

POST-HARVEST HANDLING OF FISH

UNIT CODE: AQ/CU/AM/CR/05/6/B

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Handle Harvested Fish

Duration of Unit: 260 hours

Unit Description

This unit describes the knowledge, skills and attitudes required to apply food safety measures handling harvested fish, maintain the quality of fresh fish by employing preservation and processing techniques that result into readily marketable products and by-products. The processing and preservation is carried out in an environmentally friendly manner by ensuring proper disposal of wastes.

Summary of Learning Outcomes

1. Apply food safety measures handling harvested fish
2. Prepare harvested fish for preservation
3. Preserve harvested fish
4. Process harvested fish
5. Market fish, fish-products and by-products
6. Manage wastes

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Apply food safety measures in handling harvested fish	<ul style="list-style-type: none">• Meaning of food safety• Importance of food safety• Principles of food safety• Prerequisite programmes<ul style="list-style-type: none">• Meaning, importance, categories and establishment of prerequisite programmes• Relevant programmes for post-harvest fish handling• Hazard analysis for post-harvest fish handling<ul style="list-style-type: none">• Enterprise description• Product description	<ul style="list-style-type: none">• Written tests• Oral questioning• Observation• Third Party reports• Project• Practical tests

	<ul style="list-style-type: none"> • Layout of premises and surrounding environment • Development of flow diagram • Identification of hazards at each step of the flow diagram • Describing the hazard • Significance of hazards • Establishment of the HACCP plan for post-harvest fish handling <ul style="list-style-type: none"> • Identification of critical control points • Procedures for setting up critical control limits • Establishment monitoring procedures on the control limits • Establishment of corrective actions • Verification procedures • Record keeping • Validation procedures <p>Standards and legislations of food safety on handling harvested fish</p>	
2. Prepare harvested fish for preservation	<ul style="list-style-type: none"> • Use of PPEs in preserving harvested fish • Safety measures to be observed • Use of fish handling materials, tools and equipment • Fish handling procedures <ul style="list-style-type: none"> • Grading • Cleaning • Scaling • Gutting 	<ul style="list-style-type: none"> • Written tests • Oral questioning • Practical tests • Portfolio of Evidence
3. Preserve harvested fish	<ul style="list-style-type: none"> • Use of fish preservation materials, supplies, tools and equipment • Designs of fish preservation equipment 	<ul style="list-style-type: none"> • Written tests • Oral questioning • Practical tests • Projects

	<ul style="list-style-type: none"> • Fish preservation methods <ul style="list-style-type: none"> • Icing • Smoking • Sun-drying • Salting • Freezing 	
4. Process harvested fish	<ul style="list-style-type: none"> • Use of PPEs in processing harvested fish • Safety measures to be observed • Use of fish processing materials, supplies, tools and equipment • Designs of fish processing equipment • Types of processed fish products • Processing methods <ul style="list-style-type: none"> • Frying • Smoking • Salting • Marinating • Filleting • Fermentation • Fish by-product processing <ul style="list-style-type: none"> • Oils • Frames • Skins • Packaging and labelling <ul style="list-style-type: none"> • Packaging tools and equipment • Packaging materials • Labelling information • Products storage • Quality control during processing and storage 	<ul style="list-style-type: none"> • Written tests • Oral questioning • Practical tests • Projects • Portfolio of Evidence
5. Market fish, fish products and by-products	<ul style="list-style-type: none"> • Fish market dynamics • Price determination • Distribution channels • Selling methods • Observation of hygiene 	<ul style="list-style-type: none"> • Oral questioning • Written tests • Observation • Portfolio of Evidence
6. Manage waste from fish processing	<ul style="list-style-type: none"> • Use of tools, materials and equipment in disposal of fish processing wastes 	<ul style="list-style-type: none"> • Oral questioning • Practical tests • Written tests

	<ul style="list-style-type: none"> • Environmental regulations for disposal of fish processing wastes • Types of fish processing wastes • Disposal methods of fish processing wastes 	<ul style="list-style-type: none"> • Portfolio of Evidence
--	---	---

Suggested Methods of Instruction

- Instructor led facilitation of theory
- Demonstration by trainer
- Practical work by trainee
- Viewing of related videos
- Group discussions
- Role plays
- Field trips

Recommended Resources

Reference materials

- Hazards manual of standard operating procedures
- Food safety statutory requirements and standards
- HACCP plan

Tools and equipment

Weighing balance, wheelbarrow, pallets, filleting tables, knives, waste disposal containers, ice box, smoking kiln, solar dryer, drying racks, drying mats or canvass, domestic freezers, cool boxes, meat mincer, blender, crockery, basins, buckets, hard brush, baskets, fire-fighting equipment

Materials and supplies

Ice, salt, frying oil, polybags, cartons, gunny bags, ice packs, sealing tape, labels

Personal protective equipment (PPEs)

Gum boots, head covers, gloves, dust coats, first aid kits, mouth pieces, aprons