

AQUACULTURE HOUSING ACTIVITIES

ISCED UNIT CODE: 0831 251 01A

TVETCDACC UNIT CODE: AQ/CU/AM/CR/01/3/MA

UNIT DURATION: 150 HOURS

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Perform Aquaculture housing activities

UNIT DESCRIPTION

This unit specifies the competencies required to set up fish rearing unit. It involves constructing fish rearing units, installing inlet and outlet systems, predatory control devices and maintaining fish rearing units.

SUMMARY OF LEARNING OUTCOMES

S/No	Learning Outcomes	Duration (Hours)
1.	Construct a fish-rearing unit	30
2.	Install inlet and outlet systems	50
3.	Install predatory control devices	30
4.	Maintain fish rearing unit	40
Total		150

Learning outcomes, content, suggested assessment methods.

LEARNING OUTCOME	CONTENT	SUGGESTED METHOD OF ASSESSMENT
1. Construct a fish-rearing unit	1.1. Personal protective equipment 1.1.3. Gumboots 1.1.4. Helmets	• Practical

	<p>1.1.5. Gloves</p> <p>1.1.6. Overalls</p> <p>1.1.7. First aid kits</p> <p>1.2. Tools and requirements</p> <p>1.2.3. Tools-tape measure</p> <p>1.2.4. Spirit level</p> <p>1.2.5. Jembes</p> <p>1.2.6. Spades</p> <p>1.2.7. Pangas</p> <p>1.3 Factors to consider before constructing a rearing unit</p> <ul style="list-style-type: none"> • Availability of extra labor • Equipment and materials required • Site related factors <p>1.4 Site clearing</p> <ul style="list-style-type: none"> • Importance of site clearing • Types of wetland vegetation • Site clearing techniques • Risks associated with site clearing <p>1.5 Methods of disposing cleared vegetation</p> <p>1.6 Analyzation of water quality and quantity</p> <p>1.7 Analyzation of water characteristics</p> <p>1.8 Land topography <i>easy to do</i></p> <p>1.9 Selection of fish</p> <p style="padding-left: 2em;">rearing unit</p> <p>1.9.1 Earthen ponds</p> <p>1.9.2 Lined ponds</p> <p>1.9.3 Concrete ponds</p> <p>1.9.4 Fiberglass tanks</p> <p>1.9.5 Plastic tanks</p> <p>1.9.6 Glass tanks</p> <p>1.10 Clearance of fish rearing unit</p> <p>1.11 Measurement of fish rearing area</p> <p>1.12 Construction of fish rearing unit</p> <p>1.13 Pond levelling and inlet-outlet system</p>	<ul style="list-style-type: none"> • Project • Third party report • Portfolio of evidence • Written tests • Oral questioning
2 Install inlet and outlet	<p>2.1 Personal protective equipment</p> <p>2.2 Tools and equipment selection</p> <p>2.3 Elevation of inlet and outlet system</p>	<ul style="list-style-type: none"> • Practical • Project • Third party

systems	2.4 Excavation of trenches 2.5 Installation of PVC pipes 2.6 Fitting of inlets and outlets 2.7 Backfilling of trenches 2.8 Inlet and outlet systems	report • Portfolio of evidence • Written tests • Oral questioning
3 Install predatory control devices	3.1 Identification of fish predators and intrusive animals 3.2 Removal and location of ponds weeds 3.3 Control measures for predators and intrusive animals	• Practical • Project • Third party report • Portfolio of evidence • Written tests • Oral questioning
4 Maintain fish rearing unit	4.1 Maintenance required in fish rearing unit 4.1.1 Cleaning around net pens and ponds 4.1.2 Repairing damaged netting 4.1.3 Floatation or moorings 4.1.4 fixing the banks of a pond 4.2 Clearing of grass on pond dykes 4.3 Clearing of infringing vegetation 4.4 Clearing blockages and monitoring of pipes and drainage channels 4.5 Cleaning of tools and equipment	• Practical • Project • Third party report • Portfolio of evidence • Written tests • Oral questioning

Suggested Methods of Instruction

- Project
- Demonstration
- Practicals
- Discussions
- Direct instruction

Recommended Resources for 25 Trainees

Category/Item	Description/specification	Quantity	Recommended ratio (Item: Trainee)
Desktop computers/laptops		25	1:1
Internet connection			
Projector		1	1:25
Printer		1	1:25
Feed mixer		1	1:25
Well-equipped workshop		1	1:25
Flame photometer		1	1:25
Tanks		1	1:25
Feed extruder		1	1:25
Assorted sieve		1	1:25
Spade		5	1:5
Weighing scale		5	1:5
Jembe		5	1:5
PH meter		5	1:5
Wheelbarrow		5	1:5
Measuring tape		5	1:5