Assessment Guide for Assessors & Facilitators

Conservation

Level 3

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Title:		**Monitor Natural Resource Management Practices**					
Applied Title:		**Monitor Natural Resource Management Practices in Citrus Production**					
Field:		Agriculture and Nature Conservation					
Sub-Field:		Primary Agriculture					
SETA (SGB):		AgriSETA					
Skills Area:		Conservation					
Context:		Citrus Production					
US No:	116263	**Level:**	3	**Credits:**	4	**Notional Hours:**	40
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Based on the Production Guidelines of:

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Cabeton Training and Development

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Directions

Please Note: There is a separate assessment guide for the learner. The learner must use this guide to prepare himself / herself for the assessment.

This assessment guide contains all necessary activities and instructions that will enable the assessor and learner to gather evidence of the learner's competence as required by the unit standard. This guide was designed to be used by a trained and accredited assessor who is registered to assess this specific unit standard as per the requirements of the AgriSETA ETQA.

Prior to the delivery of the program the facilitator and assessor must familiarise themselves with content of this guide, as well as the content of the assessment guide for learners.

The assessor, facilitator and learner must plan the assessment process together, in order to offer the learner the maximum support, and the opportunity to reflect competence.

The policies and procedures that are applicable during the execution of this assessment are available on the website of the Citrus Academy, contained in a document named Policies and Procedures for Assessment, and must be strictly adhered to. The assessor must familiarise himself with this document before proceeding.

This guide provides step-by-step instructions for the assessment process of:

US No:	116263	**Level:**	3	**Credits:**	4

The step-by-step instructions agree and are conducted in concert with the steps described in the learner assessment guide. The steps are as follows:

Step	***Description***	***Timeframe***
1	Learner Assessment Contract	Before delivery of program
2	Learner Declaration of Authenticity	Before delivery of program
3	Diagnostic Assessment of Learning Assumed to be in Place	Before delivery of program
4	Assessment Plan for Gathering of Evidence	Before delivery of program
5	Learner Formative Assessment Activities	During delivery of program, assessment after delivery of program
6	Presentation	After delivery of program
7	Integrated Summative Assessment Tool	After delivery of program
8	Re-assessment Procedures	After completion of assessment
9	Documentation	After completion of assessment
10	Administration and Completion of Portfolio of Evidence	After completion of assessment

Step 1

Pre-Assessment Briefing and Checklist

A pre-assessment briefing for learners is held before the delivery of the program. Use the checklist below to ensure that all these points are addressed and discussed with the learners.

Pre-Assessment Briefing Checklist		
	√	X
Organise resources – people, equipment, venue, etc.		
Explain the purpose of the assessment		
Discuss the standards or criteria to be used		
Discuss assessment roles and accountabilities		
Decide on assessment venues		
Negotiate evidence required, and where or how this evidence may be gathered		
Explain the methods of assessment that will be used during the gathering and summing up of evidence		
Negotiate the date of submission for the activity workbook and the date for the summative assessment		
Discuss resources required for the assessment e.g. equipment, materials, etc.		
Explain the procedure if the learner is found to be not yet competent		
Explain the appeal and review procedures		
Identify any potential learning barriers and negotiate strategies to overcome these		
Complete and sign the assessment plan with the learner		

The learner and assessors must sign the **Learner Contract** in the learner assessment guide.

Step 2

Learner Declaration of Authenticity

The learner is requested to complete and sign the Declaration of Authenticity in the learner assessment guide. This should be checked and co-signed by the assessor.

The format is as reflected in the learner assessment guide.

Step 3

Diagnostic Assessment of Learning Assumed to be in Place

In the learner assessment guide, the learner is asked to indicate whether they have completed the learning assumed to be in place as prescribed by the unit standard.

The assessor must guide the learners through this step, explaining in detail the content of the mentioned learning areas, because names of learning programs do not always agree with the names of the unit standards, and learners might indicate the incorrect information.

If learners indicate that they have not yet completed the mentioned unit standards, the assessor should prescribe an action plan to allow the learner to obtain the skills required by recommending additional training, competence portfolios, or the relevant RPL assessment for the given unit standards.

The format is as reflected in the assessment guide for learners. Please read it and familiarise yourself with its content.

Step 4

Assessment Plan for Gathering of Evidence

A pro-forma assessment plan for this unit standard has been drafted in the learner assessment guide. Explain the plan to the learner and complete the dates and signatures as indicated.

The format for the assessment plan is as reflected in the assessment guide for learners. Please read it and familiarise yourself with its content. Make a note of the dates agreed upon in the table provided below.

Learner and Assessor Assessment Plan		
Unit Standard	Monitor natural resource management practices	
Registration Number	116263	
Step	***Description***	***Completion / Submission Date***
Step 5	Learner Formative Assessment Activities	
Step 6	Presentation	
Step 7	Integrated Summative Assessment	
Step 8	Re-Assessment Procedures	
Step 9	Documentation	
Step 10	Administration and Completion of Portfolio of Evidence	

Step 5

Learner Formative Assessment Activities

The learner assessment guide contains comprehensive activities and worksheets that the learner must complete during the delivery of the learning program. It is imperative that these activities be completed as part of the learning process in order to give the learner the opportunity to develop the skills, knowledge and attitudes that are required for competence.

Learners must complete all the activities in the workbook.

Learners must be encouraged to take control of their learning by indicating areas in the workbook where they experience difficulty.

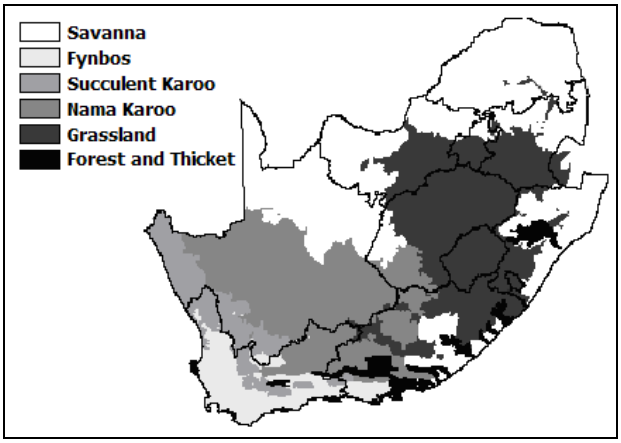
The learner hands in the learner assessment guide to the assessor or the facilitator, only if the facilitator is a subject matter expert, for the assessment of the formative assessment activities. The assessment of these activities must be done according to the prescribed benchmarks and according to the following marking matrix.

The learner should not move on to the next step before this step has been completed and learners show sufficient capacity and readiness for summative assessment. If problems areas are identified, the learner should be guided with a developmental action plan, which is documented separately and signed by the learner, the facilitator and the assessor.

Model answers are provided below.

Activity 1 – Group Discussion
Hold a class discussion about the questions below, and write keynotes for yourself on the conclusions that you reach.

What is a biome?
Biomes are major ecological communities and represent a division of the world's vegetation that correspond to a particular climate and are characterised by types of plants and animals, for example tropical rain forest or desert. Biomes are composed of several ecosystems and represent a regional community of organisms named after the dominant vegetation.
What biome is found in the area where you farm or where you are completing your practical duties? Describe it in detail.
Adapt to learner's geographical area



Do you think citrus production influences this biome? Explain your answer.
Yes, citrus production replaces (some of) the natural vegetation in the area, which in turn affects the ecosystems and potentially poses a danger to depletion or polluting natural resources through farming activities, while monoculture might attract large populations of specific insects/microbes that attack the citrus

Activity 2 – Group Brainstorm

In your group, brainstorm about the questions below and write down keynotes for yourself.

What is biodiversity?
Biodiversity (or biological diversity) is a collective term meaning the totality and variety of life on earth. Biodiversity includes genetic diversity within species, the variety among different species, and the range of ecosystems within which life exists and interacts.
Why is it important to maintain and increase biodiversity?
Biodiversity is necessary for the existence of ecosystems. A variety of organisms must exist in any given ecosystem for the sake of the health of the ecosystem. For example, if there were an ecosystem with only chickens, this would be extremely unhealthy and would not exist for long. There would be nothing for the chickens to eat, and nothing to eat the chickens. In the same way, if there were to be an ecosystem with only one type of plant, it would be extremely unhealthy. **The importance of biodiversity to the functioning of ecosystems is therefore in the variety of fauna and flora that ensures a healthy food chain and competition for food and resources that ensures that natural selection sees to the survival of the fittest. Biodiversity ensures that the natural balance between various species of fauna and flora is maintained.** **If only one species becomes extinct in an ecosystem, it can have a knock-on effect on others it interacts with. Some species are by virtue of their interactions with others important to the continued existence of their ecosystems. These are known as keystone species. The extinction of a keystone species causes a cascade of further extinctions.** **The variety of life on earth forms a huge gene pool which is the material on which natural selection works in the ongoing process of evolution, which generates more biodiversity. This gene pool is also a resource of crucial importance to humanity for food, fuel, clothing, shelter, and to maintain our health. Biodiversity enhances our lives in countless ways, from the development of new and improved food crops and medicines, to the sight of a flight of geese against a sunset. While modern technology has given people greatly increased power over nature, it has done little to reduce our dependence on biodiversity.** **Living things do not exist independently of each other or the abiotic environment. They depend on one another in a variety of ways, for example in the food chain. Together with the abiotic parts of the environment, such as soil, water and air, living organisms form essential life-support systems, such as the water cycle, the carbon cycle and several other nutrient cycles. The pool of life is therefore much more than the sum of its parts.**
What impacts on biodiversity in the area where you live?
Adapt to geographical area. The leading threats to biodiversity are: • **Converting land to agricultural use** • **Forest clearing** • **Climate change** • **Pollution** • **Unsustainable harvesting of natural resources** • **The introduction of alien species**
How does agriculture affect biodiversity?
Agriculture in essence aims at establishing a majority of one species of plant or animal in an ecosystem – in the ecosystem which is a citrus farm, there may be a variety of plants, but there will be more citrus trees than anything else. In fact, other plant species may even be

actively put under pressure because of weed control and the need for establishing infrastructure, such as roads. **Establishing a majority of one plant species in an ecosystem also has a knock-on effect on the diversity of fauna found in the ecosystem. Animal species, specifically insect species, for which this specific plant is a food source, will flourish and increase in numbers, while animal species who may have been present in the ecosystem before but that can no longer find food because of the loss of diversity in plant species, will disappear from the ecosystem.** **The same situation is found in animal farming. Where a specific animal species, such as cattle, is introduced into an ecosystem where it becomes the major species, other animal species will be put under pressure by farming practices and unfair competition for food. The diversity of plant species will also be affected as the majority animal species will have a preferred food source, which will put specific plant species under pressure.**
What steps can be taken to limit the negative impact of the factors you mentioned above?
Proper planning before the establishment of an orchard and effective management for the lifespan of the orchard is the most important aspect of maintaining biodiversity. For the farmer to plan and manage his farm while minimising the environmental impact of his activities, he needs to: • **Know about biodiversity and its importance in terms of conservation** • **Know the types of fauna and flora that occur naturally in the environment of his farm** • **Know the needs of the fauna and flora** • **Know the needs of citrus production** • **Strive to balance the needs of his crop with those of naturally-occurring fauna and flora** **Controlling and managing fertiliser and plant protection product applications** **Limiting population growth and urbanisation** **Controlling the animal populations and rotating grazing of animals where livestock is involved**

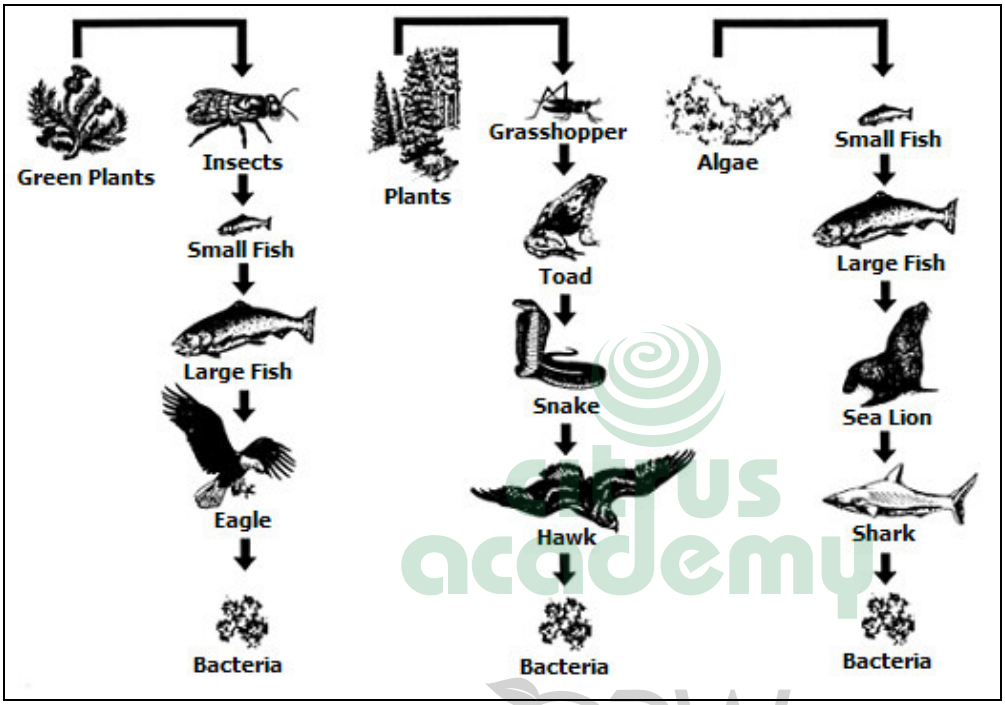
Activity 3 – Group Project
Design a strategy with your group in which you come up with solutions to maintain biodiversity in your area and prevent threats to local fauna and flora. Summarise the strategies that you come up with, including the specific steps that needs to be taken.
Adapt to group's approach. Points to revolve around discussions concluded in activity 2.

Activity 4 – Research and Discover	
Find examples of fauna and flora that is endangered in your area and explain what agriculture can do to protect them.	
Examples of Endangered Fauna and Flora	**Protection Strategies**
Adapt to learners' geographical area	**Adapt to learners' geographical area**

Activity 5 – Research and Discover		
Find examples of invasive fauna and flora species in your area. Explain why they are considered invasive, how they should be dealt with, and what role your team can play in dealing with them.		
Examples of Invasive Fauna and Flora	**Why Are Species Invasive?**	**Control Strategies**
Adapt to learners' geographical area	**Adapt to learners' geographical area**	**Adapt to learners' geographical area**

Activity 6 – Explore and Discover
Walk about the farm where you are completing your practical duties. Identify an ecosystem and answer the questions below.

Describe the ecosystem.
Adapt to learner's environment.
Describe the biotic and abiotic elements of the ecosystem.
Adapt to learner's environment. **Biotic = living elements such as fauna and flora** **Abiotic = non-living elements such as air**
Describe how the food chains in the ecosystem work.
As per learner's environment.



Identify possible problems with the ecosystem and complete the table below.

Possible Problem	What causes the problem	How can problem be prevented?	How can problem be dealt with if it occurs?
Adapt to learner's environment and examples, e.g.			
Plants are constantly under attack from fungi	**Fungal population out of control due to orchards being too humid (poor canopy management)**	**Correct irrigation times** **Better canopy management**	**Adapt irrigation schedules** **Adapt canopy management routines**

Activity 7 – Worksheet
Answer the questions below in your own words and according to your understanding.
What is soil potential and how is it measured?
Soil potential refers to the ability of the soil to support plant growth and produce a good quality crop.
Soil potential is judged by the following criteria: • **Soil fertility** • **Plant available water** • **Soil permeability**

What is soil degradation and how does it happen?
Soil degradation means a decrease in the quality and potential of the soil and can result from a variety of actions or circumstances. Soil degradation decreases the ability of soil to support and sustain life, and therefore negatively impacts agricultural production and other natural resources and thus biodiversity.
How can the soil potential be retained or improved on the farm where you are completing your practical duties?
As per learner examples. Re-establish vegetation, rotational farming, preventing soil erosion, protecting subsoil from compaction, increase soil fertility through such practices as mulching.
How can soil degradation be prevented on the farm where you are completing your practical duties?
As per learner examples. Combat soil erosion, combat soil compaction.
What can cause soil erosion on the farm where you are completing your practical duties?
As per learner examples. Any compaction actions, over-grazing, destruction of vegetation, water run-off on steep slopes, any action causing dust formation.
How would you know if soil has been eroded?
Visible signs as follows: **Water Erosion – Water erosion causes two types of problems, being on-site loss of agricultural potential, and the off-site effects of downstream sedimentation, causing flooding and the silting up of reservoirs. The main forms of water erosion are sheet erosion, rill erosion (channel erosion), and gully erosion.** **Sheet erosion is characterised by the down-slope removal of soil particles by a thin sheet of water. Channel erosion can occur on steep land or on land that slopes more gently. Because there are always irregularities in a field, water finds hollows in which to settle and low-lying channels through which to run. As the soil from these channels is washed away, the channels become deeper and miniature dongas are formed in the field. Gully erosion cause dongas, which usually occur near the bottom of slopes and are caused by the removal of soil and soft rock as a result of concentrated runoff that forms a deep channel or gully.** **Wind erosion – Wind erosion occurs when the land surface is left bare in regions that are arid enough, as a result of low rainfall, to allow the soil to dry out, and flat enough to allow the wind to carry the soil away over an extended period of time. Land may become susceptible to wind erosion as a result of the grazing of animals that remove the protective plant cover, and whose hooves break up the soil, especially round watering points. Arable land that has been left bare is also a major problem.**
What will you do if you encounter soil erosion on the farm where you are completing your practical duties?
Report it, follow farm procedures to counter erosion as soon as possible.
What would you recommend to prevent or manage soil erosion on the farm where you are completing your practical duties?
As per learner examples. Build / pack anti-erosion structures, re-establish original vegetation, crop rotation, use of smaller implements and reduction of traffic on soil to combat compaction, mulching, plant wind breaks.

Activity 8 – Explore and Discover
Identify the veldt composition in the area where you live. Collect pictures or dried examples of the pioneer, sub-climax and climax species found there.

Pioneer Species
Adapt to geographical area of learner.
Sub-Climax Species

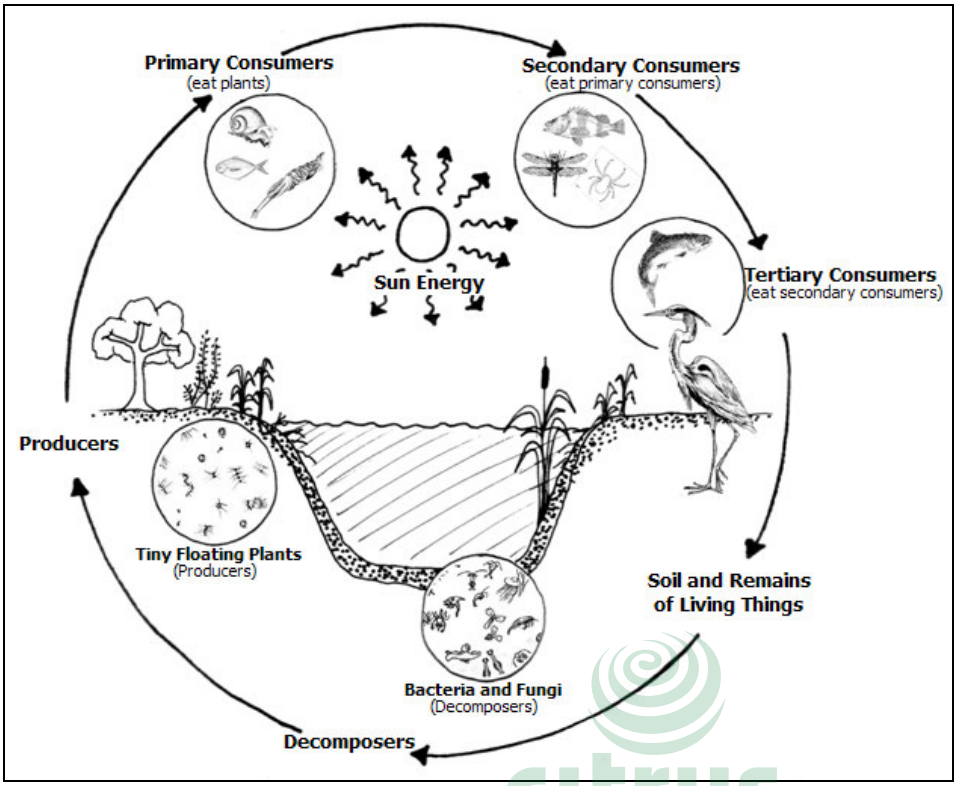
Adapt to geographical area of learner.
Climax Species
Adapt to geographical area of learner.

Activity 9 – Research and Advise
Make a recommendation to a small-scale citrus farmer of methods to increase soil potential and ensure soil conservation.
As per learner recommendations. Includes all actions to combat erosion and to retain soil potential and to reverse soil degradation.

Activity 10 – Worksheet
Answer the questions below in your own words and according to your understanding.
Identify and name the water source(s) on the farm where you are completing your practical duties.
As per learner's environment; e.g. river, canal, fountain, dam, etc.
What does water management mean to you?
The most common water management methods include rainwater harvesting, subsurface irrigation, protecting water sources, and maintain irrigation systems.
How are the water source(s) that you have identified managed?
As per learner's environment.
What does water runoff mean?
Water runoff happens when water is applied in volumes that the soil cannot absorb, causing it to run off. It occurs naturally when high rainfall occurs in a short period of time. Regular water runoff occurs mostly as a result of over-irrigation, when water is applied at such a high rate or in such volumes that it does not have sufficient time to infiltrate the soil. A secondary cause of water runoff may be soil crusting, which is caused by increased soil salinity.
How should water runoff be controlled and managed on the farm where you are completing your practical duties?
As per learner's strategies. **A good water runoff plan takes the following into consideration:** • **Sediment clouds the water and can destroy aquatic habitats.** • **Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can not exist in water with low dissolved oxygen levels.** • **Bacteria and other pathogens can cause health hazards and affect food safety adversely.** • **Debris, such as plastic bags, bottles and cigarette butts, that are washed into water bodies can threaten aquatic life.** • **Household hazardous wastes and agrochemical products such as herbicides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life.** • **Soil erosion must be prevented by planning pre-emptive actions and structures to avoid erosion formation on potentially sensitive terrain.** • **Maintenance of irrigation systems and water sources.** • **Erecting structures or establishment of indigenous reeds and grasses that will help with filtering of runoff water.**

Activity 11 – Worksheet
Answer the questions below in your own words and according to your understanding.

What is the energy cycle?



How is the energy cycle utilised on a citrus farm?

Citrus trees use sun energy during photosynthesis to grow and to produce leaves, pollen, seeds and fruit that is passed on to primary, secondary and tertiary consumers.

Why must we understand the energy cycle when farming?

If citrus trees are planted with the correct attitude to the sun it will contribute to a healthy crop from healthy trees without the use of unnaturally high amounts of agrochemical crop protection products. The trees will get the right amount of sun energy to ensure that the canopy develops sufficiently without trapping moisture that causes disease. This in turn will contribute to the maintenance of healthy ecosystems.

Make a recommendation about the placement of citrus trees to utilise sunlight correctly for photosynthesis and best farming practice. Base it on your practical experience.

As per learner's experience and advice from farm.

Activity 12 – Worksheet

Find a copy of the map for the farm where you are completing your practical duties. Identify the following by tracing or colouring the items on a copy of the map. Attach the copy to your workbook.

- Contour lines
- Steep elevation
- Gradual elevation
- Boundaries of the farm
- Water sources such as dams or rivers

Explain in your own words why it is important to be able to identify this kind of information on a map.

To understand and recognise the location of specific information such as natural resources on a map, to be utilised during the analysis of a map, to determine the location of farming activities in relation to these (for conservation purposes).

Marking Matrix and Assessor Report for Formative Assessment Activities Formative Evidence Collection Summary for Unit Standard 116263 – Level 3					
	Action Required from Learner to Develop Competence	***Competence Assessments***	***Standard for Activity***	***Allocation of Marks***	***Feedback to Learner and Comments on Evidence***
Specific Outcome 1: **Know and monitor the occurrence of key types of fauna and flora and their environmental requirements.** *Range:* Fauna and flora include all harmful and useful fauna and flora on the farm and direct vicinity	Attend classroom lesson, participate and ask questions	Activities in learner activity book were completed correctly	Activity answers must be at least 85% correct A signature + commentary from the supervisor / coach / mentor or facilitator in learner Workbook	As per model answer sheet	
Specific Outcome 2: **Demonstrate an understanding of the elements of an ecosystem and a food chain.** *Range:* Ecosystem includes but is not limited to energy flows, water cycle, climate, soil, fauna, flora and air. Food chain is limited to food chain components.	Attend classroom lesson, participate and ask questions	Activities in learner activity book were completed correctly	Activity answers must be at least 85% correct A signature + commentary from the supervisor / coach / mentor or facilitator in learner Workbook	As per model answer sheet	
Specific Outcome 3: **Identify the key fauna and flora types and their sustainable management.** *Range:* All planted areas on a farm	Attend classroom lesson, participate and ask questions	Activities in learner activity book were completed correctly	Activity answers must be at least 85% correct A signature + commentary from the supervisor / coach / mentor or facilitator in learner Workbook	As per model answer sheet	

Marking Matrix and Assessor Report for Formative Assessment Activities Formative Evidence Collection Summary for Unit Standard 116263 – Level 3					
	Action Required from Learner to Develop Competence	***Competence Assessments***	***Standard for Activity***	***Allocation of Marks***	***Feedback to Learner and Comments on Evidence***
Specific Outcome 4: **Identify the different soil categories, the utilisation and maintenance thereof.** *Range:* Soil types are limited to three types occurring on the farm or direct environment	Attend classroom lesson, participate and ask questions	Activities in learner activity book were completed correctly	Activity answers must be at least 85% correct A signature + commentary from the supervisor / coach / mentor or facilitator in learner Workbook	As per model answer sheet	
Specific Outcome 5: **Monitor and implement principles of water management.** *Range:* Water management includes but is not limited to rainwater harvesting, catchment methods, protection of wells and fountains, protecting and controlling riverbanks, etc.	Attend classroom lesson, participate and ask questions	Activities in learner activity book were completed correctly	Activity answers must be at least 85% correct A signature + commentary from the supervisor / coach / mentor or facilitator in learner Workbook	As per model answer sheet	
Specific Outcome 6: **Demonstrate a basic understanding of the energy cycle.** *Range:* Limited to the components of the energy cycle	Attend classroom lesson, participate and ask questions	Activities in learner activity book were completed correctly	Activity answers must be at least 85% correct A signature + commentary from the supervisor / coach / mentor or facilitator in learner Workbook	As per model answer sheet	

Marking Matrix and Assessor Report for Formative Assessment Activities Formative Evidence Collection Summary for Unit Standard 116263 – Level 3					
	Action Required from Learner to Develop Competence	***Competence Assessments***	***Standard for Activity***	***Allocation of Marks***	***Feedback to Learner and Comments on Evidence***
Specific Outcome 7: **Read a two dimensional map of the direct vicinity.** *Range:* Limited to basic topography	Attend classroom lesson, participate and ask questions	Activities in learner activity book were completed correctly	Activity answers must be at least 85% correct A signature + commentary from the supervisor / coach / mentor or facilitator in learner Workbook	As per model answer sheet	
US CCFO: Identifying	Attends all lessons, activities, practical and completes activities and workbook as per instructions	Attendance register and facilitator report	Learner must at least be present and no negative commentary about the learner should be made in the facilitator report.	N/a	
US CCFO: Working					
US CCFO: Organising					
US CCFO: Communicating					
US CCFO: Science					
US CCFO: Demonstrating					
US CCFO: Contributing					
US CCFO: Identifying					

Assessment Feedback Form – Activity Workbook			
	Comments / Remarks		
Feedback to learner on assessment			
Feedback from learner to assessor			
Learner's Signature		**Date:**	
Assessor's Signature		**Date:**	

Step 6

Presentation

Before the summative task is undertaken, the learner must be reminded of what is expected from him / her in terms of summative and reflexive competence. Read and explain to the learner this section in the learner assessment guide. The learner and assessor must sign off this section to acknowledge that this step was completed. Mark both the written evidence and also show proof of being verbally presented with the evidence required.

- Use the planning and questioning format below to help you collect evidence for foundational and embedded knowledge as prescribed by the outcomes of the unit standards.
- Provide the questions as listed to the learners as a guide.
- Ensure that you apply the exact same methodology for each learner in order to ensure that VACS principles are adhered to.
- Only a suitably qualified and registered assessor who is ALSO a subject matter expert in this specific field can mark this assessment tool for learner assessment.
- If no such a person can be found to assess the learner, then it is advised that a qualified assessor consults with the appropriate subject matter expert prior to the assessment in order to establish key points for competence and / or uses model answers as supplied by a subject matter expert to allocate marks. The subject matter expert should be consulted for any answers that the assessor might have queries on.

Please utilise the following table to gather evidence during the learner's presentation:

Criteria	Evidence Found of Learner Applying Concept as per Practical Experience	Evidence lacking	Comments
What is meant by an ecosystem?			
Identify the ecosystems found on the farm or in the farming environment			
Why is it important to protect these ecosystems?			
What can be done to protect these ecosystems?			
List all the natural resources necessary for the farm to operate (think of such things as the soil, water, etc.)			
How can these natural resources be damaged or harmed?			
What would the consequences be to the farm and the environment if these natural resources were harmed or damaged?			
What can be done to protect these natural resources?			

Criteria	Evidence Found of Learner Applying Concept as per Practical Experience	Evidence lacking	Comments
What is meant by invasive species?			
How will you know that you have encountered an invasive species?			
What must be done if you encounter an invasive animal species?			
What must be done if you encounter an invasive plant species?			

Step 7

Integrated Summative Assessment Tool

One assessment tool is provided in this step, being the attitudes and attributes assessment tool.

This assessment tool has been drafted in its entirety and follows below. It must be copied and completed for every learner in the same manner and according to the same procedure.

Learners must not be given this tool in preparation for summative assessment. This corresponding step in the Learner Assessment Guide is a direct reflection of this tool and is drafted in a format that is appropriate to the learner's level of language competence.

- Use this rating scale to judge the learner's CCFO competence according to the unit standard.
- The learner's entire performance and all the stages of learning, as well as all gathered evidence must be considered for this section.
- It is advised that the assessor consult with facilitators, mentors, coaches and supervisors in order to ensure that an objective rating is allocated.
- A rating between 1 and 5 should be given, as follows:

Rating	***Description***
1	No evidence can be found
2	The evidence found is weak and this is still a major development area for the learner
3	The evidence found meets the average expectation for a learner on this level
4	The evidence found is of a high quality and exceeds the average standard expected
5	The evidence found is outstanding and the learner attitudes and traits are very well developed

- Learner must be given constructive feedback on each rating.
- Ensure that you apply the exact same methodology for each learner in order to ensure that VACS principles are adhered to.
- The benchmark for learner competence in this tool is 3:5 in EVERY CCFO.

At the end of this step, an assessment feedback form is provided which must be completed and signed by the assessor, learner and moderator, where applicable.

Attitudes and Attributes Assessment Tool

Use the following rating table in this assessment:

Rating	***Description***
1	No evidence can be found
2	The evidence found is weak and this is still a major development area for the learner
3	The evidence found meets the average expectation for a learner on this level
4	The evidence found is of a high quality and exceeds the average standard expected
5	The evidence found is outstanding and the learner attitudes and traits are very well developed

CCFO Criteria	***Rating***
Identifying – The learner can identify problems and deficiencies correctly.	
Working in a Team – The learner is able to work well as member of a team.	
Organising – The learner works in an organised and systematic way whilst performing all tasks and tests.	
Communicating – The learner is able to communicate his or her knowledge orally and in writing, in a way that shows what knowledge he or she has gained.	
Demonstrating – The learner is able to show and perform the tasks required correctly.	
Contributing – The learner is able to link the knowledge, skills and attitudes that he or she has acquired in this module of learning to specific duties in their job or in the community where he or she lives.	
Science – Learner is able to utilise and use science and technology effectively	
Collecting – Learner can effectively gather information	

Assessment Feedback Form			
	Comments / Remarks		
Feedback to learner on assessment and / or overall recommendations and action plan for competence			
Feedback from learner to assessor			
Assessment Judgement	You have been found: ❍ Competent ❍ Not yet competent in this unit standard	Actions to follow: ❍ Assessor report to ETQA ❍ Learner results and attendance certification issued	
Learner's Signature		**Date:**	
Assessor's Signature		**Date:**	
Moderator's Signature		**Date:**	

Step 8

Re-Assessment Procedures

- Note that only outcomes on which the learner was found not yet competent must be re-assessed.
- The same procedures in steps 6 and 7 are repeated.
- The tool must be adapted at discretion of the assessor. Best practice is not to present the exact same format and questions if possible.
- Use your expertise and judgement to ensure that the method of re-assessment remains integrated and relevant to the expected outcomes.

Step 9

Documentation

The following documentation is addressed in this step:

1. Learner and assessor information reports;
2. Assessor report and summative evidence collection summary;
3. Learner assessment re-actionnaire;
4. Assessor's assessment review and improvement document;
5. Assessment appeal form

1. Learner and Assessor Information Forms

The learner information form is in the assessment guide for learners. The assessor information form follows. These forms must be completed for each individual learner and placed in the learner's portfolio of evidence.

2. Assessor Report and Summative Evidence Collection Summary

This report follows after the information report. Use it to summarise the findings during assessment. Please complete the copy of this report that is in the learner assessment guide.

3. Learner Assessment Re-Actionnaire

A pro-forma for the learner assessment re-actionnaire is included in the learner assessment guide. Ask the learner to complete this form and sign it.

4. Assessor's Assessment Review and Improvement Document

The assessor is expected to complete the assessor review of the assessment process, using the pro-forma document of which an example follows. Please complete the copy of the document in the learner assessment guide. This document must be discussed with the learner and any learner commentary should be recorded.

5. Assessment Appeal Form

The assessment appeal form is also provided in the learner assessment guide. Assist the learner to complete the document if necessary.

The learner must be requested to sign-off all reports and documents before they are placed in the portfolio of evidence.

Assessor Information Form				
Unit Standard	116263			
Program Date(s)				
Surname				
First Name				
Company Name				
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				

Assessor Report and Summative Evidence Collection Summary for Unit Standard 116263 – Level 3					
Description	***Evidence Gathered***		***Benchmark***	***Competent / Not yet Competent***	***Feedback and Comments***
	Foundational and Embedded Knowledge	**Practical Skills, Underpinning Knowledge and Reflexive Competence**			
Specific Outcome 1: **Know and monitor the occurrence of key types of fauna and flora and their environmental requirements.** *Range:* Fauna and flora include all harmful and useful fauna and flora on the farm and direct vicinity	Attend all lectures, complete learner workbook and presentation	CCFO Rating Scale	85% competence in all areas		
Specific Outcome 2: **Demonstrate an understanding of the elements of an ecosystem and a food chain.** *Range:* Ecosystem includes but is not limited to energy flows, water cycle, climate, soil, fauna, flora and air. Food chain is limited to food chain components.	Attend all lectures, complete learner workbook and presentation	CCFO Rating Scale	85% competence in all areas		
Specific Outcome 3: **Identify the key fauna and flora types and their sustainable management.** *Range:* All planted areas on a farm	Attend all lectures, complete learner workbook and presentation	CCFO Rating Scale	85% competence in all areas		
Specific Outcome 4: **Identify the different soil categories, the utilisation and maintenance thereof.** *Range:* Soil types are limited to three types occurring on the farm or direct environment	Attend all lectures, complete learner workbook and presentation	CCFO Rating Scale	85% competence in all areas		

Assessor Report and Summative Evidence Collection Summary for Unit Standard 116263 – Level 3					
Description	***Evidence Gathered***		***Benchmark***	***Competent / Not yet Competent***	***Feedback and Comments***
	Foundational and Embedded Knowledge	**Practical Skills, Underpinning Knowledge and Reflexive Competence**			
Specific Outcome 5: **Monitor and implement principles of water management.** *Range:* Water management includes but is not limited to rainwater harvesting, catchment methods, protection of wells and fountains, protecting and controlling riverbanks, etc.	Attend all lectures, complete learner workbook and presentation	CCFO Rating Scale			
Specific Outcome 6: **Demonstrate a basic understanding of the energy cycle.** *Range:* Limited to the components of the energy cycle	Attend all lectures, complete learner workbook and presentation	CCFO Rating Scale			
Specific Outcome 7: **Read a two dimensional map of the direct vicinity.** *Range:* Limited to basic topography	Attend all lectures, complete learner workbook and presentation	CCFO Rating Scale			
Embedded Knowledge: The learner is able to demonstrate a basic knowledge of: 1. Basic fire fighting rules. 2. Basic principles of natural resources management. 3. Acts and legislation on "conservation of Agricultural Resources". 4. OHS Act.	Attend all lectures, complete learner workbook and presentation	n/a			

Assessor Report and Summative Evidence Collection Summary for Unit Standard 116263 – Level 3					
Description	***Evidence Gathered***		***Benchmark***	***Competent / Not yet Competent***	***Feedback and Comments***
	Foundational and Embedded Knowledge	**Practical Skills, Underpinning Knowledge and Reflexive Competence**			
5. Natural Resource Conservation Act. 6. Components of the water cycle. 7. Components of ecosystems. 8. Components of an energy cycle. 9. Principles of sustainability. 10. Classification of fauna and flora relevant to the direct environment. 11. Alien species relevant to the direct environment. 12. Three main soil types and characteristics. 13. Definitions and terminology. 14. Prevailing climatic conditions of the area. 15. Sources of water. 16. Sources of energy (renewable and non renewable). 17. Basic topography and map reading. 18. Types of pollution. 1. Importance of natural resources management.					
Unit Standard CCFOs: • Identifying • Working in a Team • Organising • Communication • Demonstrating • Contributing • Science • Collecting	N/a	Rating Scale	Minimum rating of 3:5 in each criteria or overall average of 3:5		

Assessor's Assessment Review and Improvement Document	
Issues	**Comments**
Did the assessment go according to plan?	
Did anything unexpected happen?	
Were you pleased with the assessment decision; i.e. was it what you expected?	
How could the process have been carried out more efficiently?	
How could the process of assessing the knowledge be improved?	
How could the Performance Observation checklist be improved?	
Was the evidence you gathered sufficient to make a judgment of competence?	
Was the way you obtained feedback from the learner effective?	
Were you pleased with the way you communicated your decision to the learner? If not, how could this have been improved?	
How would you improve the assessment process?	

Any learner has the right of appeal against any not-yet-competent decision by the assessor. If the learner wishes to appeal, please assist him / her to complete the form below.

Appeal Form			
I hereby appeal against the outcome of my assessment.			
Date:			
Learner's Name:			
Assessors Name:			
Organisation:			
Assessment Details: Criteria, role, standards Used, etc.			
Issue to be Reviewed:			
Learner's Signature		**Date:**	
Assessor's Signature		**Date:**	

Step 10

Administration and Completion of Portfolio of Evidence

All the documents or copies thereof, as prescribed previously, must be kept on file as part of the learner portfolio of evidence.

Learner's portfolio of evidence must be readily available for internal and external moderation and verification by the appropriate practitioners, until after the verification process has taken place. The portfolio of evidence may then be kept or returned to the learner according to the service provider's policy.

The prescribed learner results form should be submitted to the ETQA or the National Learner Database as per the SETA procedure.