



NQF Level: **1** US No: **116169**

Learner Workbook

Primary Agriculture

Understand how sustainable farming systems conserve natural resources



My name:

My Workplace:

Commodity: Date:

Before we start...

Dear Learner - on completion of the Learner Guide, you should have acquired all the knowledge and skills to be assessed against the following unit standard:

Title: Understand how sustainable farming systems conserve natural resources		
US No: 116169	NQF Level: 1	Credits: 4

Please read the unit standard at your own time (see Learning Guide).

What is assessment all about?

Assessment takes place at different intervals of the learning process and includes various activities. Some activities will be done before the commencement of the program whilst others will be done during programme delivery and other after completion of the program.

The assessment experience should be user friendly, transparent and fair. Should you feel that you have been treated unfairly, you have the right to appeal. Please ask your facilitator about the appeals process and make your own notes.

How to use this workbook ...

Your activity workbook will be handed in from time to time on request of the facilitator for the following purposes:

- ◆ The activities that follow are designed to help you gain the skills, knowledge and attitudes that you need in order to become competent in this learning module.
- ◆ It is important that you complete all the activities and worksheets, as directed in the learner guide and at the time indicated by the facilitator.
- ◆ It is important that you ask questions and participate as much as possible in order to play an active roll in reaching competence.
- ◆ When you have completed all the activities and worksheets, hand this workbook in to the assessor who will mark it and guide you in areas where additional learning might be required.
- ◆ You should not move on to the next step in the assessment process until this step is completed, marked and you have received feedback from the assessor.
- ◆ Sources of information to complete these activities should be identified by your facilitator.
- ◆ **Please note** that all completed activities, tasks and other items on which you were assessed must be kept in good order as it becomes part of your **Portfolio of Evidence** for final assessment.



1

SO 1, AC 1

Brainstorm with your group and record your conclusions.

My Name:

.....

My Workplace:

.....

My ID Number:

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1. Do you think farmers have a responsibility to the soil, water and indigenous plants and animals found in the environment around their farm?

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2. Explain what you think their responsibilities are?

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Facilitator comments:

Assessment:



2

SO 1, AC 2

Explain in your own words how each of the following issues are a result of, caused by, or impacted upon by, farming operations:

My Name:

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My Workplace:

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My ID Number:

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1. Soil Erosion.

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2. Water pollution & Wastage.

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3. Invasive plants.

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4. Fires.

Dashed-line writing area for question 4, consisting of five horizontal rows.

5. Floods.

Dashed-line writing area for question 5, consisting of five horizontal rows.

6. Population encroachment.

Dashed-line writing area for question 6, consisting of five horizontal rows.

7. Endangered species.

Dashed-line writing area for question 7, consisting of five horizontal rows.

Facilitator comments:

Assessment:



3

SO 1, AC 3

Field trip.

My Name:

My Workplace:

My ID Number:

Walk around the farm where you are completing your practical work and find, identify and name at least:

- ◆ 1 endangered plant,
- ◆ 1 endangered animal, and
- ◆ 5 alien/invasive plants.

Endangered Plant:

1. _____
2. _____
3. _____

Endangered Animal

1. _____
2. _____
3. _____

Invasive Plant

1. _____
2. _____
3. _____
4. _____

Facilitator comments:

Assessment:



4

SO 1, AC 4

Group Work.

My Name:

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My Workplace:

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My ID Number:

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Design a poster with your group in which you explain how we can conserve our natural resources on farms through environmentally friendly agricultural practices. Provide a replica of your group's poster below

[Large dashed rectangular box for drawing a poster]

Facilitator comments:

Assessment:



5

SO 2, AC 5

Group waste investigation

My Name:

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My Workplace:

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My ID Number:

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1. Identify and describe at least three types of waste that is generated on the farm where you are completing your practical activities.

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2. Describe how these wastes can cause pollution or endanger the environment.

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3. Identify the ideal way that these wastes should be disposed of in order to prevent pollution.

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Facilitator comments:

Assessment:



6

SO 3, AC 6

Explain in your own words:

My Name:

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My Workplace:

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My ID Number:

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1. What is a "natural resource"?

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2. Name the natural resources found on the farm where you are completing your practical duties.

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3. Suggest methods in which we can maintain and increase our natural resources.

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Facilitator comments:

Assessment:



7

SO 4, AC 7

Individual exercise.

My Name:

My Workplace:

My ID Number:

Design an identification chart of invasive species found in your area and also suggest plans to successfully deal with these invasive species.

[Large dashed rectangular box for drawing an identification chart and suggesting plans.]

Facilitator comments:

Assessment:



8

SO 5, AC 8

Group work, design a poster.

My Name:

My Workplace:

My ID Number:

In your group, identify the elements that are a "fire risk" on the farm where you are completing your practical duties. Identify methods to prevent or limit any "fire risk" caused by these things. Use the information you have gathered to create an instruction manual for farm employees on how to deal with fire on the farm, including how to cut or build a firebreak. Record the contents of your manual on flipchart paper as well as in your Learner Workbook. Present your manual to the rest of the group.

Facilitator comments:

Assessment:



9

SO 5, AC 9

Team task.

My Name:

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My Workplace:

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My ID Number:

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This activity can be completed in one of two ways: You can either participate in a group activity during the training course, or you can do this as part of your duties on the farm where you are working.

In the workplace: Hand in a job card that is dated and signed by your supervisor to show that you participated in the building or cutting of a firebreak. The job card must explain exactly what you did and prove that you successfully participated in this. If necessary, it can be a personal testimony from your supervisor.

During the training:

In the space provided below, give a detailed description of what you did, how you did it and why you did it in the way you did.

Facilitator comments:

Assessment:



10

SO 6, AC 10

Team work, four participants.

My Name:

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My Workplace:

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My ID Number:

.....

With 4 partners, paste examples of materials that can be used for mulching here and explain.

Examples

[Large dashed rectangular box for pasting examples and explanations]

1. What it would mean to mulch?

[Five horizontal dashed lines for writing an answer]

2. Why we would mulch?

Dashed-line writing area for question 2.

3. How we would mulch?

Dashed-line writing area for question 3.

4. When we would mulch?

Dashed-line writing area for question 4.

Facilitator comments:

Assessment:



11

SO 6, AC 11

Practical demonstration in class.

My Name:

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My Workplace:

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My ID Number:

.....

Build a "mini-gabion" and explain why you would build such a structure on a farm and where you would build or place it.

1. How to build a Gabion?

[Dashed box for answer]

2. Why we build gabions?

[Dashed box for answer]

3. Where we will build gabions on the farm?

[Dashed box for answer]

Facilitator comments:

Assessment:

Assessment Feedback Form

Comments / Remarks	
<p>Feedback to learner on assessment:</p>	
<p>Feedback from learner to assessor:</p>	
<p>Learner's Signature:</p>	<p>Date:</p>
<p>Assessor's Signature:</p>	<p>Date:</p>

Am I ready for my test?

- ◆ Check your plan carefully to make sure that you **prepare in good time**.
- ◆ You have to be found **competent** by a qualified **assessor** to be declared competent.
- ◆ Inform the assessor if you have any **special needs** or requirements **before** the agreed date for the test to be completed. You might, for example, require an interpreter to translate the questions to your mother tongue, or you might need to take this test orally.
- ◆ Use this worksheet to help you prepare for the test. These are **examples of possible questions** that might appear in the test. All the information you need was taught in the classroom and can be found in the learner guide that you received.
 1. **I am sure** of this and understand it well
 2. **I am unsure** of this and need to ask the Facilitator or Assessor to explain what it means

Design a presentation for your co-workers explaining the following:

Questions	1. I am sure	2. I am unsure
1. How can the farming activities influence the environment?		
2. How can we limit the influence of agricultural activities on the natural resources and environment?		
3. What wastes are produced by agriculture?		
4. How should these wastes be handled to limit their impact on the natural resources and environment?		
5. How can we maintain and increase biodiversity in agriculture?		
6. How can we effectively control invasive species in agriculture?		
7. How can we prevent and control the outbreak of fires on farms?		
8. How can we increase the soil's water holding capacity and prevent run-off?		
9. Why and where should we construct gabions?		
10. How can we re-establish natural vegetation?		

Checklist for practical assessment ...

Use the **checklist** below to help you prepare for the part of the practical assessment when you are observed on the **attitudes** and **attributes** that you need to have to be found competent for this learning module.

Observations	Answer Yes or No	Motivate your Answer (Give examples, reasons, etc.)
Can you identify problems and deficiencies correctly?		
Are you able to work well in a team?		
Do you work in an organised and systematic way while performing all tasks and tests?		
Are you able to collect the correct and appropriate information and / or samples as per the instructions and procedures that you were taught?		
Are you able to communicate your knowledge orally and in writing, in such a way that you show what knowledge you have gained?		
Can you base your tasks and answers on scientific knowledge that you have learnt?		
Are you able to show and perform the tasks required correctly?		
Are you able to link the knowledge, skills and attitudes that you have learnt in this module of learning to specific duties in your job or in the community where you live?		

- ◆ The assessor will complete a checklist that gives details of the points that are checked and assessed by the assessor.
- ◆ The assessor will write commentary and feedback on that checklist. They will discuss all commentary and feedback with you.
- ◆ You will be asked to give your own feedback and to sign this document.
- ◆ **It will be placed together with this completed guide in a file as part of you portfolio of evidence.**
- ◆ The assessor will give you feedback on the test and guide you if there are areas in which you still need further development.

Paperwork to be done ...

Please assist the assessor by filling in this form and then sign as instructed.

Learner Information Form			
Unit Standard	116169		
Program Date(s)			
Assessment Date(s)			
Surname			
First Name			
Learner ID / SETA Registration Number			
Job / Role Title			
Home Language			
Gender:	Male:		Female:
Race:	African:	Coloured:	Indian/Asian: White:
Employment:	Permanent:		Non-permanent:
Disabled	Yes:		No:
Date of Birth			
ID Number			
Contact Telephone Numbers			
Email Address			
Postal Address			Signature: