## **Modification history**

Release	Comments
Release 2	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version XX
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0

AHCORG506	Manage an agroecology production system
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.
Prerequisite Unit	Nil
Unit Sector	Organic Production (ORG)

Elements	Performance Criteria
Elements describe the	Performance criteria describe the performance needed to demonstrate
essential outcomes.	achievement of the element.
Identify the farm	1.1 Identify and map energy flows through a farm agroecosystem
agroecosystem functions at	1.2 Identify and map nutrient cycles through parts of a farm ecosystem
a systems level	1.3 Identify disturbance points in farm ecosystem succession
	1.4 Develop a model of farm ecosystem and its elements
	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	2.1 Identify areas within farm agroecosystem that requires enhancement
enhance farm	2.2 Identify farming methods that enhance farm agroecosystem
agroecosystem	2.3 Document farming methods in an implementation plan
3. Manage Farm	3.1 Set up farm monitoring system
Agroecosystems	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.	
Skill	Description
Writing	Demonstrate sophisticated writing skills by selecting appropriate conventions and stylistic devices to express meaning in implementation plans, and monitoring systems

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
AHCORG506 Manage an agroecology production system	AHCORG506 Manage an agroecology production system	Minor changes to Application, Elements and Performance Criteria for brevity and clarity	Equivalent

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

l .	Assessment requirements for AHCORG506 Manage an
	agroecology production system

## 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 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
- managed and monitored development of a farm ecosystem
- · reviewed ecosystem and farm production performance.

## 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:
  - use of research tools and references
- specifications:
  - use of workplace policies, procedures, processes
  - use of farming systems and production specifications
  - access to 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.

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	524b2322cf72