# Competency Standards for Caribbean Vocational Qualifications (CVQ)

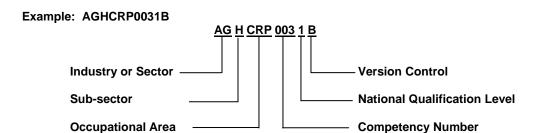
# CCAGH10107 Level I in Crop Production

Unit Number	Unit Title	Mandatory/ Elective	Hours
AGGCOR0001A	Meet industry requirements	Mandatory	10
AGGCOR0011B	Maintain the work environment	Mandatory	10
AGGCOR0021A	Observe workplace health and safety requirement	Mandatory	10
AGGCOR0031A	Plan and organise work	Mandatory	10
AGGCOR0041A	Use hazardous substances safely	Mandatory	10
AGGCOR0051A	Follow emergency procedures	Mandatory	10
AGGCOR0061A	Implement pest control programme	Mandatory	25
AGGCOR0091A	Operate farm machinery and equipment	Mandatory	25
AGGCOR0081A	Apply first aid	Mandatory	10
AGGCOR0101A	Carry out measurement and calculations	Mandatory	20
AGHCRP0001A	Prepare land for planting	Mandatory	20
AGHCRP0011A	Provide propagation support	Mandatory	15
AGHCRP0021A	Prepare and establish planting materials	Mandatory	15
AGHCRP0031B	Plant a crop by hand (manual)	Mandatory	10
AGHCRP0041A	Maintain a planted area	Mandatory	20
AGHCRP0051A	Maintain nursery plants	Mandatory	20
AGHORT0001A	Maintain turf and lawn	Elective	10
AGHORT0011A	Plant trees and shrubs	Elective	10
ITICOR0011A	Carry out data entry and retrieval procedures	Elective	50
AGHORT0021A	Prune shrubs and small trees	Elective	10
AGLPOL0011A	Handle eggs for the domestic market	Elective	10
AGLSSR0021A	Select feed, feed goats and sheep and maintain sanitary condition of feed equipment	Elective	30
AGLSSR0031A	Select feed, feed rabbits and maintain sanitary condition of feed equipment	Elective	20
AGLCAT0011A	Select feed, feed cattle and maintain sanitary condition of feed equipment	Elective	30
AGLCAG0001A	Provide milking operations support	Elective	20
AGLPOL0021A	Select feed, feed poultry and maintain sanitary conditions of feed equipment	Elective	20
AGLPIG0021A	Select feed, feed pigs and maintain sanitary conditions of feed equipment	Elective	20
AGMMCH0002A	Sell products and services	Elective	30
AGMMCH0012A	Operate point of sale systems	Elective	20
BSBSBM0012A	Craft personal entrepreneurial strategy	Elective	40
AGHORT0002B	Pot plants	Elective	10
AGHCRP0082B	Support crop harvesting	Elective	10
AGHCRP0092A	Perform post harvest operations	Elective	10

To achieve this qualification all Mandatory competency standards and a minimum of any three (3) Level 1 and any two (2) Level 2 electives must be achieved.

Nominal Training Hours (Institutional Delivery) include total hours of Mandatory competencies and electives selected.

# **Legend to Unit Code**



KEY: COR - Mandatory; SMB - Small Business Management; CRP - Crop Production; POL - Poultry; ITI - Information Technology (Industry/Sector);

BSB - Business Services (Business); SSR - Small Stock Rearing;

**AGM - Agriculture Merchandizing** 

# **AGGCOR0001A:** Meet industry requirements

Competency Descriptor:

This unit deals with the skills and knowledge required to meet the basic requirements for employment in Agriculture.

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA		
1.	Agree with employment condition	1.1	Employment documentation is checked for compliance with agreed terms and conditions.	
		1.2	Employment conditions are checked to ensure currency is maintained.	
2.	Meet workplace employment requirements	2.1	Industry developments are promoted in workplace context to improve quality, productivity and conditions.	
		2.2	Work practices comply with codes of practice and workplace expectations.	
		2.3	Faults and abnormalities in the workplace are recognised and reported to the appropriate person.	
		2.4	Dress and personal requirements comply with workplace standards and Occupational Health & Safety (OHS).	
		2.5	Agreed outcomes are met through completion of workplace routines and specific instructions.	
3.	Observe and record in the workplace	3.1	Issues and events occurring in the workplace on a daily basis and which may require attention are identified.	
		3.2	Information is recorded accurately and in the required format.	
		3.3	Communication technology relevant to the enterprise is used under supervision.	

4.	Interact with others in the workplaces	4.1	Issues or events requiring action or attention are reported to supervisor with the level of detail laid down in workplace instructions.
		4.2	Queries are stated clearly, courteously and concisely.
		4.3	Telephone messages are taken accurately, information recorded appropriately and calls redirected to other staff efficiently.
		4.4	Work instructions are clarified where necessary and concerns are raised promptly with the supervisor.
		4.5	A positive attitude is maintained in interacting with others.
5.	Work in a team	5.1	Allocated tasks are identified and completed within defined time-lines.
		5.2	Assistance is actively sought by approaching other team members when difficulties arise.
		5.3	Feedback provided by others in the working groups is acknowledged.
		5.4	Appropriate lines of communication with supervisors and peers are demonstrated according to enterprise policy.
		5.5	Support and tolerance are offered and provided to colleagues.
		5.6	Participation in team problem solving activities is demonstrated.
6.	Meet, greet and direct clients and customers	6.1	Client is greeted in line with enterprise policy.
		6.2	Questioning and active listening is used to elicit client needs.
		6.3	Clients with special needs are referred or redirected as required.
		6.4	A positive attitude is maintained in interacting with clients and customers.

6.5 Telephone is answered promptly, calls re-directed to appropriate person or messages recorded according to enterprise policy.

# **RANGE STATEMENT**

This unit of competency should be demonstrated in accordance with the enterprise's terms and conditions which may include:

- relevant awards
- employment contracts
- workplace requirements orally or in writing
- work ethics
- personal grooming and hygiene policy policies and procedures
- enterprise position description (delegated responsibilities)
- organisational structure of enterprise

Industry developments may include:

- implications of technology changes on employment
- industry environment
- changes in market conditions
- Actions may include:
- reporting
- rectifying faults
- prevention of damage, such as reporting of machinery problems before they become major
- fixing minor problems such as water leaks, damage to fences

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica
- Pesticide control authority regulations (PCA)
- National Environmental Protection Agency (NEPA)
- Occupational Health & Safety (OHS)
- Hygiene requirements
- First Aid regulations/requirements

Work practices may include:

- care of equipment
- · handling of products
- materials and crops
- farm operations
- maintaining time books, diaries and other records

Communication technology may include:

- Faxes
- Answering machines
- Telephone networks, cellular phone, intercom system, two-way radio
- electronic mail (e-mail)
- simple/basic interaction with computers
- Customers include those with special needs

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply knowledge and skills of industry requirements in an agricultural related enterprise.

## (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- consistently follow supervisor's instructions and apply industry requirements in an agricultural setting in the appropriate context and to the level acceptable by the enterprise
- report and record within established routines using methods and procedures that are predictable

# (2) Pre-requisite Relationship of Units

- AGGCOR0031A Plan and organize work
- (3) Underpinning Knowledge and Skills

# Knowledge of:

- trade and professional ethics
- industry awards and conditions
- employer's expectations
- sources of information for industry
- labour laws of Jamaica
- basic contract law
- enterprise's established policies and procedures
- impact of technology on industry
- obligation of employers to employees
- obligation of employees to employer
- enterprise policy in relation to greeting and assisting clients and customers
- location of enterprise layout and resources
- communication technology and systems used by the enterprise
- questioning and listening techniques
- effective interpersonal skills
- verbal and non-verbal communication skills
- communication strategies and techniques
- system-related problems and humanrelated problems
- calculate wages including statutory deductions

# (4) Resource Implications

The following resources should be made available:

- Job description and/or employment contract
- · Enterprises policies and procedures

# (4) Method of Assessment

Evidence may be gained in a variety of ways including:

- observation
- oral questioning/written test
- supporting statement from supervisor/manager manager

#### Skills

# The ability to:

- understand and comply with employment conditions
- apply trade and professional ethics
- meet workplace employment requirements
- use appropriate communication strategies and techniques
- identify faults and abnormalities in the workplace
- reports faults and abnormalities in the workplace
- complete assigned tasks
- observe and record in the workplace
- interact with others in the workplace
- work in a team
- meet, greet and direct clients and customers
- maintain personal presentation
- apply basic contract law

# (5) Context of Assessment

This unit must be assessed through practical demonstration on-the-job or in a simulated workplace agricultural environment.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items

# CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>					

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

# **AGGCOR0011B:** Maintain the work environment

Competency Descriptor:

This unit deals with the skills and knowledge required to keep the workplace place including workshops, tool sheds and planted areas tidy and safely maintained.

ELEMENT OF COMPETENCY		PER	FORMANCE CRITERIA
1.	Maintain a clean and efficient workplace	1.1	Appropriate tools are selected and used safely.
		1.2	Waste and used materials are removed and placed in disposal containers specified by the enterprise.
		1.3	Floors, benches and other flat work surfaces are swept, washed and treated according to enterprise guidelines.
		1.4	Work areas are tidied and material stored neatly and according to enterprise guidelines.
2.	Adopt safe working practices	2.1	Work habits (including personal hygiene) reflect knowledge and understanding of Occupational Health & Safety (OHS) responsibilities.
		2.2	Protective clothing is worn and safety equipment is used according to enterprise safety plan/policy.
		2.3	The work environment is kept tidy and free of hazards according to enterprise safety plan/policy.
		2.4	Dangers and hazards within the workplace are recognised and reported to the appropriate person
		2.5	Manual handling techniques when lifting or moving heavy loads conform to Occupational Health & Safety (OHS) guidelines.
3.	Use hand tools, machinery and equipment	3.1	Tools, machinery and equipment are used to manufacturers or enterprise specifications.
		3.2	Manufacturers and enterprise safety requirements are followed.
		3.3	Unsafe or faulty tools, machinery and equipment are identified and segregated for repair or replacement.

- Tools, machinery and equipment are cleaned and stored according to company policy.
- 4 Maintain structures and surroundings
- 4.1 Structures are repaired to enterprise standards and according to supervisor's directions.
- 4.2 Surroundings are maintained according to enterprise requirements.
- 4.3 Structural damage and deterioration are reported to enterprise requirements.

# **RANGE STATEMENT**

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

This unit of competency should be demonstrated in accordance with the enterprise's :

- policies and procedures in regard to the maintenance of sites
- designated operating hours

Tools and equipment may include:

- hand tools
- machinery and equipment in workshops or on-site inclusive of hand motor mowers, brush cutters, vacuum cleaners and blowers, high pressure air, water cleaners, pruning equipment and hoses

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica
- Pesticide control authority regulations
- Occupational Health & Safety (OHS)
- Hygiene requirements
- First Aid regulations/requirements

Structures may include:

 buildings, roads, tracks, soil conservation works, trellises, shelters, shade cloth, bird netting, hail netting, glass houses, yards, fences, drying racks and irrigation systems

#### Dangers may include:

 fire, electricity, natural objects (trees and landforms etc), water, plant, machinery, vehicles, chemicals

#### Planted areas may include:

display beds, treed areas, shrubberies

#### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply knowledge and skills to a limited range of maintenance tasks and roles.

### (1) Critical Aspects of Evidence

- consistently follow supervisor's instructions
- perform maintenance tasks to the enterprise standard
- report and record within established routines
- apply OHS procedures

#### (2) Pre-requisite Relationship of Units

Nil

### (3) Underpinning Knowledge and Skills

# Knowledge of:

- OHS rules and regulations for the workplace
- machinery assessment practices for safe use
- maintenance tasks for a worksite
- enterprise policy relevant to the job

#### (4) Resource Implications

on the job agriculture work place environment

# (5) Method of Assessment

This unit of competency may be assessed in conjunction with other units.

To achieve consistency of performance, evidence should be collected over a set period of time, which is sufficient to include dealings with an appropriate range of maintenance tasks.

# <u>Skills</u>

The ability to:

- maintain a clean and efficient workplace
- use hand tools, machinery and equipment
- maintain structures and surroundings

# (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job or in a simulated workplace environment.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items inclusive of short answer, extended essay items project or portfolio.

#### CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

# AGGCOR0021A: Observe workplace health and safety requirement

Competency Descriptor:

This unit deals with the skills and knowledge required by workers to meet workplace occupational health and safety requirements.

ELEMENT OF COMPETENCY		PERI	FORMANCE CRITERIA
1.	Maintain a clean and efficient workplace	1.1	Basic safety checks are undertaken before operation of all machinery and vehicles and hazards are reported to the appropriate supervisor
		1.2	Work for which protective clothing or equipment is required is identified and the appropriate protective clothing or equipment is used in performing these duties in accordance with workplace policy.
		1.3	Prior to performing manual handling jobs, risk is assessed and work is carried out according to currently recommended safe practice.
		1.4	Risks to bystanders are recognized and action is taken to reduce risk associated with jobs in the workplace
		1.5	All procedures and work instructions for controlling risk are followed closely.
2.	Render appropriate emergency procedures	2.1	Individuals maintain the necessary knowledge of and ability to follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.
		2.2	Emergency procedures are followed to company standards and workplace requirements.
		2.3	Emergency equipment is used in accordance with manufacturers' specifications and workplace requirements.
3.	Participate in arrangements for maintaining health and safety of all people in the workplace	3.1	Appropriate authorities are notified according to company policy.
		3.2	Contributions are made to the on going monitoring and reporting of all aspects of (OHS).

# **RANGE STATEMENT**

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

This unit of competency should be demonstrated:

 in accordance with the enterprise's policies and procedures for maintaining health and safety at the workplace Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica
- Pesticide control authority regulations
- Occupational Health & Safety (OHS)
- Hygiene requirements
- First Aid regulations/requirements

Hazardous manual handling tasks include:

- moving
- lifting
- · carrying bags, drums, cartons
- shovelling
- loading materials
- pulling
- pushing
- up-ending materials
- chipping weeds
- picking fruit or vegetables

This unit of competency should be demonstrated in accordance with the enterprise's :

Hazards in the workplace include:

- plant and machinery operation and maintenance
- · vehicles including motorcycles
- noise
- chemicals
- manual handling
- dust
- solar radiation
- natural hazards in trees (thorns and spines)
- electricity
- waterways

Protective clothing or equipment is required for:

- noise associated with plant and machinery
- pesticides
- dust
- · work in the sun

Risk to bystanders include:

- run-over and injury associated with vehicles and machinery
- exposure to noise

#### Workplace procedures will include:

- hazard policies and procedures
- emergency policies and procedures
- procedures for use of personal protective clothing and equipment
- hazard identification and issue resolution procedures
- job procedures and work instructions

#### Workers may include:

- · permanently employed workers
- casual workers
- seasonal workers
- people visiting the workplace.
- contract workers

#### OHS emergencies in the workplace may include:

- electrocution
- fire
- flood
- chemical spills
- serious injury associated with tractors
- machines
- vehicles

#### Other individuals may include:

· people visiting the workplace

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply of knowledge and skills to a limited range maintenance tasks and roles.

# (1) Critical Aspects of Evidence

- Evidence should include a demonstrated ability to consistently follow supervisor's instructions and use methods and procedures that are predictable to perform a limited range of maintenance roles in the appropriate context and to the level acceptable by the enterprise.
- The work is likely to be under direct supervision with regular checking. Reporting and
  recording is undertaken within established routines using methods and procedures that are
  predictable. There is a specified range of duties and contexts where the choice of actions
  required will be made quite clear by the supervisor.

#### (2) Pre-requisite Relationship of Units

Nil

### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- significant hazards in the workplace
- local emergency services
- personal hygiene and fitness requirements

#### Skills

The ability to:

- follow workplace procedure for hazard identification and risk control
- act in an emergency
- maintain health and fitness
- render first aid

# (4) Resource Implications

The following resources should be made available:

#### (4) Method of Assessment

Competency shall be assessed while work is undertaken under direct supervision and when the student/ apprentice is able to successfully perform all the required Performance Criteria relevant to the Unit in a workplace or simulated farm environment, within commercially acceptable timeframes.

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job or in a simulated workplace environment requiring until competency is achieved. /\*

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items inclusive of short answer, extended essay items project or portfolio.

# CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

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Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

# AGGCOR0031A: Plan and organise work

Competency Descriptor:

This unit deals with the skills and knowledge required to keep the workplace place including workshops, tool sheds and planted areas tidy and safely maintained. This unit describes the daily planning that is required of workers in regard to work duties. It includes the organisation of tools and equipment and the recording of information about the job at hand.

ELEMENT OF COMPETENCY		PERF	ORMANCE CRITERIA
1.	Communicate verbally within the workplace	1.1	Interpretation is consistent with the schedule and tasks defined.
		1.2	A number of work activities are integrated.
		1.3	Priorities are established consistent with workplace requirements.
2.	Plan and manage time	2.1	Arrival at the workplace at the allocated time in punctual.
		2.2	Workplace activities, allocated tasks and workplace priorities are discussed with the supervisor.
		2.3	A daily schedule for completing activities and allocated tasks is drawn up including priorities, allocated start times, estimation of completion times and materials, equipment and assistance required for completion.
		2.4	Work time and personal time are allocated to appropriate work and study situations.
3.	Respond to problems as they arise	3.1	Priorities are established consistent with workplace requirements.
		3.2	Response maintains a quality outcome, minimizes impact on work schedules and reflects accurate knowledge of products and processes used in the workplace.

# **RANGE STATEMENT**

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

Work activities may include:

daily routines, periodic routines, ad hoc activities.

Problems which may arise include:

- colleague absence
- personal illness
- emergency situations
- natural disasters

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica.
- Pesticide control authority regulations.
- Occupational Health & Safety (OHS).
- Hygiene requirements.
- First Aid regulations/requirements.

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to plan and organize assigned tasks.

# (1) Critical Aspects of Evidence

- evidence should include a demonstrated ability to consistently follow supervisor's instructions
- plan and organise assigned tasks to the level acceptable by the enterprise
- report and record within established routines using methods and procedures that are predictable

#### (2) Pre-requisite Relationship of Units

AGGCOR0001A Meet industry requirement

AGGCOR0021A Observe workplace health and safety requirement

AGGCOR0051A Follow in emergency

# (3) Underpinning Knowledge and Skills

#### **Knowledge**

#### Knowledge of:

- products and processes used in the workplace
- time management skills
- enterprise's policy for using and storing tools
- verbal and non-verbal communication skills
- how to complete forms
- basic report writing
- · problem solving skills
- estimate duration of time to perform assigned tasks

#### Skills

#### The ability to:

- interpret work schedules
- organize materials and equipment
- · respond to problems as they arise
- prepare work plan
- follow instructions

#### (4) Resource Implications

- written or verbal instructions
- work activity within worker's span of responsibility
- relevant tools and equipments

## (4) Method of Assessment

This unit of competency may be assessed in conjunction with other units.

To achieve consistency of performance, evidence should be collected over a set period of time, which is sufficient to include dealings with an appropriate range and under a variety of situations.

# (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job or in a simulated farm/nursery/agriculture-merchandising environment.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items inclusive of short answer, extended essay items project or portfolio.

# CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
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Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

# AGGCOR0041A: Use hazardous substances safely

Competency Descriptor:

This unit deals with the skills and knowledge required to handle hazardous substances in the workplace.

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA		
1.	Handle hazardous substances	1.1	Specific hazardous substance is identified from the label and applicable manufacturer's safety data sheet.	
		1.2	Selected hazardous substance is handled in safe containers or packages under instruction from the supervisor or manager.	
2.	Store hazardous substances	2.1	Storage for hazardous substances is checked for compliance with industry standards in line with instructions.	
		2.2	Regular participation in the conduct of safety audits maximises the individual's awareness of safety issues	
		2.3	Required hazardous substances are estimated and industry standard storage conditions established according to instructions.	
3.	Transport hazardous substances	3.1	Transport mode and procedures are established in consultation with the manager or supervisor as instructed.	
		3.2	Hazardous substances are loaded or decanted into secure containers or packaging in line with work programs.	
		3.3	Load is secured or sealed to ensure safety and eliminate spillage according to enterprise policy.	
		3.4	Transport of hazardous substances is completed in line with established procedures and movements recorded according to enterprise policy.	
4.	Use hazardous substances	4.1	Personal protective equipment suited to the task is selected and fitted or worn.	
		4.2	Selected hazardous substance is removed from storage and utilised in accordance with the label instructions and workplace requirements.	

- 4.3 Containers and unused hazardous substances are disposed of in accordance with established workplace procedures.
- 5. Act in emergency situations with hazardous substances
- 5.1 Emergency incidence is notified to appropriate authorities in the workplace.
- 5.2 Clear identification of the nature of the emergency is established in consultation with the workplace supervisor.
- 5.3 Direction is sought from the supervisor or workplace notices to establish the role of the individual in the emergency.

# **RANGE STATEMENT**

This unit of competency should be demonstrated in accordance with the enterprise's:

- policies and procedures in regard to the handling of hazardous substances
- protocols for record keeping
- provision of personal protective equipment
- instructions to personnel
- record of governing legislation
- designated operating hours

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica.
- · Pesticide control authority regulations.
- Occupational Health & Safety (OHS).
- Hygiene requirements.
- First Aid regulations/requirements.

Handling and using hazardous substances may include:

- spraying
- use of application equipment
- decanting liquids
- refueling
- transport and cartage
- use of industrial gases

Hazardous substances may includes:

- fuels and oils
- welding and LP gases in the workshop
- fumigants
- pesticides and weedicides
- baits
- coolants and refrigerants
- human medicines and treatments
- alkaline and caustic substances
- acids
- detergents & wetting agents

Suitable or industry standard storage conditions may include:

- security systems
- · elevated storage
- fans and ventilation
- drainage systems
- separation of incompatible materials
- caution signs as required and workplace notices

Emergency situations may include:

- spilt fuels or other substances
- · use of incorrect substances
- fire
- contact with skin or eyes
- · leaking or damaged containers
- explosion
- mixing of incompatible materials
- contamination of water supplies and container disposal problems

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply the relevant knowledge and skills when performing tasks involving the use of hazardous substances.

## (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- consistently follow supervisor's instructions
- use methods and procedures that are predictable when handling hazardous substances in the workplace, in the appropriate context and to the level acceptable by the enterprise
- report and record within established routines using methods
- work as a part of a team
- identify hazardous substances from label and applicable manufacturer's data sheets

#### (2) Pre-requisite Relationship of Units

- AGGCOR0021A Observe workplace health and safety requirement
- AGGCOR0051A Follow emergency procedures

#### (3) Underpinning Knowledge and Skills

# Knowledge of:

- Occupational Health & Safety (OHS) rules and regulations for the workplace
- machinery assessment practices for safe use
- maintenance tasks for a worksite
- enterprise policy relevant to the job
- types of hazardous substances
- caution symbols for hazardous substances
- storage and transportation requirements for various categories of hazardous substances
- procedures for handling hazardous substances
- verbal and non-verbal communication skills
- write incident report
- measure and calculate length, area, volume
- ratio and proportion
- decimals
- basic stock taking

#### (4) Resource Implications

The following resources should be made available:

- real or simulated workplace environment
- tasks involving the use of hazardous substances
- hazardous

#### (5)Method of Assessment

This unit of competency may be assessed in conjunction with other units that form part of a job role or function.

In order to achieve consistency of performance, evidence should be collected over a period of time, which is sufficient to include dealings with an appropriate range of hazardous substances.

## (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job or in a simulated workplace environment.

The underpinning knowledge may be assessed off the job with the use of written or verbal items.

#### Skills

The ability to:

- maintain a clean and efficient workplace
- use hand tools, machinery and equipment
- maintain structures and surroundings
- read and interpret manufacturer's labels and data sheets
- measure and calculate length, area, volume
- calculate ratios
- apply OHS procedures for handling hazardous substances
- maintain stock data
- write incident report
- apply verbal and non-verbal communication skills

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# CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

# AGGCOR0051A:

# Follow emergency procedures

Competency Descriptor:

This unit deals with the skills and knowledge required by workers to respond to workplace emergencies such as fire and other dangerous situations and render first aid in the workplace.

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA		
1.	Minimise emergency situations	1.1	Appropriate actions are taken to maximise safety and minimise health hazards in the workshop and on site.	
		1.2	Machinery handling and actions minimise risks to all personnel.	
		1.3	Regular checks of the environs are carried out to minimise potential hazards.	
2.	Plan for emergencies	2.1	Contingency plans are understood and activated for emergencies in compliance with enterprise policies.	
		2.2	Regular checks of the environs are carried out to minimise potential hazards.	
		2.3	Personal responsibilities are carried out in emergency situations and practice drills.	
		2.4	Evaluation procedures are implemented to company standards.	
3.	Act as instructed in emergencies	3.1	Contingency plans are activated for emergencies in compliance with safety procedures.	
		3.2	Emergency procedures are carried out as required by established workplace policy.	
4.	Implement fire prevention and control	4.1	Fire hazards are minimised as specified in workshop and fuelling procedures.	
		4.2	Appropriate fire extinguishers and fire fighting plant are used in fire situations and the appropriate authority is notified according to specified procedures.	
		4.3	Evacuation procedures are implemented as instructed according to workplace policy.	

- 5. Render First Aid
- 5.1 First aid appropriate to the incident is correctly applied.
- 5.2 The patient is monitored whilst awaiting professional or para-medical support.

#### RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

Emergency situations may include:

- power failure
- quarantine breakdown
- fire, flood, storms
- heart failure
- breathing stopped and serious personal injury.

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica
- Pesticide control authority regulations
- Occupational Health & Safety (OHS)
- Hygiene requirements
- First Aid regulations/requirements

Emergency equipment may include:

- first aid kits
- fire extinguishers
- emergency power generators
- chemical spillage kits

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply knowledge and skills to the emergency situations outlined in the range statement.

#### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- consistently follow supervisor's instructions
- use emergency methods and procedures to respond to workplace emergency to the level acceptable by the enterprise
- activate contingency plans for emergency according to company standards
- report and record within established routines

# (2) Pre-requisite Relationship of Units

AGGCOR0021A Observe workplace health and safety requirement

#### (3) Underpinning Knowledge and Skills

# Knowledge of:

- sources of human injury
- basic concept of duty of care
- specific Acts and Regulations relating to emergency situations
- First Aid procedures for burns, heart attack, fainting, severe bleeding, open wound chemical burn, sprain, strain and electrical shocks
- fire safety measures
- types of fire extinguishers
- incident report

#### Skills The c

#### The ability to:

- minimise emergency situations
- plan for emergencies
- act as instructed in emergencies
- implement fire prevention and control
- render first aid as required
- apply fire safety measures
- write incident report

# (4) Resource Implications

- a simulated work environment
- first aid kit
- fire extinguishers

#### (5) Method of Assessment

In order to achieve consistency of performance, evidence should be collected over a set period of time, which is sufficient to include dealings with an appropriate range of emergency situations

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job or in a simulated workplace.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

# CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

# **AGGCOR0061A:** Implement pest control programme

Competency Descriptor:

This unit deals with the skills and knowledge required to implement pest control programmes on farms, gardens, plant nurseries, flower shops and other farm merchandise enterprises.

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1.	Identify pest infestation	1.1	Evidence of pest infestation is identified.
		1.2	Stage of pest life cycle is determined.
		1.3	Severity and extent of infestation and damage is assessed.
		1.4	Problems requiring immediate attention are recognised and actions taken as required by enterprise policy.
		1.5	Pest infestation and damage is reported to enterprise.
2.	Prepare equipment for controlling pests	2.1	Pre-operation checks and services of pest control equipment are completed to industry standards and relevant legislation.
		2.2	Personal protective equipment/clothing is fitted according to industry/enterprise requirements.
		2.3	Safeguards are employed to ensure that targeted pest are controlled and all other species remain unharmed.
3.	Undertake pest and disease treatment.	3.1	Tools and equipment are prepared and used according to supervisor's instructions.
		3.2	Treatments are prepared and administered according to supervisor's instructions and manufacturer's guidelines.
		3.3	Work practices employed minimises damage to non-target plants/animals.
		3.4	Enterprise regulations are observed.
4.	Dispose of pest and control agents	4.1	Vertebrate pest carcasses and other specified pest are disposed of to industry requirements.

4.2 Control agents are removed and disposed of to industry requirements.

5. Keep records

- 5.1 Details on pest or disease infestations are gathered and documented according to enterprise/industry policy.
- 5.2 Treatment regimes are documented and results are recorded according to enterprise policy.
- 5.3 Information is updated and reviewed as appropriate and according to enterprise policy.
- 5.4 Records are maintained according to enterprise guidelines.

# **RANGE STATEMENT**

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

This unit of competency should be demonstrated in accordance with the :

Pesticide Control Authority regulations

Agents used in the prevention/ control treatment can include:

- insecticides and vermifuges
- vaccines and medicines
- poisons and baits
- biologically active agents
- growth regulators
- mechanical mean including shooting

Legislation, codes and national standards relevant to the workplace may include:

- Environmental Foundation of Jamaica.
- Pesticide Control Authority.
- OHS and hygiene requirements.
- First Aid regulations/requirements.

OHS issues that impact upon the performance of this unit:

- safe manual handling systems and procedures
- safe systems and procedures for outdoor work, including protection from solar radiation
- safe systems and procedures for handling farm chemicals
- selection, use and maintenance of personal protective
- equipment/clothing

Common pests or disease may include:

- fungus
- insects
- weeds
- rodents
- bacteria
- virus
- nematodes

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to identify pest and diseases that affects crops and livestock and to effectively control and manage their population.

#### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability:

- to positively identify harmful pest and of plants and animals
- to determine ways to control these pest
- to use methods that are least damaging to environment
- consistently follow supervisor's instructions
- activate contingency plans for emergency relating to control pests according to company standards
- · report and record within established routines

#### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with

AGGCOR0041A Use hazardous substances safely

## (3) Underpinning Knowledge and Skills

#### Knowledge

## Knowledge of:

- pests affecting animals and plants
- disease transmitted by various pests
- activity of agents used
- agent application
- characteristics of common pest
- chemical control measures
- non-chemical and cultural control techniques
- integrating chemical and non-chemical control measures
- mode of action of different groups of chemicals
- life cycle of pests
- stages of infestation
- infestation characteristics of common pests and diseases of the region
- manufacturer's instruction related to the handling of pest control agents
- complete record
- use verbal and non –verbal communication skills
- calculate and measure length, area, volume, time
- apply ratio and proportion, fraction and decimal
- OHS and First aid regulations

### Skills

# The ability to:

- follow supervisor's instructions
- administer different types of farm chemicals
- use biological controls
- implement control programs based on epidemiology
- report and record of pest control activities
- identify pest and diseases
- apply non-chemical and environmental control measures
- maintain related records
- interpret manufacturer's instruction for handling pest control agents
- perform related calculations
- apply verbal and non verbal communication
- apply OHS and first aid regulations

# (4) Resource Implications

The following resources should be made available:

- · real or simulate work environment
- application equipment
- · agricultural chemicals/biological agents
- plants and animals

#### (5) Method of Assessment

In order to achieve consistency of performance, evidence should be collected over a set period of time, which is sufficient to include dealing with an appropriate range of pest infestations in a variety of situations.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with agricultural/veterinary chemicals and biological agents.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items inclusive of multiple choice, short answer or project.

## CRITICAL EMPLOYABILITY SKILLS

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Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

# AGGCOR0091A: Operate farm machinery and equipment

Competency Descriptor:

This unit deals with the skills and knowledge required to operate farm machinery and equipment.

Competency Field: Agriculture - Equipment

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1.	Check equipment before use	1.1	Pre-start checks of engines and motors are completed to enterprise requirements.
		1.2	Faults or malfunctions are corrected and/or reported to enterprise requirements.
2.	Operate equipment safely	2.1	All safe operating practices and legal requirements are observed.
		2.2	All controls are used safely and appropriately.
		2.3	The equipment is used without damage to it, property structures or surfaces.
		2.4	Hazards are recognised and appropriate operating conditions are observed.
		2.5	The equipment is re-fuelled when needed or appropriate.
		2.6	Damage and /or faults to any part of the equipment are reported promptly according to workplace requirements.
3.	Clean and store equipment	3.1	Equipment is cleaned and stored after use to enterprise requirements.
		3.2	Equipment use is recorded to enterprise requirements.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

This unit of competency should be demonstrated in accordance with the:

policies and procedures in regard to the operation of farm equipment

Enterprise specifications may include:

- pre-operation checks
- standards of operation
- policies and routines relating to wear and damage
- safeguards
- reporting routines

#### Operator factors include:

- risk taking behaviour
- physical/developmental limitations
- clothing

#### Environmental hazards include:

- Broken ground
- cultivation
- hidden objects
- gullies
- creek beds
- sloping ground

Mechanical hazards associated with equipment include:

- noise
- vibration

Legislation, codes and national standards relevant to the workplace may include:

- OHS and hygiene requirements.
- First Aid regulations/requirements.

#### Equipment may include:

- chain saws, bush cutter
- stationary engines
- pumps
- irrigation equipment
- solar and wind powered equipment
- chaffing machine
- shredder
- taking passengers
- fatigue

Routine daily safety checks may include an assessment of:

- mechanical hazards
- belts, gauges
- · chains and drives
- power take off equipment and guards
- spark arresters and fire safety

Routine daily service requirements may include:

- fluid levels
- belt replacement
- air cleaners
- fuel and lubrication

Weather related conditions:

- wet
- cold
- heat

Operational standards may include:

- pre-operational checks
- standards of operation
- storage and usage of fuels and lubricants
- safeguards
- reporting routines

## **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to safely and efficiently operate farm equipment and to properly clean and store after use.

# (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- operate equipment safely
- manually handle equipment appropriately
- apply OHS procedures
- consistently follow supervisor's instructions
- activate contingency plans for emergency relating to the use of equipment
- report and record within established routines

## (2) Pre-requisite Relationship of Units

Nil

#### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- the main functions of a range of farm equipment
- the safety features and hazards of a range of farm equipment
- the controls and their functions of a range of farm equipment
- the meaning of ratios, metric units and the concept of percentages
- OHS procedures for various equipment
- enterprise procedures for safe use of machinery and equipment
- relevant OHS requirements for storage of equipment
- verb and non verbal communication

#### <u>Skill</u>s

The ability to:

- identify the controls and their functions of a range of farm equipment and machinery
- read, comprehend and discuss information and write simple statements
- add, subtract, multiply and divide whole numbers, decimals and fractions
- demonstrate emergency procedures in the operation of machinery and equipment

#### (4) Resource Implications

The following resources should be made available:

- basic farm machinery and equipment e.g. lawn mower, chain saw, edge trimmer, water pump
- fuel
- lubricants

#### (5) Method of Assessment

Competency shall be assessed through direct observation and questions related to underpinning knowledge.

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with a range of farm equipment and machinery.

The underpinning knowledge may be assessed off the job with the use of written or verbal items

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>					

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

# AGGCOR0081A: Apply first aid

Competency Descriptor: This unit deals with the skills and knowledge required to identify the need for and the application of first aid until the arrival of

medically qualified personnel or the evacuation of the patient.

Competency Field: Agriculture

ELEMENT OF COMPETENCY		PERF	PERFORMANCE CRITERIA			
1.	Identify the need for first aid	1.1	Initial assessment is made of extent and nature of first aid required from personal observation and/or witness reports.			
		1.2	Initial assessment is reported to personnel/emergency services in accordance with workplace procedures.			
2.	Ensure the safety of patient and carer	2.1	Hygiene is maintained for protection of patient and carer.			
		2.2	Hazards to the patient and carer are identified and appropriate action is taken to prevent further injury to either party.			
		2.3	Patient is made as comfortable as possible and reassured by word, manner and actions.			
3.	Assess patient and apply fist aid	3.1	Patient is assessed against the DRABC (danger, response, airway, breathing, ventilation and circulation) model.			
		3.2	Vital signs are measured, recorded and any changes noted and reported as appropriate.			
		3.3	Treatment appropriate to the patient's injuries is provided in accordance with recognised first aid techniques.			
		3.4	First aid equipment is operated/applied in accordance with recognised procedures and standards.			
		3.5	Patient's condition is monitored and reported as required by workplace procedures, with treatment being modified as appropriate.			
		3.6	Treatment is maintained until qualified medical assistants assume responsibility or until the patient is evacuated.			
		3.7	Provide additional assistance as requested by medical/emergency services personnel.			

3.8 Details of first aid administered are reported in accordance with workplace procedures.

#### 4. Complete work

- 4.1 First aid equipment is recovered (if practical), cleaned, inspected/tested, refurbished, replaced and stored as appropriate.
- 4.2 Medical waste is disposed of in accordance with workplace requirements.
- 4.3 Equipment faults are rectified and reported in accordance with workplace procedures.
- 4.4 Documentation is completed as required by legislative, regulatory and workplace requirements.

# **RANGE STATEMENT**

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

First aid is that assistance given to a patient who has suffered an injury or illness in the workplace. It is that assistance which is deemed necessary to attempt to resuscitate, stabilise and/or treat the patient until qualified medical personnel assume responsibility or until the patient is evacuated for appropriate medical treatment.

Work is carried out in accordance with statutory obligations, relevant health regulations and organisation insurance requirements.

Work may be conducted without supervision and guidance.

The following variables may be present for this particular unit.

First aid may include:

cardio-pulmonary resuscitation (CPR)

bleeding control

spinal injury care

basic patient management

stabilising fractures

First aid equipment May include:

- first aid kit
- personal protective equipment
- stretcher (may be improvised)

The provision of first aid and workplace responsibilities is to conform to:

- OH&S requirements
- material safety management systems
- hazardous substances and dangerous requirements
- safe operating procedures

#### Relevant information may include:

- OH&S and environmental requirements relating to hazards in the workplace
- obligations under relevant safety and health regulations
- local medical and emergency services
- provisions relating to roles and responsibilities of health and safety representatives and/or occupational health and safety committees

Emergency services may include support provided by:

- ambulance
- police
- fire personnel and equipment

#### Designated personnel may include:

- supervisors
- managers
- team leaders
- first aid attendants/other medically trained staff
- specified Occupational Health and Safety personnel
- other persons authorised or nominated by the school or industry to perform, approve, inspect and direct specified work

#### Work involves:

- assessing situations
- · identifying appropriate control measures
- awareness of emergency services responsibilities and responsiveness
- treating injuries
- maintaining equipment

Relevant workplace policies and procedures may include:

- risk management policies and procedures
- first aid procedures
- safe manual handling and lifting procedures
- emergency, fire and accident procedures
- materials safety procedures
- personal safety procedures
- procedures for the use of personal protective equipment
- job procedures and work instructions

Personal protective equipment may include:

- safety glasses/goggles
- hair nets
- ear muffs/plugs
- gloves
- footwear
- protective clothing

# **EVIDENCE GUIDE**

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

# (1) Critical Aspects of Evidence

Accurately follow workplace procedures for reporting injuries/illnesses and providing first aid in the workplace.

Identify and respond to injuries/illnesses occurring in the workplace.

Apply emergency response first aid.

Provide appropriate treatment to and monitor patient's condition.

Accurately report and document injuries and illnesses and treatment provided.

## (2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

Nil

#### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- Workplace procedures and requirements for the treatment of workplace injuries/illnesses.
- Reporting responsibilities and requirements.

The provision of first aid including:

- systems of the body (respiratory, skeletal, digestive, circulatory, nervous, urinary, skin)
- causes and management of unconsciousness
- priorities for life support (DRABC model)
- resuscitation techniques
- bleeding control and laceration treatment
- patient assessment
- principles of initial patient management
- management and treatment of fractures and soft tissue injuries
- management and treatment of burns

#### **Skills**

# The ability to:

 collect, organise and analyse information related to workplace health and safety systems and procedures and the application of these to work situations

- communicate ideas and information on workplace safety issues including the treating and recording/reporting of workplace incidents/accidents/illnesses and interpersonal communication with casualties
- plan and organise activities including the inspection of first aid support facilities and treatment areas to ensure their completeness, adequacy, equipment and serviceability
- work with others and in a team to promote an awareness of first aid within the workplace and its provision when required
- use mathematical ideas and techniques to correctly complete measurements and calculations associated with assessment, treatment and monitoring of patient's condition
- use problem solving skills to assess and determine treatments and priorities in providing first aid to a patient
- use the workplace technology related to the reporting, recording and responding to workplace injuries and illnesses

#### (4) Resource Implications

- first aid kit, stretchers and medical/first aid facility
- enterprise health and safety policies and procedures
- personal protective equipment
- patients

#### (5) Method of Assessment

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be conducted in conjunction with assessment of other relevant units of competency.

# (6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, work instructions, casualties and urgency.

#### CRITICAL EMPLOYABILITY SKILLS

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Levels of Competency							
Level 1.	Level 2.	Level 3.					
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>					

Collect, analyse and organise information	evel 2	
Communicate ideas and information	evel 2	
Plan and organise activities	evel 2	
Work with others and in team	evel 2	
Use mathematical ideas and techniques	evel -	
Solve problems	evel 2	
Use technology	evel 1	

# AGGCOR0101A: Carry out measurement and calculations

Competency Descriptor:

This unit deals with the skills and knowledge required to perform related calculations and applies to all individuals working in the agriculture industry.

Competency Field: Agriculture

ELI	EMENT OF COMPETENCY	PER	FORMANCE CRITERIA
1.	Apply the four basic rules of calculation	1.1	Simple calculations are correctly performed using the four basic arithmetic rules- addition, subtraction, multiplication and division.
		1.2	An understanding of the concept of angles is correctly demonstrated.
		1.3	Simple calculation involving time, volume and length are correctly calculated.
2.	Perform basic calculations involving fractions and decimals	2.1	Simple calculations are performed involving fractions and decimals.
3.	Perform basic calculations involving percentages	3.1	Simple calculations involving profit and loss, and discounts are correctly performed.
4.	Perform basic calculations involving proportions	4.1	Simple calculations involving ratios are correctly performed.
5.	Use measurement instruments	5.1	Measurement taken to 100 % accuracy.
		5.2	Used measurement instruments according to manufacturer's/supervisor's instructions.
		5.3	Observed indicator lines and/or manufacturer's and supervisor's instructions when using pre-measured products.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

Calculations may be mental/using pen and paper/calculator/cash register. All problems should have appropriate applications to the agriculture industry and relate to the normal operation in this environment.

Calculations may include:

- ratio and proportion
- percentages profit and loss, discounts
- fractions and decimals
- addition and substraction eg. stock count
- time intervals

## **EVIDENCE GUIDE**

Competency is to be demonstrated by individual computations in accordance with the performance criteria and as related to the work environment.

#### (1) Critical Aspects of Evidence

This unit could be assessed alone on in conjunction with any other units addressing the safety, materials handling, recording and reporting; associated with the computations being performed or other units requiring the exercise of the skills and knowledge covered by this unit.

During assessment the individual will:

- take responsibility for the quality of their own work
- perform computations in accordance with standard principles
- perform computations accurately
- use accepted mathematical procedures, practices, processes and workplace procedures

#### (2) Pre-requisite Relationship of Units

Nil

#### (3) Underpinning Knowledge and Skills

# <u>Knowledge</u>

#### Knowledge of:

- numbers and basic arithmetic operations
- percentages
- fractions and decimals
- ratio and proportion
- costing
- interpretation of measurement and calculations
- data relative to the agriculture industry
- basic measurement of angles
- basic stock valuation

#### Skills

#### The ability to:

- measure using specified instruments
- interpret measurements and calculations
- perform work related calculations
- · communicate effectively
- calculate mentally
- use calculate and/or cash register
- count stock

#### (4) Resource Implications

The candidate will be provided with:

- all tools, equipment, materials and documentation required where necessary
- any relevant workplace procedures
- any relevant product, manufacturing specifications and or prices
- any relevant codes, standards, manuals and reference materials or tables

## (5) Method of Assessment

The candidate will be required to orally, or in writing or by any other methods of communication:

• answer questions put by the assessor

Assessor must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge.

#### (6) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. The competencies covered by this unit should be demonstrated by an individual working alone. The assessment environment should not disadvantage the candidate.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

	Levels of Competency						
	Level 1.		Level 2.		Level 3.		
•	Carries out established	•	Manages process	•	Establishes principles and		
	processes	•	Selects the criteria for the		procedures		
•	Makes judgement of		evaluation process	•	Evaluates and reshapes process		
	quality using given criteria			•	Establishes criteria for evaluation		

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

# **AGHCRP0001A:** Prepare land for planting

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare land for planting.

Competency Field: Agriculture - Horticulture

ELEMENT OF COMPETENCY PERFORMANCE CRITERIA		ORMANCE CRITERIA	
1.	Prepare for the use of mechanical aids in land preparation.	1.1	Fuel, maintenance supplies and tools are provided on site for equipment operators in line with supervisors' instructions and contractor requirements.
		1.2	Related farm activities are completed as instructed.
2.	Prepare for the use of manual aids in land preparation	2.1	Appropriate hand tools are selected and checked.
		2.2	Related farm activities are completed as instructed.
3.	Implement soil conditioning measure	3.1	Selected appropriate soil conditioning treatment.
		3.2	Transported soil conditioner to the area to be treated.
		3.3	Added soil conditioner as instructed.
4.	Complete environmental maintenance tasks	4.1	Non-toxic waste and works debris are disposed of in line with farm policy and environmental standards.
		4.2	Tree planting is completed in line with site planning documentation.
		4.3	Removals of stick and debris or manual excavations are carried out as instructed by supervisor.
		4.4	Vegetation and erosion control structures established in line with property plans.
		4.5	Weeds are chopped, stumped or spot sprayed, as instructed.

This unit of competency should be demonstrated in accordance with:

- the enterprise policies and procedures for land preparation
- steps involved in the preparation of land for cultivation taking into consideration erosion control

On-site OHS procedures may include:

- provision of protective clothing and equipment
- provision of appropriate fire fighting equipment for field operation of machinery and equipment
- checks for hazardous substances
- provision of safety devices
- safe storage of toxic chemicals in accordance with Pesticide Control Authority regulations

Manually constructed excavations may include:

- post holes
- small pits
- trenches
- compost pit or heap
- drains

Relevant OHS hazards identification, risk assessment and risk control measures include:

- systems and procedures for the safe operation and maintenance of machinery and ride-on vehicles
- safe manual handling systems and procedures
- safe systems and procedures for storage, handling and transportation of hazardous substances (petroleum products etc)
- hazardous land forms identified and all employees notified. These include gullies, cliffs, protruding rocks, or any land form that has potential to cause an accident
- protection from hazardous noise
- protection from organic and other dusts
- safe systems and procedures for outdoor work, including protection from solar radiation
- selection, use and maintenance of relevant personal protective clothing and equipment

Legislation, codes and national standards relevant to the workplace may include:

- National Environmental Protection Agency Jamaica (NEPA)
- OHS and hygiene requirements
- First Aid regulations/requirements

Non-toxic waste may include:

- fuel containers
- cardboard and degradable containers
- some packaging materials
- faulty and worn-out parts

Basic field duties may include:

- land clearing, cultivation, spraying, forking
- planting, stumping, chopping, digging, ploughing
- seedbed preparation

Erosion control measures may include:

- terracing
- contour cropping
- channel drains
- check dams
- strip cropping
- mulching and gully basins

Equipment used may include:

- hand and power tools
- maintenance supplies
- fuels and oils
- fencing equipment

## **EVIDENCE GUIDE**

Competency is to be demonstrated in aspects of soil types in Jamaica and land preparation activities.

#### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- perform all requirements of land preparation efficiently with minimum damage to soil structure
- provide necessary requirements to protect the soil from erosion
- provide for maintenance of the environment and to ensure little or no damage to biotic factors
- · support field operations to ensure completion in a timely and efficient manner
- consistently follow supervisor's instructions
- use methods and procedures that are predictable when sowing plant materials
- report and record within established routines

#### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with

- AGGCOR0011A Maintain the work environment
- AGGCOR0021A Observe workplace health and safety requirement

# (3) Underpinning Knowledge and Skills

# Knowledge

Knowledge of:

- relevant NEPA and PCA regulations
- the rights and responsibilities of employers and employees under the labour law
- OHS legislation
- land clearing, cultivation, spraying, forking
- planting related to soil conservation measures, stumping, chopping, digging, ploughing
- seedbed preparation
- procedures for excavating post holes, small pits, trenches, compost pit or heap, drains
- soil erosion and conservation practices
- erosion control measures including: terracing, contour cropping, channel drains, check dams, strip cropping, mulching
- factors influencing soil formation
- soil formation process
- types of soil
- · composition and properties of soil
- soil profile
- · composition and properties of soil
- types of soil conditioners
- procedures for applying soil conditioner
- verbal and non-verbal communication skills
- measurement and calculation of length, area, volume, ratio and proportion

#### Skills

The ability to:

- communicate appropriately with other farm personnel
- complete field duties to industry requirement inclusive of land clearing, ploughing, harrowing
- prepare land for planting
- prepare compost
- sterilize soil
- prepare seedbeds and seed boxes
- identify soil texture by touch
- use appropriate measures to prevent soil loss
- construct and fill/pack a compost heap/pit
- use verbal and non-verbal communication

# (4) Resource Implications

The following resources should be made available:

- various equipment and tools used in land preparation
- plot of land
- different types of soil
- materials for compost

# (5) Method of Assessment

Competency should be assessed while tasks are undertaken and should involve.

- observation of work processes at intervals when the land is being prepared
- questioning related to underpinning knowledge

## (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with different aspects of land preparation for cultivation. Emphasis should also be placed on soil conservation methods practiced in Jamaica.

#### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>					

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

# **AGHCRP0011A:** Provide propagation support

Competency Descriptor:

This unit deals with the knowledge and skills required by assistants to plant propagators in the production nursery sector.

Competency Field: Agriculture - Horticulture

ELEMENT OF COMPETENCY		PERF	ORMANCE CRITERIA
1.	Provide maintenance tasks to parent plants	1.1	Water is applied to parent plants according to daily watering plan.
		1.2	Fertiliser is applied according to enterprise guideline
		1.3	The hygiene of the propagation area is maintained, tools are sterilised and rubbish and litter are removed and disposed of according to enterprise policy.
		1.4	Parent plants and surroundings are maintained in a clean and tidy fashion according to enterprise guidelines.
		1.5	Weeds are removed from around cultivated plants according to supervisor's instructions.
		1.6	Changes in parent plant appearance or emergence of pests or diseases are reported to the appropriate person according to enterprise guidelines.
2.	Prepare materials for propagation	2.1	Containers for propagation are prepared according to supervisors guidelines.
		2.2	Cleaning procedures are performed and hygiene practices followed according to enterprise guidelines.
3.	Place propagation materials at propagation site(s)	3.1	Propagation material is obtained from parent stock, and transported to propagation site according to supervisor's instructions.
		3.2	Plants are placed in accordance with the pattern and spacing designated by the supervisor.
		3.3	Hygiene practices are followed according to enterprise guidelines.
		3.4	Safe lifting techniques employed and manual handling techniques are efficient according to enterprise Occupational Health and Safety guidelines.

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica.
- Pesticide control authority regulations.
- Occupational Health & Safety (OHS).
- Hygiene requirements.
- First Aid regulations/requirements

The preparation of planting containers may include:

- sterlizing trays and tools
- gathering trays and containers
- locating and collecting media
- filling containers with media

Propagation methods may include:

- sexual methods sowing seeds
- asexual methods cuttings, layering, grafting, budding, suckers

Equipment used in the propagation process may include:

- wheelbarrow, trolley, mechanical trolley
- secateurs, media trays, water spray container
- rubbish bins, budding knives, tying materials, propagation knives

Parent plants may include:

- plants that are hardy
- on-site
- · in ground or containerised

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply the knowledge and skills required to provide propagation support in a horticulture enterprise.

#### (1) Critical Aspects of Evidence

- consistently follow supervisor's instructions
- · report and record within established routines
- prepared propagation materials and equipment as directed
- select vegetative material of good quality and appropriate size for propagation
- maintain parent plant as directed
- maintain the hygiene of parent plant, equipment and surroundings

#### (2) Pre-requisite Relationship of Units

AGGCOR0011A Maintain the work environment

AGGCOR0031A Plan and organise work

AGGCOR0061A Implement pest control programme

AGHCRP0041A Maintain a planted area

#### (3) Underpinning Knowledge and Skills

# Knowledge of:

- handling techniques for different plant types
- methods used to prepare different plant types for propagation
- basic hygiene practices in plant production
- conditions for successful plant establishment
- plant classification
- plant physiology
- photosynthesis, respiration, translocation, absorption, transpiration
- vegetative organs and their functions
- the effects of moisture, light, aeration, temperature and pathogenic organisms on propagated plants
- types of soil and soil science
- pests and diseases affecting plants
- plant propagation methods
- plant growth regulators
- crop support components
- procedures for measuring length
- procedures for calculating area, volume, ratio and proportion
- records keeping
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures

#### (4) Resource Implications

The following resources should be made available:

- vegetative materials/parent stock
- tools and materials used in propagating plants

#### (4) Method of Assessment

Evidence should be collected over a set period of time through direct observation intermittent checking and questioning related to underpinning knowledge. This should include dealing with an appropriate range of crops and planting techniques.

Competencies in this unit may be demonstrated concurrently.

#### Skills

#### The ability to:

- prepare materials for propagation
- maintain parent plant
- maintain the hygiene of parent stock, equipment and environment
- install crop support components where necessary
- identify pests and diseases affecting plants
- apply OHS regulations and procedures
- apply First aid procedures
- measure length
- calculate area, volume, ratio and proportion
- complete records
- apply verbal and non verbal communication skills

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

## CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>			

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

# AGHCRP0021A Prepare and establish planting materials

Competency Descriptor:

This unit describes the process of supporting the sowing of plant materials such as seeds, plugs, crowns, canes, eyes, bulbs or other similar plant material for flower, fruit or vegetable production.

Competency Field: Agriculture- Horticulture

ELEMENT OF COMPETENCY		PERF	ORMANCE CRITERIA
1.	Prepare growing media	1.1	Growing media is prepared as directed.
		1.2	Tools are chosen appropriate to the task being undertaken, used according to guidelines and safe working practices are employed.
		1.3	Cleaning procedures are performed and hygiene practices followed according to enterprise guidelines.
		1.4	Work areas are tidied and material stored neatly and according to enterprise guidelines.
2.	Select material for planting	2.1	Plant material is selected which is sound, of defined size and suitable vigour for use in the planting process as directed.
		2.2	Work practices are employed which minimize plant damage.
3.	Prepare plant products for planting	3.1	Material is prepared neatly, cleanly and evenly to the defined size.
		3.2	Storage procedures and hygiene practices are followed according to enterprise guidelines.
4.	Insert plant products into growing area	4.1	Tools are chosen appropriate to the task being undertaken, used according to guidelines and safe working practices are employed.
		4.2	Work practices are employed which minimise plant damage.
		4.3	Placement, spacing depth, orientation and technique used are according to planting method and species requirements.
		4.4	Growing media covering is even, and to the required depth and compaction.

- 4.5 Water and fertilisers are applied evenly and in volumes specified by supervisor.
- 4.6 Tool and equipment cleaning and storage procedures are performed and hygiene practices followed according to enterprise guidelines.

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica.
- Pesticide control authority regulations.
- Occupational Health & Safety (OHS).
- Hygiene requirements.
- First Aid regulations/requirements

Planting materials may include:

- seedlings, seeds, foliage, bulbs
- trees
- fruit and vegetables
- · vegetative materials

Planting methods may include:

- hand planting
- assisting with mechanical planting

This unit of competency should be demonstrated in accordance with the enterprise's standards for sowing seeds:

- growing media
- prepared media including hydroponic systems, field soils, containerised media, seed bed, foam, jiffy pots, non-soil medium

Plant preparation may include:

- trimming
- washing
- dipping

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply knowledge and skills when sowing plant materials

#### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- consistently follow supervisor's instructions
- use methods and procedures that are predictable when sowing plant materials
- report and record within established routines
- growing media is prepared as directed
- select vegetable material of good quality and appropriate size for planting
- use appropriate planting techniques

#### (2) Pre-requisite Relationship of Units

AGGCOR0021A Observe workplace health and safety requirement

AGHCRP0001A Prepare land for plantingAGHCRP0011A Provide propagation support

#### (3) Underpinning Knowledge and Skills

# Knowledge of:

- plant classification
- vegetative organs and their functions
- types of seeds
- · types of growing media
- handling techniques for different seed and vegetative materials
- basic techniques of media preparation
- basic methods of sowing plant products
- germination
- photosynthesis, translocation, respiration and absorption
- the effect of moisture, temperature, aeration, light and pathogenic organisms on plants
- pests and diseases affecting plants
- hygiene practices in plant handling
- procedures for measuring length
- procedures for calculating area, volume, ratio and proportion
- records keeping
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures

# (4) Resource Implications

- seedbeds/seed boxes
- vegetative materials
- hand tools used in sowing plant materials
- irrigation system

## Skills The ability to

- identify vegetative materials
- sow various vegetative materials
- prepare growing media as directed
- handle vegetative materials appropriately
- identify plant pests and diseases
- apply OHS regulations and procedures
- apply First aid procedures
- measure length
- calculate area, volume, ratio and proportion
- complete records
- apply verbal and non verbal communication skills

#### (4) Method of Assessment

Evidence should be collected over a set period of time through direct observation and questioning related to underpinning knowledge. This should include dealing with an appropriate range of plant materials and sowing techniques.

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

#### CRITICAL EMPLOYABILTIY SKILLS

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Collecting, analysing and organising ideas and information	Level 1	
Communicating ideas and information	Level 1	
Planning and organising activities	Level 1	
Working with others and in teams	Level 1	
Use mathematical ideas & techniques	Level 1	
Solve problems	Level 1	
Using technology	Level 1	

# **AGHCRP0031B:** Plant a crop by hand (manual)

Competency Descriptor:

This unit deals with the knowledge and skills required to plant fruit or vegetable crop; flower, bare rooted or containerised plants; seeds, seedlings, cuttings, or bulbs manually, according to local, regional and international protocols.

Competency Field: Agriculture - Horticulture

ELEMENT OF COMPETENCY		PERF	FORMANCE CRITERIA
1.	Line field	1.1	Tools appropriate to the task being undertaken are selected and used according to guidelines, and safe working practices.
		1.2	Planting distance and arrangement determined according to crop requirements
		1.3	Field inspected and direction of rows determined according to agronomic and environmental specifications.
		1.4	Planting distances measured according to specifications.
		1.5	Markers used to indicate position of plant in field according to enterprise practice.
2.	Prepare planting hole	2.1	Tools appropriate to the task being undertaken are selected and used according to guidelines, and safe working practices.
		2.2	Planting holes are prepared to the specified dimensions as directed by management.
		2.3	Soil is moistened according to company policy and plant requirements.
		2.4	Organic matter/fertilizer is added to hole as directed.
3.	Prepare planting material	3.1	Tools appropriate to the task being undertaken are selected and used according to guidelines, and safe working practices.
		3.2	Plant material of prescribed characteristics selected for use in the planting process.
		3.3	Media in seedbed/tray treated according to directions from management before lifting of seedlings.

		3.4	Seedlings lifted and treated according to enterprise practice.
		3.5	Plants are kept cool and moist to avoid the roots drying according to enterprise practice.
		3.6	Planting material is inspected, screened and sorted according to company policy.
4.	Plant the crop	4.1	Tools appropriate to the task being undertaken are selected and used according to guidelines, and safe working practices.
		4.2	Plants are placed in holes at a depth and angle specified by company policy.
		4.3	Plant placement, depth, orientation and planting technique are in line with prescribed planting method and species.
		4.4	Mulch, as appropriate, is applied as directed by supervisor and to the standard acceptable by the enterprise.
		4.5	Post-planting treatments are completed in accordance with supervisors' instructions.
		4.6	Work practices employed cause no plant damage.
		4.7	Tool and equipment are cleaned and stored using hygiene practices specified in enterprise guidelines.
5.	Install crop support components	5.1	Tools, machinery and equipment appropriate to the task being undertaken are selected and used according to guidelines, and safe working practices.
		5.2	Where necessary, supports are placed and tensioned as defined by supervisors' specifications.
		5.3	Construction methods employed are according to plans and specifications.
		5.4	Tools, machinery and equipment are cleaned and stored according to company policy.
6	Keep accurate records	6.1	Activities are accurately documented and reported according to company policies.
		6.2	Records are kept current.

The range of variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training assessment requirements may depend on the work situations and available resources.

The following variables may be present for this particular unit:

#### Crops may include:

- fruit
- vegetables
- foliage crops
- flowers
- bulbs
- essential oil crops
- other

#### Plant preparation may include:

- trimming
- washing
- dipping or dusting
- puddling
- shading

#### Specified dimensions may include:

- depth
- width
- pattern (arrangement)
- spacing

#### Tools, machinery and equipment may include:

- Forks
- Machete
- Spades
- Lifters
- Shovel
- Tape measure
- Weed whacker

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica.
- Pesticide control authority regulations.
- Occupational Health & Safety (OHS).
- Hygiene requirements.
- First Aid regulations/requirements.

Growing container, equipment and materials may include:

- trays, pots, bags, seed beds,
- · water jets, secateurs, plastic or crocus
- cord

#### Planting materials may include:

- seeds
- cuttings
- division
- seedlings (ball of earth or bare rooted)

# **EVIDENCE GUIDE**

Each Unit of Competency has an Evidence Guide, which relates directly to the Performance Criteria and the Range Statements. Its purpose is to guide assessment of the unit of competency in the workplace or a training programme. The following components provide information to assist this purpose.

These relate to particular knowledge and skills that are considered essential to demonstrate competency in this unit.

Competency is to be demonstrated by the ability to apply of knowledge and skills when planting crops by hand.

#### (1) Critical Aspects of Evidence

The following ability should be demonstrated by the candidate:

- use methods and procedures that are predictable when planting crops by hand
- report and record within established routines
- prepare planting hole as directed
- select vegetative material of good quality and appropriate size for planting
- use appropriate planting techniques
- install crop support components where necessary

## (2) Pre-requisite Relationship of Units

- AGGCOR0021A Observe workplace health and safety requirement
- AGGCOR0031A Plan and organize work
- AGHCRP0001A Prepare land for planting

#### (3) Underpinning Knowledge and Skills

#### **Knowledge**

Knowledge of:

- handling techniques for different plant types
- basic hygiene practices in plant production
- conditions for successful plant establishment
- differing crop planting requirements
- plant classification
- plant physiology (photosynthesis, respiration, translocation, absorption, transpiration)
- vegetative organs and their functions
- germination of seeds
- transplanting seedlings
- methods for establishing crops
- field planting arrangement
- spatial requirements for various classes of crops
- pests and diseases affecting plants
- crop support components

#### Underpinning Knowledge and Skills (Cont'd)

#### **Knowledge**

# Knowledge of:

- procedures for measuring length
- procedures for calculating area, volume, ratio and proportion
- records keeping
- verbal and non verbal communication skills
- · OHS regulations and procedures
- First aid procedures

#### Skills

## The ability to:

- prepare seed beds/trays
- line out field for planting
- prepare planting hole
- prepare planting material
- plant crops
- install crop support components where necessary
- identify pests and diseases affecting plants
- apply OHS regulations and procedures
- · apply First Aid procedures
- measure length
- calculate area, volume, ratio and proportion
- complete records
- apply verbal and non verbal communication skills
- prepare potting mixture

#### (4) Resource Implications

The following resources should be made available:

- plot of land
- seeds and vegetative plant materials
- hand tools used in the planting of crops
- irrigation system
- measuring devices
- cord and strings
- pesticides
- containers
- pesticides
- seed trays and benches
- potted mixture

#### (4) Method of Assessment

Evidence should be collected over a set period of time through direct observation and questioning related to underpinning knowledge. This should include dealing with an appropriate range of crops and planting techniques.

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job or in a simulated workplace environment.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

## CRITICAL EMPLOYABILTIY SKILLS

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Levels of Competency					
Level 1.	Level 2.	Level 3.			
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Collecting, analysing and organising ideas and information	Level 2
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 2
Solve problems	Level 1
Using technology	Level 1

# AGHCRP0041A: Maintain a planted area

Competency Descriptor:

This unit describes the provision of basic maintenance to a growing

crop.

Competency Field: Agriculture - Horticulture

ELEMENT OF COMPETENCY		PERF	FORMANCE CRITERIA
1.	Install crop support components	1.1	Tools appropriate to the task are selected, used according to guidelines and safe working practices are employed.
		1.2	Supports are placed and tensioned as defined by supervisors' specifications.
		1.3	Construction methods employed in accordance with plans and specifications.
2.	Care for growing plant stock	2.1	Plant stock treatments are carried out neatly, cleanly and in a fashion which causes them no disturbance.
		2.2	Crop support components are adjusted and/or repaired according to supervisors' instructions.
3.	Tend to growing media	3.1	Fertiliser is spread evenly and at rates specified by supervisor.
		3.2	Weed removal and soil cultivation is carried out in accordance with the requirements of the crop and soil conditions.
		3.3	Safe equipment operation and work practices ensure compliance with Occupational Health & Safety (OHS) regulations.
4.	Place irrigation system and components	4.1	Irrigation components are located according to supervisors' specifications.
		4.2	Irrigation components are assembled and connected securely and the system operation tested according to supervisors specifications.
5.	Water established plants	5.1	Water is applied to plants at the rate and volume defined by supervisor.
		5.2	Equipment is drained of all excess water, cleaned and stored according to manufacturer's instructions.

6.	Weed planted area	6.1	Weeds to be removed are identified according to instructions from supervisor.
		6.2	Weeds are removed from planted area without disturbance to adjacent plants.
		6.3	Weeds are stacked, processed and disposed of according to enterprise guidelines.
		6.4	Site is cleaned according to enterprise guidelines.
7.	Clean structures and features	7.1	Debris is removed and sorted according to enterprise guidelines.
		7.2	Items are cleaned according to maintenance program details.
		7.3	Material is disposed of according to enterprise guidelines.
8.	Prepare compost pit/heap	8.1	Area for compost pit or heap is prepared at designated site or as directed by supervisor.
		8.2	Material for filling for compost pit/heap.
9.	Maintain plants in healthy condition	9.1	Fertiliser is applied evenly at the rate defined by supervisor and according to manufacturer's instructions.
		9.2	Tools chosen are appropriate to the task being undertaken, used according to manufacturer's guidelines and Occupational Health & Safety (OHS) regulations.
		9.3	Dead, diseased and damaged plants are treated according to supervisor's instructions.
		9.4	Implement pest control activities according to enterprise requirement.
		9.5	Tools and equipment are cleaned, maintained and stored consistent with manufacturer's specifications and enterprise guidelines.

Plant products may include:

- flowers
- vegetables
- fruit
- foliage

This unit of competency should be demonstrated in accordance with the enterprise's :

 policies and procedures in regard to the maintenance of a planted area

#### Basic maintenance includes:

- mowing coarse grass and ancillary grassed areas
- weeding
- hand watering display beds
- cleaning park or garden facilities
- mulch and mould plants
- fertilize plants
- pest control

#### Support components includes:

- stake
- brace
- trellis
- arbour

#### Plants may include:

- trees
- shrubs
- ground covers both native and exotic

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica.
- Pesticide control authority regulations.
- Occupational Health & Safety (OHS).
- Hygiene requirements.
- First Aid regulations/requirements

#### Equipment used includes:

- personal protective equipment
- hoses, motorised blowers, hand edging tools
- spades, forks, rakes, hoes, brooms, knives
- trowels, wheelbarrows, hand tools

#### Processing of weeds includes:

- composting
- · bagging and removal
- burying

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply of knowledge and skills to a limited range maintenance tasks to growing plants.

#### (1) Critical Aspects of Evidence

- · consistently follow supervisor's instructions
- use methods and procedures that are predictable when planting crops by hand
- report and record within established routines
- install crop support components
- care for growing stock
- irrigate established plants appropriately
- · weed planted area without damage to plants
- clean support structures and other structure in planted area
- maintain plants in an healthy condition

#### (2) Pre-requisite Relationship of Units

AGGCOR0021A Observe workplace health and safety requirement

AGGCOR0031A Plan and organize work

AGGCOR0041A Use hazardous substances safely

### (3) Underpinning Knowledge and Skills

## Knowledge of:

- maintenance activities for different crops
- manual handling guidelines
- types and range of annual and perennial weeds
- procedures for weeding, thinning, moulding, mulching
- water requirements of plants
- correct care and use of equipment, scheduled maintenance and repair
- crop support systems and their erection
- methods and reasons of treating growing stock including pruning and disbudding techniques
- water application techniques
- · types of fertilizer
- fertiliser application methods
- pest control methods
- plant's use of fertilisers
- competition by weeds for water, nutrients and light
- procedures for measuring length
- procedures for calculating area, volume, ratio and proportion
- records keeping
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures

### (4) Resource Implications

- plot with a variety of growing crops
- irrigation system
- equipment and materials for maintaining crops

### Skills

### The ability to:

- weed planted areas
- water established plants
- · clean structures and features
- install crop support components
- care for growing stock
- · tend to growing media
- fertilize plants
- identify and control pest
- place irrigation systems and components
- apply First aid procedures
- measure length
- calculate area, volume, ratio and proportion
- complete records
- apply verbal and non verbal communication skills

### (5) Method of Assessment

Evidence may be collected in a variety of ways including:

- direct observation
- oral questioning
- written test
- authenticated assessments and/or assignments from relevant training courses
- supporting statement from supervisor or previous employer

Competencies in this unit may be demonstrated concurrently.

### (7) Context of Assessment

This unit must be assessed through practical demonstration on-the-job or in a simulated workplace environment requiring until competency is achieved.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul><li>Manages process</li><li>Selects the criteria for the evaluation process</li></ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>					

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

### **AGHCRP0051A:** Maintain nursery plants

Competency Descriptor: This unit describes basic plant maintenance duties in either a retail or

production nursery. It refers generally to the maintenance of containerized plants but may include other nursery plant stock.

Competency Field: Agriculture

ELI	EMENT OF COMPETENCY	PERFORMANCE CRITERIA	
1.	Maintain nursery plants	1.1	Plants are watered evenly and to the saturation level according to supervisor's instructions.
		1.2	Plants are staked, mulched and fertilised as directed.
		1.3	Plants checked to ensure they are upright and water can efficiently wet the media according to supervisor's instructions.
2.	Clean up a growing site	2.1	Weeds are removed from around cultivated plants according to supervisor's instructions.
		2.2	Rubbish and litter are removed and pots, surroundings and presentation areas are maintained in a clean and tidy fashion according to enterprise guidelines.
		2.3	Tools are chosen appropriate to the task being undertaken, and used according to guidelines, and safe working practices.
3.	Treat plants	3.1	Volume and method of treatment is delivered according to supervisors instructions.
		3.2	Intervention methods are undertaken to assist plant growth according to supervisor's instructions.
		3.3	Equipment operation and work practices conform to enterprise Occupational Health and Safety guidelines.
		3.4	Tool and equipment cleaning and storage procedures are performed and hygiene practices are followed according to enterprise guidelines.
4.	Transfer potted material	4.1	Plants are placed appropriately according to the pattern and at the spacing designated by the supervisor.
		4.2	Safe lifting techniques and efficient manual handling techniques are employed according to enterprise guidelines.

### **RANGE STATEMENT**

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica.
- Pesticide control authority regulations.
- Occupational Health & Safety (OHS).
- Hygiene requirements.
- First Aid regulations/requirements

Intervention methods include:

- aeration
- removing dead material
- spacing and thinning

Nursery plants include:

- · containerised, balled and bagged
- in-ground, hydroponic
- aquatic and stock plants
- seedlings, bulbs, corms
- tubers, woody
- perennial, annual

Treatments may include:

- pesticides
- fungicides
- fertiliser

Fitting water components may include:

coupling hoses

Tools and equipment include:

- wheelbarrows, trolleys
- motorised trolleys
- secateurs, media trays
- water spray container
- dibblers, rubbish bins
- a variety of containers

### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply knowledge and skills to a limited range maintenance tasks and roles.

### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- consistently follow supervisor's instructions
- report and record within established routines
- water plants are watered evenly to the required saturation level
- provide required support is provided for the plants
- clean-up growing sites are cleaned up
- remove weed planted re removed without damage to stock
- clean support structures and other structure in planted area
- prepare containerised plants are prepared to specification

### (2) Pre-requisite Relationship of Units

AGGCOR0021A Observe workplace health and safety requirement

AGGCOR0041A Use hazardous substances safely

• AGHCRP0051A Maintain a planted area

### (3) Underpinning Knowledge and Skills

### **Knowledge**

Knowledge of:

- use and maintenance of hand tools
- Occupational Health & Safety (OHS) guidelines and principles
- principles and practices of effective display bed presentation
- maintenance activities for different crops
- manual handling guidelines/techniques
- types and range of annual and perennial weeds
- procedures for weeding, thinning, moulding, mulching
- water requirements of plants
- · correct care and use of equipment,
- crop support systems and their erection
- methods and reasons of treating growing stock including pruning and disbudding techniques
- water application techniques
- types of fertilizer
- fertiliser application methods
- plant use of fertilisers
- competition by weeds for water, nutrients and light
- procedures for measuring length
- procedures for calculating area, volume, ratio and proportion
- records keeping
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures

### Skills

The ability to:

- water plants
- · clean up a growing site
- treat plants
- transfer potted material stock
- clean structures and features
- install crop support components
- care for growing stock
- tend to growing media
- place irrigation systems and components
- · apply First aid procedures
- measure length
- calculate area, volume, ratio and proportion
- complete records
- apply verbal and non verbal communication skills

### (4) Resource Implications

The following resources should be made available:

- plant nursery
- materials and equipment for maintaining nursery plants

### (5) Method of Assessment

In order to achieve consistency of performance, evidence should be collected over a set period of time, which is sufficient to include dealing with a variety of nursery plants

### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job or in a simulated workplace environment requiring until competency is achieved.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>					

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
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Solve problems	Level 1
Using technology	Level 1

### AGHORT0001A: Maintain turf and lawn

Competency Descriptor:

This unit deals with the skills and knowledge required to perform basic maintenance of grassed areas in places such as private residences, roadside verges, commercial properties, public parks and recreational areas and at sporting facilities.

Competency Field: Agriculture

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA		
1.	Control weeds by chemical method	1.1	Weed infested lawn is identified and type of weed infestation verified with supervisor.	
		1.2	Appropriate chemical is selected based on the instruction of supervisor.	
		1.3	Appropriate safety gear, tools and equipment are selected for applying chemical to lawn.	
		1.4	Chemical is prepared according to supervisors and manufacturers instructions.	
		1.5	Followed supervisor's and or manufactured instruction when applying chemical to predetermined infested lawn.	
		1.6	Unused chemical and containers are disposed of according to manufacturer's instruction and enterprise policy.	
		1.7	Equipment is cleaned thoroughly and stored according to enterprise policy.	
2.	Irrigate lawn	2.1	Lawn is inspected and conditions indicating the need for watering discussed with supervisor.	
		2.2	Appropriate equipment is selected for watering lawn.	
		2.3	Watering is done at the appropriate rate and time of day based on supervisor's instruction.	
3.	Fertilise lawn	3.1	Appropriate type and quantity of fertiliser is selected based on supervisor's instruction.	
		3.2	Appropriate equipment, gears and tools are selected according to supervisor's instruction.	

		3.3	Fertiliser is prepared according to manufacturer's or supervisor's instructions.
		3.4	Fertiliser is applied according to manufacturer's or supervisor's instructions.
		3.5	Tools and equipment are used according to supervisor's instructions and manufacturers guidelines.
		3.6	Disposal of unused materials is completed according to manufacturer's instructions and enterprise policy.
4.	Mow lawn	4.1	Mower is checked and serviced to manufacturer's specifications and enterprise policy.
		4.2	Safety gear is selected and fitted according supervisor or manufacturer's instruction.
		4.3	Grass is mown at height and in a pattern specified by supervisor.
		4.4	Mowing is at an appropriate distance from trunks of trees and shrubs to prevent damage.
		4.5	Mower controls are used safely and efficiently to complete the mowing program according to supervisor's instructions.
		4.6	The mower is maneuvered in a controlled manner without excessive speed according to enterprise occupational health and safety guidelines.
5.	Maintain grassed areas and surroundings	5.1	Broad leaf weeds and unwanted grasses are removed by hand (for small lawns and grassed areas).
		5.2	Grass clippings and rubbish is raked, collected and removed according to supervisor's instructions, and disposed of according to enterprise guidelines.
		5.3	Grass is mown and edges are trimmed to meet the presentation standards of the enterprise.
		5.4	Tools and equipment are cleaned, maintained and stored consistent with manufacturer's specifications and enterprise policy.

6.	Aerate lawn	6.1	Compacted and poorly growing areas of lawn/turf are selected based on supervisor advice.
		6.2	Tools and equipment are selected and serviced according to supervisor's and manufacturer's instruction.
		6.3	Plugs of soil are correctly cut to correct depth and removed.
		6.4	Organic matter is evenly spread over the area according to supervisor's guidelines.
		6.5	Area is mowed and maintained according to supervisor's guidelines.
		6.6	Tools are cleaned and stored according to manufacturer's and enterprise guidelines.
7.	Control pests and diseases	7.1	Pest infested and diseased lawn is identified and type of pest infestation and disease verified with supervisor.
		7.2	Appropriate chemical is selected based on the instruction of supervisor.
		7.3	Appropriate safety gear, tools and equipment are selected for applying chemical to lawn.
		7.4	Chemical is prepared according to supervisor's and manufacturer's instructions.
		7.5	Followed supervisor's and or manufactured instruction when applying chemical to pest infested and diseased lawn.
		7.6	Unused chemical and containers are disposed of according to manufacturer's instruction and enterprise policy.
		7.7	Equipment is cleaned thoroughly and stored according to enterprise policy.

### RANGE STATEMENT

Legislation, codes and national standards relevant to the workplace may include:

- Pesticide Control Authority regulations
- OHS and hygiene requirements
- First Aid regulations/requirements

This unit of competency should be demonstrated in accordance with the:

 policies and procedures in regard to the maintenance of turf /lawn

### Tools and equipment may include:

- 2- and 4- stroke pedestrian and ride-on rotary mowers,
- cylinder mowers
- motorised blowers,
- pavement sweepers,
- diesel ride-on mowers and sweepers,
- · turf edging machines
- brush cutters, weed wackers
- knapsack sprayers/mist blowers, buckets, drums and fertilizer spreader
- power aerator/auger, matchete, mattock, rake

### Disease may be caused by:

- insects
- rodents
- virus
- bacteria
- fungi and moss

### Pests may include:

- insects
- rodents
- virus
- bacteria
- fungi and moss

### Chemicals may include:

- legally permissible herbicides
- fungicides
- insecticides
- miticides and bactericides

### Turf maintenance activities may include:

- mowing with pedestrian or ride-on machines and edge trimming
- aerate lawn compacted by pedestrian or vehicular traffic
- irrigate lawn
- fertilise lawn
- control pest and diseases on lawn

### Weed killing compound may include appropriate:

legally permissible herbicides and growth retardants

### Safety gears may include:

- protective clothing
- gloves
- boots
- goggles and mask

### Fertilizer may include:

- inorganic
- organic
- soluble

### Method of fertiliser application may include:

- broadcasting,
- row or hand placement
- foliar application and use of hopper spreader

### Factors determining water need may include:

- turf/lawn type, humidity
- · quantity and quality of available light
- air movement
- temperature
- seasonality
- growth required

Equipment used may include:

- hose
- sprinkler
- sub irrigation system
- knapsack/mist blower
- buckets drums and fertilizer spreader
- handsaws
- secateurs

Turf/lawn may include:

- turf/lawn with low
- medium and high water requirement in private residences
- roadside verges
- commercial properties
- public parks and recreational areas and at sporting facilities

### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to safely and efficiently apply knowledge and skills to a range of pruning tasks and roles within established enterprise routines

### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- · Consistently follow supervisor's instruction.
- Select and use appropriate tools and equipment.
- Manoeuvre machine and equipment without injury or damage.
- Consistently maintain turf/lawn according to enterprise standards.

### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with the core unit competencies

### (3) Underpinning Knowledge and Skills

## Knowledge of:

- Occupational Health and Safety guidelines
- manual handling guidelines
- enterprise standards for grass appearance
- correct use and care of equipment
- correct set-up, use and cleaning procedures for tools and lawn maintenance equipment,
- minor repairs and service requirements of lawn maintenance equipment
- types of grass used on lawn
- factors of good lawn maintenance
- anatomy and physiology of grass
- types of pests and diseases affecting the various varieties of grasses
- chemicals used to control pests and diseases on turf/lawn
- · procedures for aerating lawn
- types of lawn mowers
- parts of lawn mowers
- irrigation requirement of the various variety of grasses
- environmental control measures when using chemicals
- maintain related records
- interpret manufacturer's instruction for handling pest control agents
- perform related calculations
- apply verbal and non verbal communication
- apply OHS and first aid regulations
- complete record
- use verbal and non –verbal communication skills
- calculate and measure length, area, volume, time
- apply ratio and proportion, fraction and decimal
- OHS and First aid regulations
- basic First Aid

### Skills

### The ability to:

- manipulate irrigation systems
- mix fertilizer and chemicals
- use tools and equipment safely
- trim edges and verges efficiently
- aerate turf/lawn
- irrigate turf/lawn
- fertilise turf/lawn
- mow turf/lawn
- control pests and diseases affecting lawn
- · consistently use time efficiently
- apply enterprise polices/procedures in regard to the maintenance of turf/lawn
- apply safe work practices and emergency procedures in regard to the maintenance of turf/lawns, safe handling of products and equipments, according to OHS regulations/requirements and First Aid
- apply environmental control measures when using chemicals
- maintain related records
- interpret manufacturer's instruction for handling pest control agents
- perform related calculations
- apply verbal and non verbal communication
- apply OHS and first aid regulations

### (4) Resource Implications

The following resources should be made available:

- Lawn maintenance tools, machinery and equipment
- Chemicals to control pests and diseases affecting turf/lawn
- Irrigation system for turf/lawn
- Access to grassed areas in places such as private residences, roadside verges, commercial properties, public parks and recreational areas and at sporting facilities.

### (5) Method of Assessment

Competency shall be assessed through a combination of direct observation, intermittent checking and questions related to underpinning knowledge

Competencies in this unit may be demonstrated concurrently.

### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with a range of lawn maintenance needs.

The underpinning knowledge may be assessed on/off-the-job with the use of written or verbal items inclusive of multiple choice, short answer or project.

### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
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Solve problems	Level 1
Using technology	Level 1

### **AGHORT0011A:** Plant trees and shrubs

Competency Descriptor:

This unit deals with the skills and knowledge required to plant ornamental trees and shrubs. It applies to and can be contextualised for planting activities in parks and gardens, domestic and commercial landscapes, sporting facilities, and planting of windbreaks and shelter – belts.

Competency Field: Agriculture

ELEMENT OF COMPETENCY PERFORMANCE CRITERIA		FORMANCE CRITERIA	
1.	Prepare a planting site	1.1	Site is marked out according to planting plan and/or supervisor's instructions.
		1.2	Tools and equipment are prepared and used according to supervisor's instructions and manufacturers guidelines.
		1.3	Competing plants are controlled according to supervisor's instructions.
		1.4	Soil is modified according to the cultural requirements of the trees to be planted.
2.	Excavate planting hole	2.1	Planting holes are dug to sufficient size to ensure roots can grow outwards and downwards according to the needs of the species and size of root system.
		2.2	Sides of planting holes are gouged to remove glazing of sidewalls and allow root penetration into surrounding soil.
		2.3	Depth of planting holes is sufficient to ensure that the tree is planted no deeper than the junction of the roots and the stem.
3.	Prepare trees and shrubs for planting	3.1	Trees and shrubs are watered prior to planting to ensure entire root ball is damp.
		3.2	Trees and shrubs are removed from containers without damage to shoot or root.
		3.3	Bound roots are treated and damaged or broken roots are trimmed according to the needs of the species.

- 4. Install trees and shrubs and provide after care
- 4.1 Tree or shrub is placed in hole with roots prepared according to standard horticulture practice.
- 4.2 Planting hole is back-filled with soil free from large lumps and stones.
- 4.3 Soil is consolidated lightly and a shallow basin formed for water retention.
- 4.4 Tree or shrub is watered in with sufficient volume to eliminate air pockets.
- 4.5 Mulching material is applied evenly to pre-determined depth according to enterprise guidelines.
- 4.6 Trees and shrubs are secured as directed with stakes.
- 4.7 Trees and shrubs are pruned as required.
- 4.8 Fertiliser is applied according to supervisor's instructions and manufacturers guidelines.
- 4.9 Tools and equipment are cleaned, maintained and stored.

### **RANGE STATEMENT**

This unit of competency should be demonstrated in accordance with the enterprise:

 policies and procedures in regard to planting of trees and shrubs

Plant support systems may include:

- tying
- staking
- bracing
- anchoring
- · guying and installation of tree guards
- protective materials
- staking
- anchoring
- anchoring

Legislation, codes and national standards relevant to the workplace may include:

- OHS and hygiene requirements
- First Aid regulations/requirements

Equipment used may include:

- spades, garden hoe
- rakes, pickaxe
- shovels, spading fork
- spray equipment
- secateurs, wheel barrow
- augers, ball cart

### Pruning may include:

- formative
- removal of dead or damaged materials
- canopy reduction
- lifting
- thinning

### After care may include:

- mulching
- fertilising
- pruning
- watering
- · plant support systems

### Instructions may include:

- supervisors orders
- · plans and specifications
- · client's instructions
- sketches

### Trees and shrubs may include:

- container grown
- tube grown
- bare rooted plants

(across a range of life forms and growth habits that do not require mechanized lifting devices)

### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to safely and efficiently apply knowledge and skills to a range of planting tasks and roles usually within established enterprise routines

### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- apply knowledge of planting techniques and concepts
- indicate the factors affecting the timing and method of tree or shrub planting
- · prevent the drying out of plant root system
- meet the initial establishment needs of juvenile plants
- apply principles relating to the application of mulches and fertilisers
- apply knowledge of the basic plant structure and the nutritional requirements of plants
- apply labelling techniques
- prepare a planting site
- excavate planting hole
- prepare trees (and shrubs) for planting
- install trees (and shrubs)
- provide aftercare
- follow supervisor's instructions

### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with

AGGCOR0021A Observe workplace health and safety requirement

### (3) Underpinning Knowledge and Skills

## Knowledge of:

- planting techniques
- methods of installing landscape trees and shrubs
- factors affecting the timing and method of tree or shrub planting
- function of trees and shrubs in landscaping
- reasons for and methods of pruning
- causes of injury/damage to landscape plants
- common symptoms of injured plants
- causes and prevention of drying out of plant root system
- initial establishment needs of juvenile plants
- principles relating to the application of mulches and fertilisers
- basic plant structure and the nutritional requirements of plants
- labelling techniques
- basic First Aid procedures

#### Skills

### The ability to:

- prepare a planting site
- excavate planting hole
- prepare trees and shrubs for planting
- install trees and shrubs
- stake /guy newly planted trees
- prune landscape trees and shrubs
- treat wounds after pruning
- repair damaged trees
- measure planting distance
- fertilise trees and shrubs
- · water tress and shrubs
- follow supervisor's and or client's instruction
- consistently use time efficiently
- apply enterprise polices/procedures in regard to the planting of a range of trees and shrubs
- apply safe work practices and emergency procedures in regard to the planting trees and shrubs, safe handling of products and equipments, according to OHS regulations/requirements and First Aid

### (4) Resource Implications

The following resources should be made available:

- ornamental trees and shrubs
- a range of ground planting and pruning equipment
- parks, garden, domestic and commercial landscapes, sporting facilities or area in need of wind break and shelter-belts
- a range fertilisers
- irrigation system

### (5) Method of Assessment

Competency shall be assessed through a combination of direct observation, intermittent checking and questions related to underpinning knowledge.

Competencies in this unit may be demonstrated concurrently.

### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with a range of trees and shrubs to be planted. The underpinning knowledge may be assessed off-the-job with the use of written or verbal items inclusive of multiple choice, short answer or project.

### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
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Collecting, analysing and organising ideas and information	Level 1
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Using technology	Level 1

### ITICOR0011A: Carry out data entry and retrieval procedures

Competency Descriptor: This unit deals with the skills and knowledge required to operate

computer, to enter, manipulate and retrieve data and to access

information and communicate via the Internet.

Competency Field: Information Technology and Communications - Operations

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA		
1.	Initiate computer system	1.1	Equipment and work environment are correctly checked for readiness to perform scheduled tasks.	
		1.2	The hardware components of the computer and their functions are correctly identified.	
		1.3	Equipment is powered up correctly.	
		1.4	Access codes are correctly applied.	
		1.5	Appropriate software is selected or loaded from the menu.	
2.	Enter data	2.1	Types of data for entry correctly identified and collected.	
		2.2	Input devices selected and used are appropriate for the intended operations.	
		2.3	Manipulative procedures of Input device conform to established practices.	
		2.4	Keyboard/mouse is operated within the designated speed and accuracy requirements.	
		2.5	Computer files are correctly located or new files are created, named and saved.	
		2.6	Data is accurately entered in the appropriate files using specified procedure and format.	
		2.7	Data entered is validated in accordance with specified procedures.	

		2.8	Anomalous results are corrected or reported in accordance with specified procedures.
		2.9	Back-up made in accordance with operating procedures.
3.	Retrieve data	3.1	The identity and source of information are established.
		3.2	Authority to access data is obtained where required.
		3.3	Files and data are correctly located and accessed.
		3.4	Integrity and confidentiality of data are maintained.
		3.5	The relevant reports or information is retrieved, using approved procedure.
		3.6	Formats to retrieved report or information conform to requirements.
		3.7	Copy of the data is printed where required.
4.	Amend data	4.1	Source of data/information for amendment is established.
		4.2	Data to be amended is correctly located within the file.
		4.3	The correct data/Information is entered, changed or deleted using appropriate input device and approved procedures.
		4.4	The Integrity of data is maintained.
5.	Use document layout and data format facilities	5.1	Requirements for document are verified where necessary.
		5.2	The given format and layout are appropriately applied.
		5.3	Facilities to achieve the desired format and layout are correctly identified, accessed and used.
		5.4	Data manipulating facilities are used correctly.
		5.5	Format reflects accuracy and completeness.

6.	Monitor the operation of equipment	6.1	The system is monitored to ensure correct operation of tasks.
		6.2	Routine system messages are promptly and correctly dealt with.
		6.3	Non-routine messages are promptly referred in accordance with operating requirements.
		6.4	Error conditions within level of authority are dealt with promptly, and uncorrected errors are promptly reported.
		6.5	Output devices and materials are monitored for quality.
7.	Access and transmit information via the Internet	7.1	Access to the Internet is gained in accordance with the provider's operating procedures.
		7.2	Evidence of the ability to negotiate web sites to locate and access specified information and other services is efficiently demonstrated.
		7.3	E-Mail is sent and retrieved competently.
8.	Close down computer system	8.1	The correct shut down sequence is followed.
		8.2	Problem with shutting down computer is reported promptly.
		8.3	All safety and protective procedures are observed.
		8.4	The system integrity and security are preserved.
9.	Maintain computer equipment	9.1	Cleaning materials and/or solutions used meet specified recommendation.
		9.2	The equipment is cleaned as directed.
		9.3	Wear and faults identified are promptly reported to the appropriate personnel.

### **RANGE STATEMENT**

This unit applies to activities associated with essential operations linked to using and maintaining basic computer equipment.

### Equipment:

- install supplied computer
- install supplied peripherals

### Input devices:

- keyboard
- mouse
- scanner
- microphone
- camera

### Software systems to include for:

- word processing
- spread sheet
- internet access

### Files save on:

- network
- magnetic media
- personal PC

#### Work environment:

- equipment
- furniture
- cabling
- power supply

### Data:

- textual
- numerical
- graphical

### File operations:

Naming, updating, archiving, traversing field and records in database, use of search, sort, print

### Maintenance:

- cleaning: enclosures, screen, input devices, output devices
- checking cables, etc

### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to accurately carry out basic data entry and retrieval operations on a computer system in accordance with the performance criteria and the range listed within the range of variables statement.

### (1) Critical Aspects and Evidence

It is essential that competence be observed in the following aspects:

- Initiate the use on the equipment.
- Use document layout and data format facilities.
- Locate and access data.
- Use file operations.
- Manipulate input devices.
- Key-in and format reports.
- · Access to the internet.

### (2) Pre-requisite Relationship of Units

Nil

### (3) Underpinning Knowledge and Skills

## Knowledge of:

- safety for working with and around computers
- computer hardware and software systems
- procedure for initiating and closing down computer
- the operation of the data entry
  - o management system
- methods of locating files
- organisation's standards applicable to
  - o accessing files
- files operations and their applications
- file operation in database setting
- creating, locating and saving files
- using input devices
- using data checking devices
- · formatting functions of software
- · layout function of software
- graphic productions and manipulation
- · regard for accuracy and security of
  - information
- functions on the internet

#### Skills

### The ability to:

- identify computer hardware
- manipulate data input devices
- access data
- use file operations
- key-in and format reports and letters
- retrieve data
- amend data
- print data
- save data
- search and receive data from the internet
- send and receive E-Mail

### (4) Resource Implications

Files saved on network, magnetic media, and personal Computer

Input devices: Keyboard, mouse, other selection devices

### (5) Method of Assessment

Competency shall be assessed while work is undertaken under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competencies in this unit may be determined concurrently. Assessment must be in accordance with the performance criteria.

### (6) Context of Assessment

This unit may be assessed on or off the job. Assessment should include practical demonstration either in the workplace or through a simulation. A range of methods to assess underpinning knowledge should support this

### CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>					

Collect, analyse and organise information	Level 1
Communicate ideas and information	Level -
Plan and organise activities	Level 1
Work with others and in team	Level 1
Use mathematical ideas and techniques	Level 1
Solve problems	Level 1
Use technology	Level -

### **AGHORT0021A:** Prune shrubs and small trees

Competency Descriptor:

This unit deals with the skills and knowledge required to prune ornamental trees and shrubs. The work is likely to be undertaken from the ground. Aerial pruning, either from a ladder, an elevated work platform or from climbing ropes and rigging in a tree is covered in separate units.

Competency Field: Agriculture - Horticulture

### ELEMENT OF COMPETENCY PERFORMANCE CRITERIA

ELEMENT OF COMPETENCY		PERI	PERFORMANCE CRITERIA		
1.	Identify pruning requirements	1.1	Pruning requirements are established based on sound horticultural practices and consistent with enterprise policy and guidelines.		
		1.2	Plants requiring pruning are identified.		
		1.3	Type of pruning required is determined according to supervisors' instructions.		
		1.4	Appropriate tools and equipment required for pruning are identified.		
		1.5	Access to site is determined in consultation with the field supervisor.		
		1.6	Disposal of waste materials is determined according to enterprise policy.		
2.	Prepare for pruning	2.1	Pruning tools and equipment is selected in accordance to location, access and size of material to be pruned.		
		2.2	Safety equipment and personal protective equipment is prepared in line with pruning task requirements.		
3.	Undertake pruning of shrubs and trees	3.1	Plant material to be removed is identified according to pruning program requirements.		
		3.2	Branches are cut according to established horticulture practice.		
		3.3	Tools and equipment are used according to supervisors' instructions and manufacturer's guidelines.		

- 3.4 Disposal of waste materials is completed according to enterprise policy.
- 3.5 Site is cleaned and made good on completion of pruning activities.

### **RANGE STATEMENT**

This unit of competency should be demonstrated in accordance with the:

 policies and procedures in regard to the pruning of trees and shrubs

Equipment used may include:

- chipper
- small chainsaws
- ropes
- handsaws
- secateurs
- lopper
- hedge shears
- ladders
- wheel barrows

Pruning requirements may include:

- pruning for shape
- fruit and flower production
- · health and vigour
- clearance for services and access

Legislation, codes and national standards relevant to the workplace may include:

- OHS and hygiene requirements
- First Aid regulations/requirements

Types of pruning may include:

- · formative and corrective
- preventative
- ornamental pruning and canopy lifting
- thinning
- reduction
- management

Pruning techniques may include removal of:

- damaged diseased and dead wood
- flowers
- foliage

### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to safely and efficiently apply knowledge and skills to a range of pruning tasks and roles within established enterprise routines

### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- apply knowledge of principles and methods of pruning to achieve given objectives
- apply knowledge of the effects of pruning operations on plant growth and habit
- · apply principles relating to the choice and use of equipment for pruning
- determine pruning requirements
- plan for pruning
- undertake pruning of trees and shrubs

### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with

AGGCOR0021A Observe workplace health and safety requirement

### (3) Underpinning Knowledge and Skills

### Knowledge

Knowledge of:

- principles and methods of pruning to achieve given objectives
- effects on plant growth and habit by pruning operations
- plant physiology
- principles relating to the choice and use of equipment for pruning
- methods of pruning
- reasons for pruning
- reasons for treating tree wounds after pruning
- basic First Aid
- OHS in regard to pruning

### **Skills**

The ability to:

- determine pruning requirements
- plan for pruning
- prune trees and shrubs
- treat wounds after pruning
- repair damaged trees
- select and use pruning tools and equipments
- follow supervisor's and or client's instruction
- consistently use time efficiently
- apply enterprise polices/procedures in regard to the pruning of a range of trees and shrubs
- ability to collect pruned material clearly and efficiently and disposal of
- apply safe work practices and emergency procedures in regard to the planting trees and shrubs, safe handling of products and equipments, according to OHS regulations/requirements and First Aid

### (4) Resource Implications

The following resources should be made available:

- ornamental plants with a range of ground pruning needs
- · a range of ground pruning equipment

### (5) Method of Assessment

Competency shall be assessed through a combination of direct observation, intermittent checking and questions related to underpinning knowledge Competencies in this unit may be demonstrated concurrently.

### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with a range of plants requiring ground pruning needs. The underpinning knowledge may be assessed off-the-job with the use of written or verbal items inclusive of multiple choice, short answer or project.

### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

### AGLPOL0011A: Handle eggs for the domestic market

Competency Descriptor:

This unit deals with the skills and knowledge required to collect, check quality, grade, package, and store eggs for human consumption.

Competency Field: Agriculture - Livestock

ELH	EMENT OF COMPETENCY	PERF	ORMANCE CRITERIA
1.	Collect eggs	1.1	Eggs are collected from the farm areas according to the requirements of the farm using equipment and machinery provided.
		1.2	Egg cleaning, identification, handling, grading and packing procedures are carried out according to industry requirements.
		1.3	Records of all collections are completed accurately.
2.	Wash eggs	2.1	Prepare items needed for washing eggs.
		2.2	Washing liquids are prepared and tested for activity during use.
		2.3	Eggs are washed according to enterprise and industry policy.
3.	Measure and check egg quality	3.1	Eggs are observed for shell quality, shape and any abnormalities, which will affect their end use.
		3.2	Eggs are candled and sorted according to industry requirements.
4.	Grade eggs	4.1	Eggs are graded into appropriate weight and quality.
		4.2	Dirty, cracked or weak-shelled eggs removed and reported to supervisor.
		4.3	Grading records are completed.
5.	Pack eggs	5.1	Eggs are placed in correct trays or cartons with "best before" date calculated and stamped on the package.
		5.2	Cartons are assembled, packed, sealed and labelled.

6. Store eggs. 6.1 Cool room and equipment are cleaned, sanitised, and checked for efficient operation. 6.2 Eggs are stored as instructed with regard to position, temperature, humidity and period of storage according to industry standards. 6.3 Egg stock is recorded and reported to the unit manager. 6.4 Complete egg transfer to storage area in order of age, grade or dispatch. 7 Clean and disinfect 7.1 Egg handling area is washed out and disinfected. All machines and equipment are flushed and sanitised after equipment use. 7.2 Facility is maintained to prevent harbouring of microorganisms which could contaminate eggs.

### RANGE STATEMENT

Legislation, codes and national standards relevant to the workplace may include:

- Jamaica Livestock Association regulations
- Local health regulations
- OHS and hygiene requirements
- First Aid regulations/requirements

Quality monitoring of eggs may include:

- grade, date and age of egg
- quantity
- eggs are dry
- donor flock source
- accuracy of documentation

Egg grading standards:

- may be set by the customers
- may include a requirement for candling

This unit of competency should be demonstrated in accordance with the :

- policies and procedures of preparing eggs for the market
- monitoring the quality of eggs

Egg storage includes factors:

- humidity
- temperature
- egg age

Animals may include:

layer birds

Maintaining structural hygiene applies to areas where eggs are washed or further processed, and this includes:

- clean walls
- doors
- roofs
- lights
- · dust removed from high areas
- lights dusted
- · all areas with water drained
- wall/floor junctions sealed to prevent entry of micro-organisms

OHS issues that impact upon the performance of this unit includes:

- · safe bird handling systems
- systems and procedures to protect from gases and organic dusts
- systems and procedures for the safe operation and maintenance of machinery and equipment
- safe system and procedures for storage

Equipment, facility and material may include:

- egg baskets/flats
- sanitizer
- mechanical egg washer
- sponge
- storage room and dark room
- nest box
- laying birds
- candler
- egg scale
- refrigerator

### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to effectively prepare eggs for market. Emphasis should be placed on collecting, cleaning, packing, and storing eggs.

Eggs with optimal hygiene and egg age are received.

### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to efficiently

- collect and clean eggs
- determine egg quality
- grade and label eggs
- pack and store eggs according to industry specifications
- safe manual handling systems and procedures to protect from electrical hazards
- consistently follow supervisor's instructions
- report and record within established routines

### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with

AGGCOR0021A Observe workplace health and safety requirement

AGGCOR0041A Use hazardous substances safely

AGGCOR0031A Plan and organize work

### (3) Underpinning Knowledge and Skills

## Knowledge of:

## • the need to maximise hygiene practices

- egg hygiene
- storage equipment maintenance
- hygiene in egg cool rooms
- importance of temperature and humidity with egg storage
- collecting and cleaning eggs
- · determine the quality of the eggs
- procedures for grading, packing, labeling and storing eggs
- structure of the egg
- abnormalities in eggs
- manual handling procedures for electrical equipment
- procedures for calculating, ratio and proportion and percentages
- simple arithmetic
- time management skills
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures
- records and record keeping
- poultry behaviour
- candling of eggs
- disposal of eggs that are below standard

#### Skills

### The ability to:

- collect and clean eggs
- collect floor egg percentage data
- adjust cool room temperatures
- grade and pack eggs
- store eggs
- pack eggs for transport
- calculate ratio and proportion and percentages
- apply time management skills
- apply verbal and non verbal communication skills
- apply OHS regulations and procedures
- apply First aid procedures
- candle eggs

### (4) Resource Implications

The following resources should be made available:

- laying birds, eggs
- · candling equipment
- refrigerator/cool room
- · collecting buckets

### (4) Method of Assessment

Assessment may be by intermittent checking at various stages of each task application or at the completion of each task and questioning related to the underpinning knowledge.

Competencies in this unit may be demonstrated concurrently.

### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with a range of tasks related to collecting and preparing eggs for the domestic market

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 3.					
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collecting, analysing and organising ideas and information	Level 1	
Communicating ideas and information	Level 1	
Planning and organising activities	Level 1	
Working with others and in teams	Level 1	
Use mathematical ideas & techniques	Level 1	
Solve problems	Level 1	
Using technology	Level 1	

### AGLSSR0021A

# Select feed, feed goats and sheep and maintain sanitary condition of feed equipment

Competency Descriptor:

This unit deals with the skills and knowledge required to select feed, feed goat and clean and sanitize feed equipment.

Competency Field: Agriculture - Livestock

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1.	Check body weights	1.1	Goats and sheep are correctly herd and restrained for weighing.
		1.2	Weighing of goats and sheep is carried out according to enterprise requirements.
		1.3	Weight and condition of goats and sheep are recorded accurately.
2.	Select feed and feeding equipment	2.1	Appropriate feed is selected for the stage of development and purpose for which goats and sheep are reared.
		2.2	Correct equipment (feeders) is selected.
3.	Collect feed and feed goats/sheep	3.1	The correct type, quality and quantity of feed is collected.
		3.2	Feed is accurately measured as directed.
		3.3	Goats and sheep are fed and observed to ensure all animals are feeding.
		3.4	Goat and sheep movements and feeding are recorded to enterprise requirements.
4.	Provide water for goats/sheep	4.1	Correct equipment (waterers) is selected.
		4.2	Clean, fresh, adequate water is available at all times.
5.	Store feed	5.1	Storage space for feed is prepared according to enterprise requirements.
		5.2	Feed correctly stacked on shelves or pallets to allow for easy checking/counting.
		5.3	Date, time and quantity of feed accurately recorded.

- 6. Clean and sanitize feed and water equipment
- 6.1 Remove stale/contaminated feed and water from equipment daily.
- 6.2 Feed and water equipment are sanitized according to enterprise standards to avoid bacteria build-up.
- 6.3 Select appropriate sanitizers and disinfectants.
- 6.4 Use sanitizers and disinfectant according to manufacturer's/enterprise requirements.

#### **RANGE STATEMENT**

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

Legislation, codes and national standards relevant to the workplace may include:

- Jamaica Goat Farmers Association.
- Local health regulations.
- OHS and hygiene requirements.
- First Aid regulations/requirements

#### Animals may include:

- meat breeds/type
- dairy breeds/type
- dual purpose

#### Feed and feed supplements may include:

- roughages
- concentrates
- grasses
- legumes
- grains
- by-product such as wheat middling, citrus pulp etc.
- mineral supplements
- additives

This unit of competency should be demonstrated in accordance with the:

- policies and procedures in regard to the selecting of feed for goats and feeding goats
- sanitizing of goat unit and equipment

Types of housing/pens may include:

- ground level type
- stilted type
- herring bone

Water checks may include:

- availability
- serviceability
- flow rate
- reserves
- number of goats using the water point
- water quantity
- presence of contamination

OHS issues that impact upon the performance of this unit may include:

- safe goat and sheep handling system and procedures
- · safe manual handling systems and procedures
- safe feed materials handling systems and procedures to reduce risk associated with organic dusts
- safe systems and procedures for working outdoors, including protection from solar radiation

#### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to select appropriate feed, feed goat and sheep, store feed and clean and sanitize feed equipment.

#### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to efficiently:

- · collect and measure feed
- feed goats and sheep
- clean and disinfect feeding and storage area, and equipment to the standard required by enterprise
- consistently follow supervisor's instructions
- report and record within established routines

#### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with

- AGGCOR0011A Maintain the work environment
- AGGCOR0021A Observe workplace health and safety requirement
- AGGCOR0041A Use hazardous substances safely

#### (3) Underpinning Knowledge and Skills

#### **Knowledge**

#### Knowledge of:

- · Goat and sheep weighing equipment
- · goat and sheep behaviour
- goat and sheep nutrition
- digestive system of the goat and sheep
- feed and water equipment
- · collect and weighing feed
- · breeds and types of goats and sheep
- records and record keeping
- nutritive value of feeds
- types of feed and feeding supplements
- · feeding systems used in goat rearing
- factors affecting feed efficiency
- mixing feed
- storing feed
- types of feeders and waterers procedures for cleaning feeding and watering equipment
- health and safety requirements for handling goats and sheep
- space requirements for goat
- feed conversion, mortality and liveability ratio
- · cost to produce a kg of meat
- procedures for measuring length
- procedures for calculating area, volume, ratio and proportion
- time management skills
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures

#### Skills

#### The ability to:

- assess condition of goat and sheep
- identify breeds and types of goats and sheep
- select feed
- collect feed
- feed goats and sheep
- provide water for goats
- · restrain and weigh goats and sheep
- store feed
- sanitize feed and water equipment
- · clean and disinfect goat pen/house
- calculate space requirements for goat
- maintain records
- calculate feed conversion, mortality and liveability ratio
- calculate cost to produce a kg of meat
- measure length
- calculate area, volume, ratio and proportion
- apply time management skills
- apply verbal and non verbal communication skills
- apply OHS regulations and procedures
- apply First aid procedures

#### (4) Resource Implications

The following resources should be made available:

- different breeds and types of goats
- feed and water equipment
- goat pen/ house
- feed
- water
- scale/weighing equipment
- detergents/disinfectant
- store room
- pallets
- record book

#### (5) Method of Assessment

Assessment may be by intermittent checking at various stages of each task application or at the completion of each task and questioning related to the underpinning knowledge

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with selecting of feed for and feeding goats of different breeds and types.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

#### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

# AGLSSR0031A Select feed, feed rabbits and maintain sanitary condition of feed equipment

Competency Descriptor: This unit deals with the skills and knowledge required to select feed,

feed rabbits and clean and sanitize rabbitry and equipment.

Competency Field: Agriculture - Livestock

EL	EMENT OF COMPETENCY	PERI	FORMANCE CRITERIA
1.	Identify types of rabbit feed and feeding equipment	1.1	Types of feed suitable for feeding rabbits at different stages of development are identified.
		1.2	Types of feeders and waterers used in rabbit rearing are identified.
2.	Collect feed and feed rabbits	2.1	The correct type and quality of feed collected.
		2.2	Feed accurately measured as directed.
		2.3	Feed mixed and handled as directed by supervisor.
		2.4	Rabbits are fed and observed to ensure all animals are feeding.
		2.5	Rabbits' movements and feeding are recorded to enterprise requirements.
3.	Operate and maintain feeders where applicable	3.1	Feeders are filled with the correct type of feed daily.
		3.2	Contaminated feed is removed prior to feeding.
4.	Provide water for rabbits	4.1	Clean, fresh, and adequate water provided at all times.
		4.2	Correct equipment selected (waterers).
5.	Store feed	5.1	Storage space for feed prepared according to enterprise requirements.
		5.2	Feed correctly stacked on shelves or pallets to allow for easy checking/counting.
		5.3	Date, time and quantity of feed accurately recorded.

- 6. Clean and sanitize feed and water equipment
- 6.1 Stale/contaminated feed and water removed from equipment daily.
- 6.2 Feed and water equipment cleaned daily.
- 6.3 Appropriate sanitizers and disinfectants selected.
- 6.4 Sanitizers and disinfectant used according to manufacturer's/enterprise requirements.

#### **RANGE STATEMENT**

This unit of competency should be demonstrated in accordance with the policies and procedures in regard to the:

- selecting of feed for rabbits and feeding rabbits
- sanitizing of rabbit unit and equipment

Feed and feed supplements may include:

- root crops carrots, turnips
- grasses timothy, Johnson, Sudan
- leaumes
- grains oats, barley, Soya beans, wheat
- · commercial pelleted rations
- leafy green vegetables
- palatable weeds

Equipments may include:

- buckets, scales, shovels, wire brush
- scoop, wheelbarrow, cage, respirator
- manual and automatic feeders
- sprayer, broom, hose, fork, rake

OHS issues that impact upon the performance of this unit may include:

- safe rabbit handling system and procedures
- safe manual handling systems and procedures
- safe feed materials handling systems and procedures to reduce risk associated with abnormalities
- safe systems and procedures for working outdoors, including protection from solar radiation

Legislation, codes and national standards relevant to the workplace may include:

- Local health regulations
- OHS and hygiene requirements
- First Aid regulations/requirements

Types of housing/pens may include:

- flat deck cage
- single hutch
- morant system
- tiered cage
- tiered hutches
- · colony system

Purpose for which animals are reared may include:

- meat
- show /exhibition
- pelt
- laboratory work

Water checks may include:

- availability
- serviceability
- flow rate
- reserves
- water quantity
- presence of contamination

different breeds of rabbits

Materials and supplies may include:

Animals may include:

- sanitizer
- disinfectants
- pesticides

Abnormalities that may result from improper feeding include:

• digestive disorders, goiter, deaths

**EVIDENCE GUIDE** 

Competency is to be demonstrated by the ability to select appropriate feed, feed goat, store feed and clean and sanitize holding area/goat pen and equipment.

#### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to efficiently

- collect and measure feed
- feed rabbits
- clean and disinfect feeding and storage area, and equipment to the standard required by enterprise.
- consistently follow supervisor's instructions
- report and record within established routines

#### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with

AGGCOR0011A Maintain the work environment

AGGCOR0021A Observe workplace health and safety requirement

AGGCOR0041A Use hazardous substances safely

AGGCOR0031A Plan and organise work

#### (3) Underpinning Knowledge and Skills

#### Knowledge

#### Knowledge of:

- rabbit behaviour
- rabbit nutrition
- digestive system of the rabbit
- feed and water equipment
- collect and weigh feed
- breeds and types of rabbits
- types of rabbit houses
- housing requirements of rabbits
- records and record keeping
- · nutritive value of feeds
- types of feed and feeding supplements
- feeding systems used in rabbit rearing
- factors affecting feed efficiency
- mixing feed
- storing feed
- types of feeders and waterers
- procedures for cleaning feeding and watering equipment
- health and safety requirements for handling rabbits
- space requirements for rabbit
- feed conversion, mortality and liveability ratio
- cost to produce a kg of meat
- procedures for measuring weight, length
- procedures for calculating area, volume, ratio and proportion
- time management skills
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures

#### Skills

#### The ability to:

- assess condition of rabbits
- identify breeds and types of rabbits
- select feed
- collect feed
- feed rabbits
- provide water for rabbits
- weigh rabbits
- store feed
- sanitize feed and water equipment
- clean and disinfect rabbit house
- calculate space requirements for rabbit
- maintain records
- calculate feed conversion, mortality and liveability ratio
- calculate cost to produce a kg of meat
- measure length, weight
- calculate area, volume, ratio and proportion
- · apply time management skills
- apply verbal and non verbal communication skills
- apply OHS regulations and procedures
- apply First aid procedures

#### (4) Resource Implications

The following resources should be made available:

- different breeds and types of rabbits
- feed and water equipment
- rabbit house
- feed
- water
- scale/weighing equipment
- detergents/disinfectant/sanitizers
- store room
- pallets
- record book

#### (5) Method of Assessment

Assessment may be by intermittent checking at various stages of each task application or at the completion of each task and questioning related to the underpinning knowledge

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with selecting of feed for and feeding RABBIT of different types.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

#### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 1. Level 2. Level 3.					
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## AGLCAT0011A Select feed, feed cattle and maintain sanitary condition of feed equipment

Competency Descriptor: This unit deals with the skills and knowledge required to select feed,

feed cattle and clean sanitize pen, holding area and equipment.

Competency Field: Agriculture - Livestock

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA		
1.	Weigh cattle	1.1	Supervisor's instruction for weighing cattle is followed.	
		1.2	Weight is accurately checked and recorded.	
2.	Select feed	2.1	Types of feed suitable for feeding cattle at different stages of development are identified.	
		2.2	Adequate feeding space for cattle is provided.	
3.	Collect feed and feed cattle	3.1	The correct type, quality and quantity of feed is collected.	
		3.2	Feed is accurately measured as directed.	
		3.3	Cattle are fed and observed to ensure all animals are feeding.	
		3.4	Cattle movements and feeding are recorded to enterprise requirements.	
4.	Provide water for cattle	4.1	Clean, fresh, adequate water is provided at all times.	
		4.2	Correct equipment is selected (waterers).	
5.	Store feed	5.1	Storage space for feed is prepared according to enterprise requirements.	
		5.2	Feed is correctly stacked on shelves or pallets to allow for easy checking/counting.	
		5.3	Date, time and quantity of feed is accurately recorded.	
6.	Clean and sanitize feed equipment	6.1	Stale/contaminated feed and water are removed from equipment daily.	
		6.2	Feed and water equipment are sanitized according to enterprise standards.	

- 6.3 Appropriate sanitizers and disinfectants are selected
- 6.4 Sanitizers and disinfectant are used according to manufacturer's/enterprise requirements.

#### **RANGE STATEMENT**

This unit of competency should be demonstrated in accordance with the:

- policies and procedures in regard to the selecting of feed for and feeding cattle
- sanitizing of holding area/dairy unit and equipment

Animals may include:

- different breeds of cattle
- · cattle of varying stage of development
- dairy
- beef
- lactating cow

Breeds of cattle may include:

- Jamaica Hope
- Jersey
- Holstein
- Guernsey
- Brown Swiss
- Jamaica Red Jamaica Black
- Jamaica Brahman
- Charolais
- Hereford
- Santa Gertudis
- Aberdeen Angus
- Red Poll

OHS issues that impact upon the performance of this unit may include:

- safe cattle handling system and procedures
- · safe manual handling systems and procedures
- safe feeding materials handling systems and procedures to reduce risk associated with organic dusts
- safe systems and procedures for working outdoors including protection from solar radiation

Legislation, codes and national standards relevant to the workplace may include:

- Jamaica Cattle Breeders Association
- Local health regulations
- OHS and hygiene requirements
- First Aid regulations/requirements

Types of housing requirements may include:

- milking house
- calf pens
- feed lots
- pasture

Feeding directions may include:

- what to feed
- frequency of feeding
- amount per animal
- method of feeding
- what to avoid and what to record

Water checks may include:

- availability
- serviceability
- flow rate
- reserves
- number of cattle per waterer
- water quantity
- presence of contaminants

Feed and feed supplement may include:

- grains
- by-product such as wheat middling, citrus pulp, molasses etc.
- forage
- mineral supplement
- additive

#### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to select appropriate feed, feed cattle, store feed and clean and sanitize feed equipment.

#### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- efficiently and consistently provide clean, fresh adequate feed and water for cattle to ensure maximum growth and production
- select feed appropriate to the productive purpose and the stage of development of the cattle
- operate feeders and waterers
- store feed appropriately
- clean and sanitize holding area/dairy unit and equipment to the standard required by enterprise
- consistently follow supervisor's instructions
- · report and record within established routines

#### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with

- AGGCOR0011A Maintain the work environment
- AGGCOR0021A Observe workplace health and safety requirement
- AGGCOR0041A Use hazardous substances safely
- AGGCOR0031A Plan and organise work

#### (3) Underpinning Knowledge and Skills

#### **Knowledge**

#### Knowledge of:

- cattle behaviour
- nutrient requirement for various types of cattle
- nutritive value of feeds
- types of feed and feeding supplements
- digestive system in cattle
- feeding systems used in cattle rearing
- feed and water equipment
- collecting and weighing feed
- factors affecting feed efficiency
- mixing feed
- storing feed
- types of feeders and waterers
- procedures for cleaning feeding and watering equipment
- health and safety requirements for handling cattle
- breeds and types of cattle
- cattle housing requirements
- space requirements for cattle
- · types of records and record keeping
- feed conversion, mortality and liveability ratio
- cost to produce a kg of meat
- · procedures for measuring length
- procedures for calculating area, volume, ratio and proportion
- time management skills
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures

#### Skills

#### The ability to:

- · assess condition of cattle
- · identify breeds and types of cattle
- select feed
- collect feed
- feed cattle
- provide water for cattle
- · store feed
- clean and sanitize holding area/dairy unit and equipment
- calculate space requirements for cattle
- maintain records
- calculate feed conversion, mortality and liveability ratio
- calculate cost to produce a kg of meat
- measure length
- calculate area, volume, ratio and proportion
- time management skills
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures

#### (4) Resource Implications

The following resources should be made available:

- different breeds and class of cattle
- feed and water equipment
- holding area/dairy unit
- feed
- water

- scale/weighing equipment
- detergents/disinfectant
- store room
- pallets
- record book

#### (4) Method of Assessment

Assessment may be by intermittent checking at various stages of each task application or at the completion of each task and questioning related to the underpinning knowledge

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with selecting of feed for and feeding different breeds and classes of cattle.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

#### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collecting, analysing and organising ideas and information	Level 1	
Communicating ideas and information	Level 1	
Planning and organising activities	Level 1	
Working with others and in teams	Level 1	
Use mathematical ideas & techniques	Level 1	
Solve problems	Level 1	
Using technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

### **AGLCAG0001A:** Provide milking operations support

Competency Descriptor:

This unit deals with the skills and knowledge required to assist with milking operations.

Competency Field: Agriculture – Dairy Operation

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA		
1.	Prepare for milking	1.1	Farm dairy and yards are set up for milking in accordance with prior instructions and are prepared for full operation in a reasonable time.	
		1.2	Teat sprays are prepared in accordance with prior instructions and manufacturers specifications.	
2.	Get a dairy herd in for milking	2.1	Dairy herd is guided into holding area without injury, undue stress or risk of injury to any animal.	
		2.2	Gates are set up for the herd upon return according to prior instructions.	
3.	Manually milk cow to test for mastitis	3.1	Animals are checked and prepared according to industry guidelines and hygiene requirements.	
		3.2	Milk sample is systematically collected with minimum stress to animal.	
		3.3	Milk sample is handled according to industry guidelines.	
4.	Isolate milk unsuitable for collection	4.1	Appropriate animal is identified and separated from the herd as directed and milked in accordance with industry policy.	
		4.2	Unsuitable milk is isolated completely from the collection supply.	
		4.3	Hygiene practices are observed.	
5.	Isolate dairy animal(s) for further activities	5.1	Animal is identified, isolated and moved without injury or undue stress to a holding pen as directed.	
6.	Carry out post-milking cleaning procedure	6.1	Basic cleaning procedure performed and hygiene standards maintained as instructed.	

#### RANGE STATEMENT

Legislation, codes and national standards relevant to the workplace may include:

- State and Local Government regulations.
- · Local health regulations.
- OHS and hygiene requirements.
- First Aid regulations/requirements

Dairy sheds may include:

- rotary
- herring bone
- other designs

Equipment and materials may include:

- test cup/strip cup
- milk buckets, brush cold and hot water
- milking machine
- cleaning agents, sanitizer rags
- hose, scrub brooms, shovel
- scrapper/squeezer, wheel barrow

Isolation may include:

 separate milking of cows suspected to be having an infection or infected This unit of competency should be demonstrated in accordance with the:

- policies and procedures in regard to the milking operations
- designated operating hours

Animals may include:

· cow and goats

Cleaning areas may include:

- yards
- feeding area
- milking palour/shed

#### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to effectively apply dairy farm policies and procedures and industry codes of practice in regard to assisting with milking operations in a dairy.

#### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to efficiently and consistently:

- apply dairy farm policies and procedures and industry codes of practice in regard to assisting with milking operation
- prepare dairy equipment and yard for milking
- guide diary herd into holding area without injury and undue stress or risk of injury animal self or others
- check animals for mastitis according to industry guidelines and hygiene requirements
- identified and separated animals suspected to be infected or are infected from the herd as directed and milked
- consistently follow supervisor's instructions
- report and record within established routines

#### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with

AGGCOR0011A Maintain the work environment

• AGLSSR0001A Select feed, feed goats and sheep and maintain sanitary conditions in

holding area/pen

AGLCAT0001A Select feed, feed cattle and maintain sanitary conditions in holding

area/pen

#### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- milking policies and procedures and industry codes of practice in regard to sanitation and hygiene regulation
- general milking procedures
- · preparation of the milking area
- preparation of milking equipment
- use and care of milking machine/equipment
- methods of milking animals
- preparation of the animals for the milking process
- add, subtract, multiply, and divide whole numbers, decimals and fractions
- procedures for calculating volume, ratio and proportion, percentages
- time management skills
- verbal and nonverbal communication
- OHS regulations and procedures
- first aid procedures

#### Skills

The ability to:

- effectively prepare milking equipment, milking area and animals for milking
- read, comprehend and accurately record
- herd, move and count dairy animals
- Identify milking plant equipment and its controls
- milk cow/goat by hand
- clean and sanitize milking equipment
- add, subtract, multiply, and divide whole numbers, decimals and fractions
- apply procedures for calculating, volume, ratio and proportion, percentages
- apply time management skills
- apply verbal and nonverbal communication
- apply OHS regulations and procedures
- apply First aid procedures

#### (4) Resource Implications

The following resources should be made available:

- dairy animals suitable for milking
- milking palour/shed
- milking equipment
- test cups/buckets
- feed

#### (5) Method of Assessment

Assessment may be by intermittent checking at various stages of each task application or at the completion of each task and questioning related to the underpinning knowledge.

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

#### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgment of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

# AGLPOL0021A Select feed, feed poultry and maintain sanitary conditions of feed equipment

Competency Descriptor:

This unit deals with the skills and knowledge required to select feed, feed poultry, catch and weigh chickens, store feed and clean and sanitize equipment.

Competency Field: Agriculture - Livestock

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1.	Check body weights	1.1	Birds are correctly caught and held for weighing.
		1.2	Weighing of birds is carried out according to enterprise requirements.
		1.3	Weight and condition of poultry are recorded accurately.
2.	Select feed and feeding equipment	2.1	Appropriate feed is selected for the stage of development and purpose for which birds are reared.
		2.2	Correct equipment (feeders) is selected.
		2.3	Adequate feeding space for birds is provided.
3.	Collect feed and feed birds	3.1	The correct type, quality and quantity of feed are collected.
		3.2	Feed is accurately measured as directed.
		3.3	Birds are fed and observed to ensure all are feeding.
		3.4	Bird's movements and feeding are recorded to enterprise requirements.
4.	Provide water for birds	4.1	Correct equipment (waterers) is selected.
		4.2	Waterers are adjusted to height of birds.
		4.3	Clean, fresh, adequate water are made available at all times.
5.	Store feed	5.1	Storage space for feed are prepared according to enterprise requirements.
		5.2	Feed is correctly stacked on shelves or pallets to allow for easy checking/counting.
		5.3	Date, time and quantity of feed is accurately recorded.

- 6.1 Stale/contaminated feed and water are removed from equipment daily.
- 6.2 Feeders and waterers are sanitized according to enterprise standards to avoid bacteria build-up.
- 6.3 Appropriate sanitizers and disinfectants are selected.
- 6.4 Sanitizers and disinfectant are used according to manufacturer's/enterprise requirements.

#### **RANGE STATEMENT**

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

This unit of competency should be demonstrated in accordance with the:

- policies and procedures in regard to the selecting of feed for and feeding poultry
- · sanitizing of poultry house equipment

Animals may include:

- different breeds and types of poultry
- layer breeds
- meat breeds

Feeding programme may include:

- layer
- chick starter
- pullet grower
- pullet developer
- peak layer
- broiler
- starter ration
- grower ration
- straight broiler ration

Legislation, codes and national standards relevant to the workplace may include:

- Local health regulations.
- OHS and hygiene requirements.
- First Aid regulations/requirements.

Types of housing may include:

- lean-to
- gablin
- hip

Water checks may include:

- availability
- serviceability
- flow rate
- reserves
- number of birds per waterer
- water quantity
- presence of contamination

Breeds of chicken may include:

- Leghorn
- Plymouth Rock
- Rhode Island Red
- New Hampshire
- Cornish

Feeding directions may include:

- what to feed
- frequency of feeding
- amount per bird
- method of feeding
- what to avoid and what to record

OHS issues that impact upon the performance of this unit may include:

- safe bird handling system and procedures
- · safe manual handling systems and procedures
- safe feed materials handling systems
- procedures to reduce risk associated with organic dusts

#### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to select appropriate feed, feed poultry, store feed and clean and sanitize feed equipment.

#### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to efficiently.

- · collect and measure feed
- feed poultry
- clean and disinfect feeding and storage area, and equipment to the standard required by enterprise.
- consistently follow supervisor's instructions
- · report and record within established routines

#### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with

AGGCOR0011A Maintain the work environment

AGGCOR0021A Observe workplace health and safety requirement

AGGCOR0041A Use hazardous substances safely

AGGCOR0031A Plan and organise work

#### (3) Underpinning Knowledge and Skills

### <u>Knowledge</u>

#### Knowledge of:

- poultry weighing equipment
- procedure for catching chickens
- procedure for weighing chicken
- poultry behaviour
- poultry nutrition
- digestive system of the chicken/poultry
- · feed and water equipment
- · collect and weigh feed
- types of poultry
- breeds of chicken
- types of poultry houses
- housing and space requirements for poultry
- nutritive value of feeds
- types of feed and feeding supplements
- feeding systems used in poultry rearing
- factors affecting feed efficiency
- mixing feed
- storing feed
- types of feeders and waterers
- procedures for cleaning feeding and watering equipment
- health and safety requirements for handling chickens
- feed conversion, mortality and liveability ratio
- cost to produce a kg of meat
- · procedures for measuring length
- procedures for calculating area, volume, ratio and proportion
- time management skills
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures
- feed and water equipment
- collect and weigh feed
- records and record keeping

#### Skills

#### The ability to:

- · assess condition of poultry
- identify breeds and types of poultry
- · identify breeds and types of chickens
- select feed
- collect feed
- feed poultry
- provide water for poultry
- catch and weigh poultry
- store feed
- clean and sanitize poultry house and equipment
- calculate space requirements for poultry
- maintain records
- calculate feed conversion, mortality and liveability ratio
- · calculate cost to produce a kg of meat
- measure length
- calculate area, volume, ratio and proportion
- apply time management skills
- apply verbal and non verbal communication skills
- apply OHS regulations and procedures
- apply First aid procedures

#### (4) Resource Implications

The following resources should be made available:

- different breeds and types of poultry/chickens
- feed and water equipment
- poultry house
- feed
- water
- scale/weighing equipment
- detergents/disinfectant
- store room
- pallets
- · record book

#### (5) Method of Assessment

Assessment may be by intermittent checking at various stages of each task application or at the completion of each task and questioning related to the underpinning knowledge.

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with different breeds chicken/poultry.

The underpinning knowledge may be assessed off the job with the use of written or verbal items.

#### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

### AGLPIG0021A

# Select feed, feed pigs and maintain sanitary conditions of feed equipment

Competency Descriptor:

This unit deals with the skills and knowledge required to select feed, feed pigs, weigh pigs, store feed and clean and sanitize tools and equipment.

Competency Field: Agriculture - Livestock

EL	EMENT OF COMPETENCY	PER	FORMANCE CRITERIA
1.	Check body weights	1.1	Pigs are correctly caught and restrained for weighing.
		1.2	Pigs are weighed according to supervisor's instructions and enterprise requirements.
		1.3	Weight and condition of pigs are accurately recorded.
2.	Select feed	2.1	Appropriate feed is selected for the stage of development and purpose for which pigs are reared.
		2.2	Adequate feeding space is provided for pigs.
3.	Collect feed and feed pigs	3.1	The correct type, quality and quantity of feed are collected.
		3.2	Feed is accurately measured as directed.
		3.3	Pigs are fed and observed to ensure all animals are feeding.
		3.4	Pig movements and feeding are recorded to enterprise requirements.
4.	Provide water for pigs	4.1	Correct equipment (waterers/drip nipple) is selected.
		4.2	Waterers are adjusted to height of pigs.
		4.3	Clean, fresh, adequate water is provided at all times.
5.	Store feed	5.1	Storage space for feed is prepared according to enterprise requirements.
		5.2	Feed is correctly stacked on shelves or pallets to allow for easy checking/counting.
		5.3	Date, time and quantity of feed is accurately recorded.

## 6. Clean and sanitize feed and water points

- 6.1 Stale/contaminated feed and water are removed from equipment daily.
- 6.2 Feed and water equipment is sanitized according to enterprise standards
- 6.3 Appropriate sanitizers and disinfectants are selected
- 6.4 Sanitizers and disinfectant are used according to manufacturers/enterprise requirements.

#### **RANGE STATEMENT**

Legislation, codes and national standards relevant to the workplace may include:

- State and Local Government regulations.
- Local health regulations.
- OHS and hygiene requirements.
- First Aid regulations/requirements

Feed and feed supplement may include:

#### Grains:

- starter feed
- grower feed
- sow and boar ration
- finisher
- legumes/cereal/pasture
- carbohydrates
- proteins
- minerals
- vitamins

Breeds of pigs may include:

- Landrace
- Berkshire
- Duroc
- Hampshire
- Hereford
- Poland China
- Tamworth
- Large White
- Jersey

This unit of competency should be demonstrated in accordance with the :

- policies and procedures in regard to the selecting of feed for and feeding pigs
- sanitizing of piggery unit and equipment

Water checks may include:

- availability
- serviceability
- flow rate
- reserves
- number of pigs per waterer
- water quantity
- presence of contamination

OHS issues that impact upon the performance of this unit may include:

- safe pig handling system and procedures
- safe manual handling systems and procedures
- safe feed materials handling systems and procedures to reduce risk associated with organic dusts
- safe systems and procedures for working outdoors, including protection from solar radiation

Feeding directions may include:

- · what to feed
- frequency of feeding
- amount per pig
- method of feeding
- what to avoid and what to record

Pigs reared to include:

- meat
- ham and bacon

Class of pigs to include:

- piglets
- weaners
- fatteners
- sow
- boar

Types of housing may include:

- indoor/dry-lot system
- outdoor/pasture-shed system
- pasture

Animals may include:

different breeds of pigs

#### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to select appropriate feed, feed pigs, catching and weighing pigs, storing feed and clean and sanitize feed equipment.

#### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to efficiently

- efficiently and consistently provide clean, fresh adequate feed and water for pigs to ensure maximum growth and production
- · collect and measure feed
- clean and disinfect feeding and storage area, and equipment to the standard required by enterprise
- · consistently follow supervisor's instructions
- report and record within established routines

#### (2) Pre-requisite Relationship of Units

This unit should be assessed after the completion of or in conjunction with

AGGCOR0011A Maintain the work environment

• AGGCOR0021A Observe workplace health and safety requirement

AGGCOR0041A Use hazardous substances safely

AGGCOR0031A Plan and organise work

#### (3) Underpinning Knowledge and Skills

#### Knowledge

#### Knowledge of:

- pig weighing equipment
- procedure for catching and restraining pigs
- pig behaviour
- pig nutrition/digestive system of the pia
- feed and water equipment
- collect and weigh feed
- store feed
- health and safety requirements for handling pigs
- breeds and types of pigs
- · pig housing requirements
- space requirements for pigs
- records and record keeping
- feeding systems used in pig rearing
- factors affecting feed efficiency
- mixing feed
- procedures for cleaning feeding and watering equipment
- feed conversion, mortality and liveability ratio
- cost to produce a kg of meat
- procedures for measuring length
- procedures for calculating area, volume, ratio and proportion
- time management skills
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures
- feed and water equipment
- collect and weigh feed
- · records and record keeping

#### Skills

#### The ability to:

- assess condition of pigs
- identify breeds and types of pigs
- select feed
- · collect feed
- feed pigs
- provide water for pigs
- restrain and weigh pigs
- store feed
- clean and sanitize piggery unit and equipment
- calculate space requirements for pig
- maintain records
- calculate feed conversion, mortality and liveability ratio
- calculate cost to produce a kg of meat
- measure length
- calculate area, volume, ratio and proportion
- apply time management skills
- apply verbal and non verbal communication skills
- apply OHS regulations and procedures
- apply First aid procedures

#### (4) Resource Implications

The following resources should be made available:

- different breeds and class of pigs
- feed and water equipment
- piggery unit
- feed
- water

- scale/weighing equipment
- detergents/disinfectant
- store room
- pallets
- record book

#### (5) Method of Assessment

Assessment may be by intermittent checking at various stages of each task application or at the completion of each task and questioning related to the underpinning knowledge.

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job dealing with selecting of feed for and feeding pigs of different breeds, types and class.

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items.

#### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>					

Collecting, analysing and organising ideas and information	Level 1	
Communicating ideas and information	Level 1	
Planning and organising activities	Level 1	
Working with others and in teams	Level 1	
Use mathematical ideas & techniques	Level 1	
Solve problems	Level 1	
Using technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

### **AGMMCH0002A:** Sell products and services

Competency Descriptor: This unit involves the use of sales techniques and encompasses the key

selling skills from approaching the customer to closing the sale. It

requires a basic level of product knowledge.

Competency Field: Agriculture/Retail Operations

ELI	ELEMENT OF COMPETENCY PERFORMANCE CRITERIA		ORMANCE CRITERIA
1.	Apply Product Knowledge	1.1	Knowledge of the use and application of relevant products and services demonstrated.
		1.2	Experienced sales staff or product information guide consulted to increase product knowledge.
2.	Approach Customer	2.1	Timing of customer approach determined and applied.
		2.2	Effective sales approach identified and applied.
		2.3	Positive impression conveyed to arouse customer interest.
		2.4	Knowledge of customer buying behaviour demonstrated.
		2.5	Customer focused on specific merchandise.
3.	Gather Information	3.1	Questioning techniques applied to determine customer buying motives.
		3.2	Listening skills used to determine customer requirements.
		3.3	Non-verbal communication cues interpreted and clarified.
		3.4	Customers identified by name where possible.
4.	Sell Benefits	4.1	Customer needs matched to appropriate products and services.
		4.2	Knowledge of products' features and benefits communicated clearly to customers.
		4.3	Product use and safety requirements described to customers.
		4.4	Customers referred to appropriate product specialist as required.
		4.5	Routine customer questions are answered accurately and honestly or referred to more experienced senior sales staff.

5.	Overcome Objections	5.1	Customer objections identified and accepted.
		5.2	Objections categorised into price, time and merchandise characteristics.
		5.3	Solutions offered according to store policy.
		5.4	Problem solving applied to overcome customer objections.
6.	Close Sale	6.1	Customer buying signals monitored, identified and responded to appropriately.
		6.2	Customer encouraged to make purchase decisions.
		6.3	Appropriate method of closing sale selected and applied.
7.	Maximise Sales Opportunities	7.1	Opportunities for making additional sales recognized and applied.
		7.2	Customer advised of complementary products or services according to customer's identified need.
		7.3	Personal sales outcomes reviewed to maximise future sales.

#### **RANGE STATEMENT**

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

Routine customer questions about merchandise may include:

price

quality

price reductions

usage

#### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to sell products and services in accordance with the performance criteria and the range listed within the range of variables statement.

#### (1) Critical Aspects of Evidence

- applying product knowledge and using an appropriate sales approach to sell the benefits of products, overcome objections and close sales
- using questioning, listening and observation skills to accurately determine customer requirements
- consistently applying store policies and procedures, in regard to selling products and services
- · maximising sales opportunities according to store policies and procedures
- consistently applying industry codes of practice, relevant legislation and statutory requirements in regard to selling products and services
- evaluating personal sales performance to maximise future sales

#### (2) Pre-requisite Relationship of Units

Nil

#### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- store policies and procedures, in regard to:
  - selling products and services
  - allocated duties and responsibilities
- store merchandise and service range
- specific product knowledge for area/section
- basic operational knowledge of relevant:
  - statutory requirements,
  - including consumer protection law (Fair Trading Commission)
  - industry codes of practice,
  - Non-Government consumer
  - organizations

#### <u>Skills</u>

The ability to:

- verbal and non verbal communications
- questioning/listening/observation
- handling difficult customers
- negotiating
- problem solving
- sales performance appreciation

#### (4) Resource Implications

All resources must be provided for the assessment. If workplace based, the resources should relate specifically to store policies, procedures and range of stock and equipment. If an off the job or simulated work environment is used then resources should be generic and be applicable to a wide variety of stores/work environments. Resources may include:

A real or simulated retail environment.

Access to a range of customers with different requirements (real or simulated).

Relevant documentation, such as:

- stock/inventory/price lists
- sales order forms
- store policy and procedures manuals

A range of merchandise and products appropriate to the retail workplace.

Product labels and sources of product information.

#### (5) Method of Assessment

Competency is demonstrated by performance of all stated criteria according to the range of variables applicable to the workplace.

Evidence should be gathered attesting to the achievement of competence by the candidate to the standard required for each element in this unit of competency.

Evidence is best gathered using the products, processes and procedures of the individual workplace context as the means by which the candidate achieves retail industry competencies.

In order to ensure consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of retail situations.

Assessment activities may also include written or verbal short answer testing, multiple choice testing, practical exercises, role plays, research/project work or observation of practical demonstration.

#### (6) Context of Assessment

Elements of competency contain both theoretical and practical components. The theoretical components may be assessed off the job. The practical components should be assessed either in a work or simulated work environment.

#### CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

#### **AGMMCH0012A:** Operate point of sale systems

Competency Descriptor: This unit involves operations at the point of sale area. It

> encompasses procedures for use of point of sale equipment and for completing a sales transaction in a retail nursery or farm store.

Competency Field: Agriculture/Retail Services

ELI	EMENT OF COMPETENCY	PERF	TORMANCE CRITERIA
1.	Operate Point of Sale Equipment	1.1	Point of sale equipment operated according to design specifications.
		1.2	Point of sale terminal opened and closed according to store procedure.
		1.3	Point of sale terminal cleared and tender transferred according to store procedure.
		1.4	Cash handled according to store security procedures.
		1.5	Supplies of change in point of sale terminal maintained according to store policy.
		1.6	Active point of sale terminals attended according to store policy.
		1.7	Records completed for transaction errors according to store policy.
		1.8	Adequate supplies of dockets, vouchers and point of sale documents maintained.
		1.9	Customers informed of delays in the point of sales operation.
2.	Perform Point of Sale Transactions	2.1	Point of sale transactions completed according to store policy.
		2.2	Store procedures identified and correctly applied in respect of cash and non-cash transactions.
		2.3	Store procedures identified and applied in regard to exchanges and returns.
		2.4	Goods moved through point of sale area efficiently and with attention to fragility and packaging.
		2.5	Information entered into point of sale equipment accurately.

		2.6	Price/total/amount of cash received stated verbally to customer.
		2.7	Correct change tendered.
3.	Complete Sales	3.1	Customer order forms, invoices, receipts completed accurately.
		3.2	Customer delivery requirements identified and processed accurately, without undue delay.
		3.3	Sales transactions processed without undue delay or customers directed to point of sale terminals according to store policy.
4.	Wrap and Pack Goods	4.1	Adequate supplies of wrapping material or bags maintained/requested.
		4.2	Appropriate packaging material selected.
		4.3	Merchandise wrapped neatly and effectively where required.
		4.4	Items packed safely to avoid damage in transit, and labels attached where required.
		4.5	Transfer of merchandise for parcel pick-up or other delivery methods arranged if required.

# **RANGE STATEMENTS**

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

Customers may include:

- regular and new customers
- people from a range of social, cultural or ethnic backgrounds and physical and mental abilities
- point of sale equipment may be manual or electronic

Store policies and procedures in regard to:

- · operation of point of sale equipment
- security
- sales transactions

# Store facilities in regard to:

- customer service
- size
- type
- location of store
- wrapping techniques may vary
- according to merchandise range

Point of sale transactions may include:

- cash transactions
- non-cash transactions such as cheques, credit cards, smart cards, lay-by, credits and returns and gift vouchers

# Staffing may include:

Full-time, part-time or casual staff

Handling techniques may vary according to stock characteristics and industry codes of practice

#### **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to effectively communicate in the workplace in accordance with the performance criteria and the range listed within the range of variables statement.

### (1) Critical Aspects and Evidence

Evidence should include a demonstrated ability to:

- operate Point of Sale equipment according to manufacturers' instructions and store policies and procedures
- apply store policies and procedures in regard to cash handling and point of sale transactions, according to the range statement
- process sales transaction information responsibly and accurately according to store policies and procedures
- apply store policies and procedures in regard to the handling, packing and wrapping of goods/merchandise
- demonstrate Literacy skills in regard to written sales and delivery documentation
- demonstrate Numeracy skills in regard to handling cash

#### (2) Pre-requisite Relationship of Units

Nil

#### (3) Underpinning Knowledge and Skills

#### Knowledge

# Knowledge of:

- store policies and procedures, in regard to:
  - customer service
  - point of sale procedures/transactions
  - allocated duties and
  - responsibilities
  - processing information
- range of services provided by the store
- stock availability
- basic operational knowledge of relevant:
  - legislation and statutory
  - · requirements, including consumer protection law
- operational skills and techniques in:
- questioning/listening
- verbal and non verbal communication
- following set routines and procedures
- dealing with different types of transactions
- wrapping and packing techniques
- store bag checking procedures
- · merchandise handling techniques
- knowledge of cash and non cash handling procedures, including:
  - opening and closing point of sale
  - terminal
  - clearance of terminal and transference of tender
  - maintenance of cash float
  - tendering of change
  - counting cash
  - calculating non-cash documents
  - balancing point of sale terminal
  - · recording takings
  - security of cash and non-cash transactions change required and denominations of change
  - credit cards
  - gift vouchers
  - lay by
  - · credits, credit notes and returns
  - cheques / travellers cheques
  - · customer accounts
  - functions and procedures for
  - operating Point of Sale equipment, including:
  - registers
  - numerical display boards

# Underpinning Knowledge and Skills (Cont'd)

#### Knowledge

#### Knowledge of:

- calculators
- electronic scales
- scanners
- credit cards
- lay by
- · credits and returns
- cheques / travellers cheques
- customer accounts
- COD

#### <u>Skill</u>

# Ability to:

- Use a range of communication/electronic equipment
- Read and understand product information
- Read and understand store policies and procedures
- Record information
- Operate point of sale equipment
- · Perform point of sale transactions
- Complete sales
- Wrap and pack goods

#### (4) Resource Implications

The following resources should be made available:

Resources may include:

- · a real or simulated retail environment
- relevant documentation, such as:
  - financial transaction dockets/slips
  - stock/inventory/price lists
  - store policy and procedure manuals
  - a range of Point of Sale equipment and materials

# (5) Method of Assessment

Evidence is best gathered using the products, processes and procedures of the individual workplace context.

Evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of retail situations.

# Method of Assessment (Cont'd)

Evidence should be gathered attesting to the achievement of competence by the candidate to the standard required for each element and unit of competency.

The theoretical components may be assessed off the job.

The practical components should be assessed either in a work or simulated work environment. Assessment activities may include any one or a combination of the following: written or verbal short answer testing, multiple choice testing, practical exercises, role plays, research/project work or observation of practical demonstration.

#### (6) Context of Assessment

This unit may be assessed on or off-the-job. Assessment should include practical demonstration either on-the-job or in a simulated workplace environment. This should be supported by assessment of underpinning knowledge.

# CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

# BSBSBM0012A: Craft personal entrepreneurial strategy

Competency Descriptor: This unit deals with the skills and knowledge required to craft an

entrepreneurial strategy that fits with the attitudes, behaviours,

management competencies and experience necessary for entrepreneurs to

meet the requirements and demands of a specific opportunity.

Competency Field: Small Business Operations

# ELEMENT OF COMPETENCY PERFORMANCE CRITERIA

- 1. Demonstrate knowledge of the nature of entrepreneurship
- 1.1 Concepts associated with entrepreneurship are clearly defined.
- 1.2 Factors, which influence entrepreneurship in and outside of Jamaica, are correctly identified and explained.
- 1.3 The importance of entrepreneurship to economic development and employment is explained clearly.
- 1.4 The findings of research conducted on entrepreneurial ventures and successes in the Caribbean region are clearly presented in an appropriate format.
- 1.5 Differences between wage employment and entrepreneurial ventures are correctly stated.
- 2. Identify and assess entrepreneurial characteristics
- 2.1 Relevant research is carried out and required entrepreneurial characteristics identified.
- 2.2 Entrepreneurial characteristics identified are assessed and ranked.
- 2.3 An understanding of the process and discipline that enable an individual to evaluate and shape choices and to initiate effective action is correctly demonstrated.
- 2.4 Factors that will help an entrepreneur to manage the risk and uncertainties of the future, while maintaining a future orientated frame of mind, are identified.
- Develop self-assessment profile
- 3.1 Self-assessment tools/methods to identify personal entrepreneurial potential are identified and properly used.
- 3.2 The ability to apply creativity, problem-solving techniques and principles to solve business related problems are demonstrated.

- 3.3 Feedback from others for the purpose of becoming aware of blind spots and for reinforcing or changing existing perceptions of strengths/ weaknesses is appropriately obtained.
- 4. Craft an entrepreneurial strategy
- 4.1 A profile of the past that includes accomplishments and preferences in terms of life and work styles, coupled with a look into the future and an identification of what one would like to do is developed.
- 4.2 Commitment, determination and perseverance; orientation towards goals; taking initiative and accepting personal responsibility; recognizing management competencies and identifying areas for development are determined.
- 4.3 Written guidelines to obtain feedback that is solicited, honest, straightforward, and helpful but not all positive or negative are developed to facilitate reviews.
- 4.4 Framework and process for setting goals which demand time, self-discipline, commitment, dedication and practice are developed.
- 4.5 Goals established are specific and concrete, measurable, relate to time, realistic and attainable.
- 4.6 Priorities, including identifying conflicts and trade-offs and how these may be resolved are established.
- 4.7 Potential problems, obstacles and risks in meeting goals are identified.
- 4.8 Specified action steps that are to be performed in order to accomplish goals are identified.
- 4.9 The method by which results will be measured is indicated.
- 4.10 Milestones for reviewing progress and tying these to specific dates on a calendar are established.
- 4.11 Sources of help to obtain resources are identified.
- 4.12 Evidence of the ability to review process and periodically revise goals is demonstrated.

# **RANGE STATEMENT**

At this stage of the entrepreneurial process the entrepreneur must be able to conduct a self-assessment profile, examine the frame work for self assessment, develop a personal entrepreneurial strategy, identify data to be collected in the self-assessment process and learn about receiving feedback and setting goals.

Concepts associated to include:

- risk
- entrepreneurship
- macro-screening
- micro-screening
- competition
- wage employment

The entrepreneur must be able to:

- understand the extreme complexity in predicting or aligning him/herself to specific careers in an environment of constant change
- determine the kind of entrepreneur he or she wants to become based on attitudes, behaviours, competencies, experience and how these fit with the requirements and demands for a specific opportunity
- evaluate thoroughly his or her attraction to entrepreneurship
- effectively develop personal plan
- utilize available information that will enhance his or her ability to achieve success

Influencing factors to include:

- market conditions
- markets demand/supply
- global trends
- level of economic activities
- funding
- economic stability
- social stability
- resources availability

The entrepreneur may encounter setbacks if the planning process is not effectively pursued.

Pitfalls may include:

- proceeding without effective planning which may result in commitment to uncertainty
- personal plans fail for the same reasons as business plans including frustration if the plan appears not to be working immediately and the challenges of changing behaviour from an activityoriented routine to one that is goal oriented
- developing plans that fail to anticipate obstacles, and those that lack progress commitment to a premature path with the desirability of flexibility can lead to disaster
- milestones and reviews

# **EVIDENCE GUIDE**

Competency is to be demonstrated when the entrepreneur is able to undertake a personal entrepreneurial assessment exercise to determine if he or she possesses the necessary credentials to be a successful entrepreneur. This stage of the entrepreneurial process is critical since experience has shown that the founder is one of the deciding forces if the venture is to succeed and prosper.

# (1) Critical Aspects of Evidence

The entrepreneur will be assessed by his/her action in developing an orchestrated plan in order to effectively pursue the business concept.

#### (2) Pre-requisite Relationship of Units

Nil

# (3) Underpinning Knowledge and Skills

# Knowledge of:

- personal entrepreneurial profile systems
- effective management systems: marketing, operations/productions, finance, administration, law
- how to measure feedback
- the method of developing a personal plan
  - o and a business plan
- understanding the difference between entrepreneurial culture and management culture

#### Skills

The ability to:

- determine barriers to entrepreneurship
- minimize exposure to risk
- exploit any available resource pool
- tailor reward systems to meet a particular situation
- effectively plan and execute activities
- use computer technology to undertake assessments

#### (4) Resource Implications

The following resources should be made available:

Personal computer with access to the Internet and appropriate software that will enable one to conduct the necessary analysis using the Internet.

# (5) Method of Assessment

A useful method of assessment is to determine if the venture can stand up to the test of critical evaluation.

# (6) Context of Assessment

This stage of the entrepreneurial process is assessed when comparisons are made between actual outcomes and plans/projections.

# CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1	Level 2	Level 3					
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>					

Collect, analyse and organise information	Level 1
Communicate ideas and information	Level 1
Plan and organise activities	Level 1
Work with others and in team	Level 1
Use mathematical ideas and techniques	Level 1
Solve problems	Level 1
Use technology	Level 1

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

# AGHORT0002B: Pot plants

Competency Descriptor:

This unit deals with the knowledge and skills required to produce containerised nursery plants after propagation in production nurseries according to local regional and international protocols.

Competency Field: Agriculture - Horticulture

ELI	EMENT OF COMPETENCY	PEF	RFORMANCE CRITERIA
1.	Prepares standard potting medium	1.1	Tools and personal protective equipment collected and used appropriately.
		1.2	Media ingredients collected in proportions specified by supervisor.
		1.3	Ingredients mixed physically to achieve homogeneity and consistency.
		1.4	Water added to medium before potting to facilitate uniform transmission of moisture based on type of ingredients used in mix.
		1.5	Medium subjected to squeeze test periodically until desired cohesion is reached.
2.	Fills pots/bags	2.1	Medium added to pots/bags until physical capacity reached according to enterprise policy.
		2.2	Pots/bags tapped gently on potting table/bench to settle growing medium, taking care to prevent damage and over compaction.
		2.3	More medium added if necessary and tapped until settling ceases.
		2.4	Pots/bags transported loosely to potting area to prevent compaction.
3.	Lifts plants	3.1	Seed box/tray/bed or open field watered liberally two hours before removal if necessary.
		3.2	Appropriate tools used safely and efficiently.
		3.3	Plants lifted in a manner to avoid damage to roots and stems.
		3.4	Bare-rooted plants treated as necessary to maintain turgor and enhance growth when placed in pots/bags.

4. Grades plants

- 4.1 Plants sorted according to size, species, colour, health.
- 4.2 Substandard or unhealthy plants treated or discarded where necessary.
- 5. Pots propagated plants
- 5.1 Medium level in pots/bags adjusted to accommodate root volume.
- 5.2 Roots set in pots base on enterprise policy.
- 5.3 Medium returned to pot/bag and pressed gently to reestablish contact and anchorage.
- 5.4 Pots set out in designated area and treated to foster rapid recovery and growth.
- 5.5 Supports inserted and tensioned as defined by supervisors' instructions, and enterprise requirements as needed.
- 6. Maintains hygiene
- 6.1 Work environment cleaned and disinfected according to enterprise and company policies.
- 6.2 Debris and rogued plants disposed of according to environmental practice and company policies.
- 6.3 Tools and equipment cleaned, maintained and stored consistent with manufacturers' specifications and enterprise, and company policies.
- 6.4 Cleaning procedures performed and hygiene practices followed according to enterprise and manufacturers' guidelines.

# **RANGE STATEMENTS**

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit

Pots/containers may include

- Plug trays
- tubes
- polyethylene bags
- plastic pots
- clay pots/terra cotts

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica
- Pesticide Control Authority regulations
- Occupational Health & Safety (OHS)
- Hygiene requirements

#### Grading criteria may include:

- Size
- health
- height
- colour

#### Media components may include

- Sand.
- potting mix
- gravel
- sawdust
- soil
- Plant bark
- perlite
- vermiculite
- foam
- peat
- Amendments
- nutrients
- ash
- Rice hulls
- sphagnum moss
- commercial mixes
- Bagass
- filter press
- Peanut husk

#### PPE may include:

- Coverall
- hard boots
- gloves
- eye protection
- respirator
- ear muffs
- dust mask
- hard hat

#### Treatment before potting may include

- misting/cooling
- shading
- pruning of roots
- shoots
- removal of flowers or leaves

#### First Aid regulations/requirements

- ceramic pots
- concrete pots

#### Other equipment may include:

- Watering can
- bench
- bricks
- mist system
- fan
- concrete blocks
- humidifier
- shade or glass house
- plastic house
- tunnel house
- Mesh/sieve
- spade
- shovel
- wheel barrow
- fork
- shredder

# Treatment after potting may include:

- watering/misting
- shading
- provision of light
- adjustment in temperature
- humidity or air circulation
- puddling

# Established plants may include:

- plants with developed root systems in nursery bed or row
- potted plants to be transferred to new pots

Plants may be:

Potting may be done:

 lifted without growing medium (bare rooted), or with medium still attached

manuallymechanically

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply of knowledge and skills to the potting of plants

# (1) Critical Aspects and Evidence

Evidence should include a demonstrated ability to:

- · consistently follow supervisor's instructions
- select appropriate potting media
- select appropriate pots/containers
- · use efficient methods to pot plants
- follow correct procedures for potting plants
- report and record within established routines

# (2) Pre-requisite Relationship of Units

Nil

# (3) Underpinning Knowledge and Skills

# Knowledge of:

 media types, application to production outcomes and preferred uses

- basic plant physiology
- classification of plants
- · parts of a plant
- vegetative organs and their functions
- the effects of moisture, temperature, aeration and light on potted plants
- photosynthesis, translocation, respiration and absorption
- pests and diseases affecting plants
- common plants and plant types
- nutritional requirements of propagated plants
- handling and potting on techniques
- environmental requirements for maintenance and storage of potted plants
- calculate area, volume, ratio, proportion
- record keeping

#### Skill

#### The ability to:

- prepare growth media
- pot propagated plants
- identify pest and disease infested plants
- apply procedures for measuring length
- apply procedures for calculating area, volume, ratio and proportion
- · apply time management skills
- maintain records
- apply verbal and non verbal communication skills
- apply ohs regulations and procedures
- apply first aid procedures
- identify water-stressed potted plants
- supply water to plants as needed
- protect plants until established
- fertilize potted plants
- maintain sanitation at the workplace
- identify nutrient deficient potted pants

# (4) Resource Implications

The following resources should be made available:

- Various plants to be potted
- · Premix potting media, containers and equipment, benches etc
- Ingredients to mix potting media
- Irrigation facility

#### (5) Method of Assessment

Evidence should be collected over a set period of time through direct observation, intermittent checking, and questioning related to underpinning knowledge. This should include dealing with an appropriate range of potting media and plants.

Competencies in this unit may be demonstrated concurrently

# (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job or in a simulated workplace environment.

The underpinning knowledge may be assessed off the job with the use of written or verbal items.

#### CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
<ul> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

# AGHCRP0082B: Support crop harvesting

Competency Descriptor:

This unit deals with the skills and knowledge required to perform routine assessment of crops and determine readiness for harvesting. It also encompasses the basic manual crop picking, sorting and/or grading in the field prior to delivery to packing shed.

Competency Field: Agriculture

# ELEMENT OF COMPETENCY PERFORMANCE CRITERIA

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1.	Perform routine assessment of plant products for harvesting	1.1	The calendar date from flowering to predicted harvest is calculated.
		1.2	The estimated maturity date is forecasted.
		1.3	Observations are made against established characteristics of cultivars to determine harvest.
		1.4	Observations are reported to supervisor according to enterprise policy.
2.	Harvest the crop	2.1	Crop selected for harvesting conforms to enterprise standards for maturity, quality and health.
		2.2	Work practices employed for harvesting minimised plant damage.
		2.3	Work practices employed reflect efficient use of time, material resources and labour.
		2.4	Harvesting procedures are carried out according to company policy.
		2.5	Equipment is prepared, used, cleaned and maintained according to company standards.
		2.6	Problems encountered are reported according to enterprise policy.
		2.7	Field harvest records are maintained according to company policies.
3	Apply pre-grading procedures	3.1	Containers are distributed at strategic locations throughout the field.
		3.2	In field transport of produce from plant to container are done to preserve quality of produce.

		3.3	Containers are packed to specifications to avoid damage during transport.
		3.4	Containers are transported to packing/grading stations.
	rade and pack harvest roduce	4.1	Crops are sorted and graded according to enterprise policy and industry standards.
		4.2	Appropriate containers are selected and prepared for the packaging of the produce.
		4.3	Products are packed to prevent bruise/damage according to enterprise requirements.
5. T	ransport the crop	5.1	Containers are labelled according to company policy.
		5.2	Containers are moved in a manner which minimises damage to product.
		5.3	Temperature of product is maintained at the levels set by industry.
		5.4	Containers are maintained in good condition.
	erform post harvest field anitation	6.1	Discarded plant material is collected to maintain field hygiene according to enterprise standards.
		6.2	Diseased and/or rotten plant material is disposed of according to enterprise standards.
		6.3	Suspected problems are reported according to company policy.

# RANGE STATEMENT

Problems may include:

- equipment failure
- pests
- diseases
- unhealthy plants
- improper handling techniques

Harvesting procedures may include:

- equipment usage
- selection standards
- removing rotten or immature produce
- out of type variants
- taking due care of produce

#### Produce can include:

- flowers
- bulbs
- tubers
- foliage crops
- fruits
- · vegetables and condiments
- grains and pulses
- root and tubers
- semi permanent crops
- permanent crops

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica
- Pesticide control authority regulations
- Occupational Health & Safety (OHS)
- Hygiene requirements
- First Aid regulations/requirements

Harvesting equipment and supplies may include:

- snips
- knives
- gloves
- bags
- containers (trays, boxes & bulk bin, buckets)
- ladders
- picking poles
- tractor with harvester

Company policies may include:

- handling techniques
- grades of crop required
- channels of communication
- harvesting procedures
- hygiene standards
- · use of chemical standards
- selection criteria

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply of knowledge and skills to a range of harvesting tasks and roles.

#### (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- recognize the optimum time of harvest for a crop
- · determine maturity of crop according to published characteristics of cultivars
- · make realistic forecast for date of harvesting
- apply correct and efficient harvesting techniques
- consistently follow supervisor's instructions
- transport produce to packing/storage area without damage to produce
- report and record within established routines

#### (2) Pre-requisite Relationship of Units

AGGCOR0011A Maintain the work environment

AGGCOR0031A Plan and organize work

#### (4) Underpinning Knowledge and Skills

### **Knowledge**

# Knowledge of:

- the basic attributes of plant produce
- the desired quality of produce to be harvested
- maturity index for different crops
- · methods of harvesting different crops
- problems resulting from early /late harvesting
- methods used to remove field heat
- harvesting techniques appropriate for specific crops
- · bundling and packing techniques
- grading and sorting techniques
- relevant Occupational Health & Safety (OHS) and transport regulations
- transportation of produce
- procedures for measuring length
- procedures for calculating area, volume, ratio and proportion
- time management skills
- record keeping
- verbal and non verbal communication
- first aid procedures
- field hygiene/sanitation
- types of packaging containers
- · infield labelling of containers

#### (4) Resource Implications

The following resources should be made available:

- · crops to be harvested
- harvesting tools for various crops
- containers for harvesting
- transport
- packing/grading station
- dump site
- company policy and procedure manual

#### Skills

#### The ability to:

- determine crop maturity
- harvest the produce
- transport produce
- remove field heat from produce
- sort and grade produce
- store produce
- apply Occupational Health & Safety (OHS) regulations
- · apply procedures for measuring length
- apply procedures for calculating area, volume, ratio and proportion
- apply time management skills
- maintain records
- · apply first aid procedures
- · maintain hygiene of produce
- communicate both verbally and nonverbally
- · package and stack produce

# (5) Method of Assessment

Evidence should be collected over a set period of time through direct observation and questioning related to underpinning knowledge. This should include dealing with an appropriate range of produce and harvesting techniques.

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job

The underpinning knowledge may be assessed off-the-job with the use of written or verbal items inclusive of short answer, extended essay items project or portfolio.

#### CRITICAL EMPLOYABILTIY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
Carries out established processes	<ul><li>Manages process</li><li>Selects the criteria for the</li></ul>	Establishes principles and procedures				
Makes judgement of quality using given criteria	evaluation process	<ul><li>Evaluates and reshapes process</li><li>Establishes criteria for evaluation</li></ul>				

Collecting, analysing and organising ideas and information	Level 2	
Communicating ideas and information	Level 1	
Planning and organising activities	Level 1	
Working with others and in teams	Level 1	
Use mathematical ideas & techniques	Level 1	
Solve problems	Level 1	
Using technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

# **AGHCRP0092A:** Perform post harvest operations

Competency Descriptor:

This unit deals with the skills and knowledge required to carry out post harvest operations in a horticultural enterprise. It covers field transport, grading, and packing of harvested crops.

Competency Field: Agriculture - Horticulture

ELI	EMENT OF COMPETENCY		PERFORMANCE CRITERIA
1.	Transport produce	1.1	Field handling practices and equipment used reflect industry best practice.
		1.2	Sorting practices which minimise damage to product are utilised in line with enterprise standards.
2.	Clean plant products	2.1	Product is washed, foreign material and dirt removed, and excess leaves stripped and/or trimmed as directed.
		2.2	Material is dried as directed according to enterprise standards.
3.	Determine market specifications prior to packaging	3.1	Colour, weight and dimension specifications of produce used by industry are determined according to enterprise policy.
		3.2	Specifications relating to the amount of blemishes on produce used by industry are determined.
4.	Grade, label and treat produce	4.1	Crop is graded and labelled according to market requirements and supervisors instructions.
		4.2	Post-harvest treatments are applied according to company policy.
		4.3	Plants that do not meet enterprise quality specifications are identified and disposed of according to enterprise policy
5.	Pack produce	5.1	Appropriate container for the produce is selected according to the market requirements and enterprise policy.
		5.2	Correct filling techniques used for specific containers according to industry, and supervisor's instruction.
		5.3	Wraps and lids are applied and containers are labelled to meet industry and client requirements.

#### 6. Store plant products

- 6.1 Produce is stored as directed.
- 6.2 The storage facility's monitoring gauges are read accurately and efficiently
- 6.3 Abnormal readings are reported to the supervisor according to company policy.
- 6.4 The condition of stored produce is checked randomly and abnormal readings are reported to the supervisor according to company policy.
- 6.5 Work practices are economical, methodical and meet established work schedules.
- 6.6 Manual handling techniques when lifting or moving heavy loads conform to enterprise Occupational Health & Safety (OHS) guidelines.

# 7. Maintain storage and grading facility hygiene levels

- 7.1 Damaged produce and broken containers are removed from the storage facility.
- 7.2 Containers are cleaned to a level of hygiene acceptable to industry standards.
- 7.3 The storage facility is cleaned without damaging monitoring or refrigeration equipment.

# **RANGE STATEMENT**

Legislation, codes and national standards relevant to the workplace may include:

- Labour laws of Jamaica.
- Pesticide control authority regulations.
- Occupational Health & Safety (OHS).
- Hygiene requirements.
- First Aid regulations/requirements

This unit of competency should be demonstrated in accordance with the enterprise's :

 policies and procedures for contaminants, grades of crops required, temperatures ranges and quality assurance

#### Containers may include:

- bulk bins
- boxes
- trays
- bags
- baskets
- crates

Other materials/equipment may include:

- packaging /cushioning materials
- scales
- labels
- secateurs
- molten wax
- storage space/room

#### Plant products may include:

- flowers
- foliage
- bulbs
- fruits
- vegetables
- herbs
- tubers
- roots
- condiments
- grains
- pulses

#### Treatment may include:

- dipping
- spraying
- waxing

#### Processes may include:

- cleaning
- washing
- brushing
- sorting
- grading
- labeling

# **EVIDENCE GUIDE**

Competency is to be demonstrated by the ability to apply of knowledge and skills to a range of post harvesting tasks and roles.

# (1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- grade, label and treat produce according to market specification
- · use efficient methods to pack and store produce
- apply correct and efficient guidelines for the storage of produce
- monitor the storage facility
- consistently follow supervisor's instructions
- report and record within established routines

# (2) Pre-requisite Relationship of Units

AGHCRP0082A Support crop harvesting

# (3) Underpinning Knowledge and Skills

#### **Knowledge**

# Knowledge of:

- re-harvest and post harvest handling techniques
- problems resulting from early or late harvesting
- field handling and transport methods relevant to different enterprise crops
- post-harvest treatments
- safe use of hazardous substances used in post harvest operations
- OHS principles relating to lifting heavy objects
- enterprise quality procedures
- industry standards for packaging
- procedures for measuring length
- procedures for calculating area, volume, ratio and proportion
- time management skills
- records keeping
- verbal and non verbal communication skills
- OHS regulations and procedures
- First aid procedures
- packing techniques for different crops
- methods of packing
- types of packing materials and containers
- requirements for cooling various crop products
- storage techniques and principles
- methods/techniques of storing different crops

#### Skills

#### The ability to:

- transport produce
- grade label and treat produce
- pack produce
- clean produce
- administer re-hydration treatment
- store products
- apply procedures for measuring length
- apply procedures for calculating area, volume, ratio and proportion
- apply time management skills
- maintain records
- apply verbal and non verbal communication skills
- apply OHS regulations and procedures
- apply First aid procedures

#### (4) Resource Implications

The following resources should be made available:

- harvested crops
- packing area/shed
- storage facility with appropriate storage environment and equipment

#### (5) Method of Assessment

Evidence should be collected over a period of time through direct observation and questioning related to underpinning knowledge. This should include dealing with an appropriate range of produce and post harvesting techniques

Competencies in this unit may be demonstrated concurrently.

#### (6) Context of Assessment

This unit must be assessed through practical demonstration on-the-job or in a simulated workplace environment requiring until competency is achieved.

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#### CRITICAL EMPLOYABILTIY SKILLS

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Levels of Competency								
Level 1.	Level 2.	Level 3.						
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Collecting, analysing and organising ideas and information	Level 1
Communicating ideas and information	Level 1
Planning and organising activities	Level 1
Working with others and in teams	Level 1
Use mathematical ideas & techniques	Level 1
Solve problems	Level 1
Using technology	Level 1

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.