



Australian Government

AHCORG513 Manage an agroecology production system

Release: 1

AHCORG513 Manage an agroecology production system

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 9.0.

Application

This unit of competency describes the skills and knowledge required to use agroecology principles in managing all elements of a farm ecosystem, including the soil, vegetation, animals, pests and diseases, to achieve and maintain overall ecological and economic health of the farm ecosystem and production.

The unit applies to individuals who apply specialised skills and knowledge, and take personal responsibility and exercise autonomy in undertaking complex work. They analyse and synthesise information and analyse, design and communicate solutions to sometimes complex problems.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Organic Production (ORG)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify the farm agroecosystem functions at a systems level	1.1 Identify and map energy flows through a farm agroecosystem 1.2 Identify and map nutrient cycles through parts of a farm ecosystem 1.3 Identify disturbance points in farm ecosystem succession 1.4 Develop a model of farm ecosystem and its elements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.5 Identify areas of complexity within farm ecosystem 1.6 Identify ecosystem functions with potential to replace external inputs for farm production system 1.7 Identify interactions between elements of farm ecosystem 1.8 Assess health of existing farm ecosystem
2. Develop plans to enhance farm agroecosystem	2.1 Identify areas within farm agroecosystem that require enhancement 2.2 Identify farming methods that enhance farm agroecosystem 2.3 Document farming methods in an implementation plan
3. Manage farm agroecosystems	3.1 Set up farm monitoring system 3.2 Monitor components of farm ecosystem according to organic standards and legislative requirements 3.3 Review ecosystem and farm production against planned performance and identify inconsistencies 3.4 Review and adjust agroecology production system plans to rectify inconsistencies

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Writing	Demonstrate sophisticated writing skills by selecting appropriate conventions and stylistic devices to express meaning in implementation plans and monitoring systems
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Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCORG513 Manage an	AHCORG506 Manage an	Minor changes to Application, Elements and	Equivalent

agroecology production system	agroecology production system	Performance Criteria for brevity and clarity Changes to Performance Evidence, Knowledge Evidence and Assessment Conditions for clarity Foundation Skills added	
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Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCORG513 Manage an agroecology production system

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has, on at least one occasion, managed and monitored a farm agroecology production system and has:

- identified farm agroecosystem functions
- assessed health of existing farm ecosystems
- developed plans to enhance farm agroecosystem, which must include:
 - the encouragement of niche development
 - increased complexity of agroecosystem
 - improved interactions between components of farm agroecosystem
- reviewed ecosystem and farm production performance.
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Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- advantages of ecological agriculture farming
- ecosystem processes, including:
 - energy flow
 - nutrient cycles
 - biological succession
 - predator and prey relationships
 - ecological niche
- relationships between ecosystems and agricultural production
- application of ecosystem processes to a production system
- production planning methods.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated on an existing farm or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - research tools and references
- specifications:
 - workplace policies, procedures, processes
 - farming systems and production specifications
 - specific legislation and industry codes of practice.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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