship of the health, hygiene and safety plan to the OHS, and other requirements such as EUREPGAP, BRC and HACCP are explained.
- ◆ An understanding of how health, hygiene and safety of both the harvested crop and the person harvesting are ensured is demonstrated.
- ◆ The process followed in case of an emergency is described.
- ◆ An understanding of how waste from the harvesting process is identified and classified is demonstrated
- ◆ An understanding of how colleagues are encouraged to keep the harvest area clean of waste and why this is important is demonstrated.
- ◆ Implementation of a waste disposal plan is explained.
- ◆ Monitoring, evaluation and control of the waste disposal plan is explained
- ◆ The need for keeping records of waste and disposal and how this assists the disposal plan is explained.

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 | | |

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? | |

My Notes ...

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Session

1 Harvesting tools, their use and maintenance

Learner Guide:
Page 8

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

SO 1: Select harvesting equipment and tools for specific agricultural enterprise.

SO 6: Manage the care and maintenance of harvesting equipment.

| Concept (SO 1) | Time frame | Activities related to the concept |
|---|------------|-----------------------------------|
| The type of tools needed to harvest the crops planted in the specific agricultural enterprise is described. | 8 Hours | Activity 1 |
| The use and coordination of harvesting equipment during the harvesting process is explained. | | |
| The process that is implemented to enable workers to report any malfunction of the harvesting equipment is described. | | |
| A problem solving strategy is described. | | |
| Concept (SO 6) | | |
| The basic plan that implemented for caring and maintenance of harvesting equipment is described. | | |
| The strategy of how the workers are encouraged to care, maintain and store equipment correctly is described. | | |
| Routine maintenance is described. | | |
| An understanding of the process implemented to report major problems with equipment is demonstrated. | | |

Session

2 Produce maturity

Learner Guide:
Page 15

After completing this session, the learner should be able to:
SO 2: Demonstrate an understanding of sampling for maturity indexing.

| Concept (SO 2) | Time frame | Activities related to the concept |
|---|------------|-----------------------------------|
| The maturity-indexing plan that is implemented for the specific agricultural enterprise is described and explained. | 7 Hours | Activity 2 |
| The collection of samples and responsibility of collection is explained. | | |
| The recording of maturity indexing information is explained. | | |



Please allow learners to complete Activity 2 in their Learner Guides

| Type of activity | Resources |
|---|---|
| Group Work | Learner guide, Stationery, relevant on farm procedures. |
| Instructions to give to the learners | |
| <p>At the learners place of work, they should investigate and compile a report on:</p> <ul style="list-style-type: none"> • Discuss the procedures used and the criteria followed to determine the maturity of the crop you work with • Discuss the sample collection plan and procedures for maturity indexing • Identify the data that is required to be collected and how it should be recorded | |

Session

3 Harvest plans

**Learner
Guide:
Page 18**

After completing this session, the learner should be able to:
SO 3: Demonstrate an understanding of the harvesting of crops according to harvesting plan.

| Concept (SO 3) | Time frame | Activities related to the concept |
|--|------------|-----------------------------------|
| The different factors that can influence the harvesting of the crop are explained. | 8 Hours | Activity 3.1 & 3.2 |
| The harvesting process of the crop and how a harvesting plan is implemented are described. | | |
| The importance of a harvesting plan with relation to the other operations of the enterprise is explained. | | |
| Management of the harvesting process to ensure a quality product reaches the shelf or processing plant is described. | | |
| Special requirements for harvesting are described. | | |

My Notes ...

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4 Harvest health, safety and environment

Session

Learner Guide:
Page 25

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

SO 4: Implement a health, hygiene and safety plan during harvesting.

| Concept (SO 4) | Time frame | Activities related to the concept |
|---|------------|-----------------------------------|
| The main components of the organisations health, hygiene and safety plan are explained. | 8 Hours | Activity 4 |
| The relationship of the health, hygiene and safety plan to the OHSA, and other requirements such as EUREPGAP, BRC, HACCP are explained. | | |
| An understanding of how health, hygiene and safety of both the harvested crop and the person harvesting are ensured is demonstrated. | | |
| The process followed in case of an emergency is described. | | |



Please allow learners to complete Activity 4 in their Learner Guides

| Type of activity | Resources |
|---|---|
| Group Work | Learner guide, Stationery, relevant on farm procedures. |
| Instructions to give to the learners | |
| <p>Identify the health and safety plan implemented at the farm where you work. Write a concise report in which you discuss:</p> <ul style="list-style-type: none"> The main components of the health, hygiene and safety plan How the plan recognises and fulfils the requirements of the OHSA, EUREPGAP, BRC, HACCP and food safety requirements that are relevant to the farm where you work. If you were in a managing position, responsible for the health and safety on the farm, how would you ensure the health, hygiene and safety of the harvested crop as well as the person harvesting the crop? The process and procedures to be followed if an emergency occurs. | |

Session

5 Waste management

**Learner
Guide:
Page 27**

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

SO 5: Implement the waste collection and disposal plan.

| Concept (SO 5) | Time frame | Activities related to the concept |
|--|------------|-----------------------------------|
| An understanding of how waste from the harvesting process is identified and classified is demonstrated. | 7 Hours | Activity 5 |
| An understanding of how colleagues are encouraged to keep the harvest area clean of waste and why this is important is demonstrated. | | |
| Implementation of a waste disposal plan is explained. | | |
| Monitoring, evaluation and control of the waste disposal plan is explained. | | |
| The need for keeping records of waste and disposal and how this assists the disposal plan is explained. | | |

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. | |