

## QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR AGRICULTURE AND ALLIED INDUSTRY



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### What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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### Introduction

## Qualifications Pack- Marine Capture Fisherman

**SECTOR:** AGRICULTURE AND ALLIED

**SUB-SECTOR:** AGRICULTURE ALLIED ACTIVITY

**OCCUPATION:** CAPTURE FISHING

**REFERENCE ID:** AGR/Q5001

**ALIGNED TO:** NCO-2004/6153.10

**Marine capture fisherman:** Also known as 'Fisher', Marine capture fisherman catches and traps various types of marine life which are for human food, animal feed, bait, and other uses.

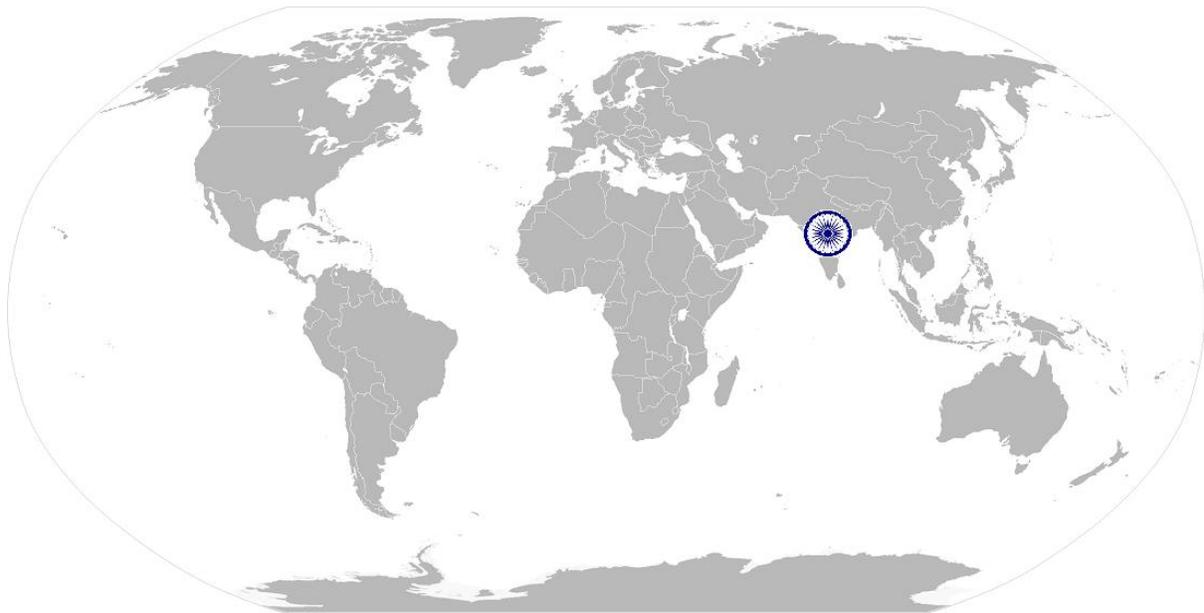
**Brief Job Description:** The individual is responsible for using various equipments, choosing the appropriate crafts and methods, to catch fish and marine life.

**Personal Attributes:** The job requires the individual to have: manual and finger dexterity, ability to swim, good eyesight, attention to details, managing distractable sounds and noises, physical, mental and mechanical ability, multi-limb coordination, ability to respond to a signal, ability to lift weight, good hand strength and steadiness and stamina to work for long hours on the ocean, hot sun and other elements of nature.

Job Details	<b>Qualifications Pack Code</b>	<b>AGR/Q5001</b>		
	<b>Job Role</b>	<b>Marine Capture Fisherman</b>		
	<b>Credits(NVEQF/NVQF/NSQF) [OPTIONAL]</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
	<b>Sector</b>	<b>Agriculture and Allied</b>	<b>Drafted on</b>	<b>01/03/14</b>
	<b>Sub-sector</b>	<b>Agriculture Allied Activity</b>	<b>Last reviewed on</b>	<b>24/03/14</b>
	<b>Occupation</b>	<b>Capture Fishing</b>	<b>Next review date</b>	<b>24/09/14</b>

<b>Job Role</b>	<b>Marine Capture Fisherman</b> Also known as 'fisher'
<b>Role Description</b>	Catching and trapping marine species used for human food, animal feed, bait and other uses
<b>NVEQF/NVQF level</b>	4
<b>Minimum Educational Qualifications*</b>	Minimum educational qualification: No formal education
<b>Maximum Educational Qualifications*</b>	Maximum educational qualification: Not applicable
<b>Training</b> (Suggested but not mandatory)	On the job training
<b>Experience</b>	6 months in capture fishing assistance (preferable)
<b>Applicable National Occupational Standards (NOS)</b>	<b>Compulsory:</b> <ol style="list-style-type: none"> <li>1. <a href="#">AGR/Q5001 Perform pre fishing activities</a></li> <li>2. <a href="#">AGR/Q5002 Capture the fish</a></li> <li>3. <a href="#">AGR/Q5003 Perform post fishing activities</a></li> </ol> <b>Optional:</b> Not applicable
<b>Performance Criteria</b>	As described in the relevant OS units

# National Occupational Standard



## Overview

This unit is about planning and deciding on the methods, crafts and equipments for the capture, based on climate, species and other criteria.

**AGR/N5001**
**Perform pre fishing activities**

<b>Unit Code</b>	<b>AGR /N5001</b>
<b>Unit Title (Task)</b>	<b>Perform pre fishing activities</b>
<b>Description</b>	This OS unit is about determining the appropriate crafts, methods and equipments for capturing the fish and marine life, based on the species, environmental conditions and other criteria.
<b>Scope</b>	<p>This unit/ task covers the following:</p> <ul style="list-style-type: none"> <li>• Choose the fishing method</li> <li>• Decide on the crafts to use</li> <li>• Prepare the net and other required equipment</li> <li>• Ensure the preparatory activities</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Choosing the fishing capture method</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. decide on the species to capture depending on the climatic and environmental condition, region and their seasonal availability</p> <p>PC2. select a suitable method from active and passive gears depending on the species to capture and duration of the trip</p> <p>PC3. adjust and alter the net according to the method chosen and the species type for capture</p> <p>PC4. determine the hook size and type of bait to be used according to the fish species planned to capture</p> <p>PC5. select the trap nets according to the size of mesh used</p> <p>PC6. select the mesh size depending upon the species and the size range being targeted</p> <p>PC7. decide appropriate capture method resulting in high productivity</p>
<b>Deciding the crafts</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC8. decide on the specific and cost effective crafts to be used for fishing from mechanized or non-mechanized types</p> <p>PC9. take necessary measures and study the weather before the capture</p> <p>PC10. operate mechanized and non-mechanised boats</p> <p>PC11. equip the fishing boats with appropriate consumables for long stays at sea</p> <p>PC12. ensure boats contain refrigerators to keep the fish fresh until returning to shore</p>
<b>Preparing net and other equipments</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC13. prepare the fishing materials such as nets, pots, traps, spears and dredges</p> <p>PC14. ensure the rod, reel, line, hooks and bait, tongs, rakes, hoes, shovels and wire trap can withstand the rougher conditions and tougher fish</p> <p>PC15. load and unload vessel equipment and supplies, by hand or using hoisting equipment</p> <p>PC16. pull and guide nets, traps, and lines onto vessels, by hand or using hoisting equipment</p>
<b>Ensuring preparatory activities</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC17. ensure the weather condition is suitable for fishing</p> <p>PC18. oversee the purchase of supplies, gear and equipment such as fuel, netting</p>

**AGR/N5001**
**Perform pre fishing activities**

	and cables PC19. obtain the required fishing permits and licenses PC20. study and familiarize with the habits and behaviour of the type of fish that's planned to focus on, natural habitat of the fish in order to increase their chances of having a great catch PC21. understand the feeding and breeding habits on the fish type that is planned to be captured PC22. have awareness on seamanship, vessel operations, marine safety, navigation, vessel repair, and fishing gear technology PC23. estimate costs of operations and plan fishing season budgets accordingly
<b>Knowledge and Understanding (K)</b>	
<b>A. Technical Knowledge</b>	The individual on the job needs to know and understand: KA1. fishing methods and techniques KA2. fishing crafts to use for different species KA3. methods of active gears and passive gears KA4. active gear such as trawling, seine netting, purse seining, trawling and harpoon methods for capture PC24. passive gear such as gill net, long lining, jigging and trapping PC25. mechanized boat type such as hand line boat, pole and line fishing vessel, trawling vessel, gill netter and their operation and basic maintenance KA5. non-mechanized boat types such as catamaran, dugout-canoes, plank built canoes and their operation PC26. species and its natural habitat to decide the appropriate method, crafts and equipment KA6. mechanised and non mechanised crafts KA7. net adjustment according to the species size KA8. weather forecast and its conditions KA9. navigational and communication equipment, GPS, radar and sonar to locate fish and avoid obstacles above and below water KA10. tools and equipments to capture and handle tough fishes KA11. use of life jackets and other safety equipments KA12. rules and regulations to be followed according to fishing industry standards
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading and Writing Skills</b>
	The user/individual on the job needs to know and understand: SA1. how to record and maintain information on capture, sale, weather conditions and other necessary information
	<b>Communication Skills</b>
	The user/individual on the job needs to know and understand: SA2. how to effectively communicate with the customers and co-fishermen for selling and to coordinate on their needs and issues
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/individual on the job needs to know and understand: SB1. how to make decisions on the methods and crafts to be used for the capture

**AGR/N5001**
**Perform pre fishing activities**

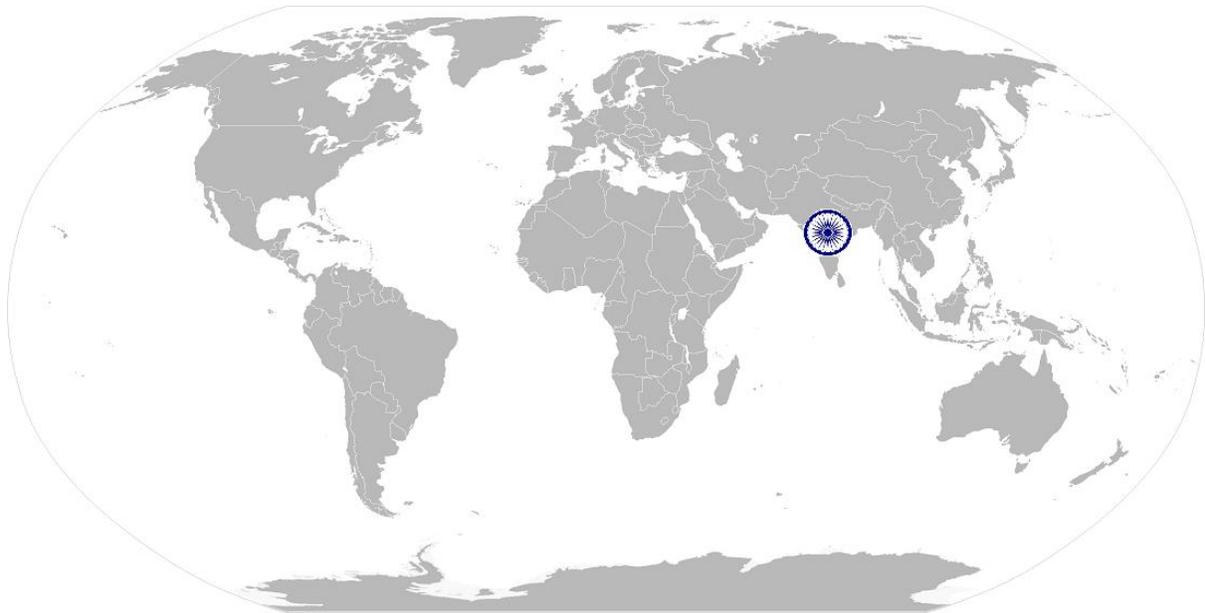
	<b>Planning Skills</b>
	The user/individual on the job needs to know and understand: SB2. how to plan on the species type, methods and crafts to use SB3. how to plan on the preparatory works of capture
	<b>Critical Thinking</b>
	The user/individual on the job needs to know and understand: SB4. how to determine how to improve the catch and react appropriately to weather conditions
	<b>Use of Tools and Equipments</b>
	The user/individual on the job needs to know and understand: SB5. how to use nets, pots, traps, spears and dredges for fish SB6. how to use life-jackets, flash lights, boat lights, paddles SB7. how to use rod, reel, line, hooks and bait, tongs, rakes, hoes, shovels and wire trap to withstand the rougher conditions and tougher fish SB8. how to use depth sounders to indicate water depth and to identify marine life in sea bottom SB9. how to use compasses charts, and electronic navigational equipment, including global positioning systems (GPS), radar and sonar to locate fish and to avoid obstacles above and below water SB10. how to operate steer vessels and navigation equipment

**AGR/N5001**
**Perform pre fishing activities**

## NOS Version Control

NOS Code	AGR/N5001		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Agriculture and Allied	Drafted on	01/03/14
Industry Sub-sector	Agriculture Allied Activity	Last reviewed on	24/03/14
		Next review date	24/09/14

# National Occupational Standard



## Overview

**This unit is capturing the fish according to the method, crafts and equipments planned**

**AGR/N5002**
**Capture the fish**

<b>Unit Code</b>	<b>AGR /N5002</b>
<b>Unit Title (Task)</b>	<b>Capture the fish</b>
<b>Description</b>	This OS unit is about capturing the fish taking necessary safety measures, using the various tools and equipments, according to the methods and crafts chosen.
<b>Scope</b>	This unit/ task covers the following: <ul style="list-style-type: none"> <li>• Choose appropriate method, use equipment to perform fishing</li> <li>• Take necessary safety measures</li> <li>• Achieve productivity</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Capturing the fish</b>	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> <li>PC1. operate rowboats, dinghies or skiffs to transport fishers, divers and hookers</li> <li>PC2. put fishing equipment into the water and anchor or tow equipment, according to the fishing method used</li> <li>PC3. locate fish using fish finding equipment</li> <li>PC4. operate fishing gear letting out and pulling in nets and lines, and extract the catch from the nets or the line's hooks</li> <li>PC5. use dip nets to prevent the escape of small fish and gaffs to facilitate the landing of large fish</li> <li>PC6. steer vessels and operate navigational instruments</li> </ul>
<b>Taking necessary safety measures</b>	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> <li>PC7. prepare adequate emergencies in the boats</li> <li>PC8. have adequate safety equipments</li> <li>PC9. ensure the necessary first-aid kits or even necessary measures to avoid drowning</li> <li>PC10. practice caution when handling fish in deep sea</li> </ul>
<b>Achieving Productivity</b>	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> <li>PC11. capture high value fish which earn good profits</li> <li>PC12. ensure that the capture fish value exceeds the operating cost involved and results in profit</li> </ul>
<b>Knowledge and Understanding (K)</b>	
<b>A. Technical Knowledge</b>	The individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KA1. fishing methods and techniques</li> <li>KA2. fishing crafts to use according to the chosen species and climate</li> <li>KA3. seamanship, vessel operations, marine safety, navigation, vessel repair, and fishing gear technology</li> <li>KA4. operation of dip nets and gaff nets</li> <li>KA5. to pilot and navigate vessels</li> <li>KA6. to use nets and other equipments</li> <li>KA7. machines and tools, including their designs, uses, repair, and maintenance</li> <li>KA8. safety precautions to be taken for illness and danger getting into the sea</li> <li>KA9. species type and their natural habitat</li> <li>KA10. rules and regulations to be followed according to fishing industry standards</li> </ul>

**AGR/N5002**
**Capture the fish**

Skills (S)	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading and Writing Skills</b>
	The user/individual on the job needs to know and understand: SA1. how to record and maintain information on capture, sale, weather conditions and other necessary information
	<b>Communication Skills</b>
	The user/individual on the job needs to know and understand: SA2. how to effectively communicate with the customers and co fishermen for capturing the fish and on its essential needs
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/individual on the job needs to know and understand: SB1. how to make decision on the capture
	<b>Navigation Skills</b>
	The user/individual on the job needs to know and understand: SB2. how to use complex tools and navigate boats to where highest concentration of fish is located
	<b>Mechanical Skills</b>
	The user/individual on the job needs to know and understand: SB3. how to operate complex fishing machinery and periodically do routine maintenance SB4. how to control operations of equipment or systems SB5. how to watch gauges, dials, or other indicators to make sure a machine is working properly
	<b>Physical Skills</b>
	The user/individual on the job needs to know and understand: SB6. how to use arms and legs and move whole body considerably performing physical activities such as climbing, lifting, balancing, walking, catching, swimming, and handling of materials
	<b>Analytical Skills</b>
	The user/individual on the job needs to know and understand: SB7. how to measure the quality and quantity of their catch
	<b>Use of Tools and Equipments</b>
	The user/individual on the job needs to know and understand: SB8. use of nets, pots, traps, spears and dredges for fish SB9. use of life jackets, flash lights, boat lights, paddles SB10. use of rod, reel, line, hooks and bait, tongs, rakes, hoes, shovels and wire trap to withstand the rougher conditions and tougher fish SB11. how to use compasses, charts and electronic navigational equipment, including global positioning systems (GPS), radar and sonar to locate fish and to avoid obstacles above and below water SB12. how to operate steer vessels and navigation equipment
<b>Reflective Thinking</b>	
The user/individual on the job needs to know and understand:	

**AGR/N5002**

**Capture the fish**

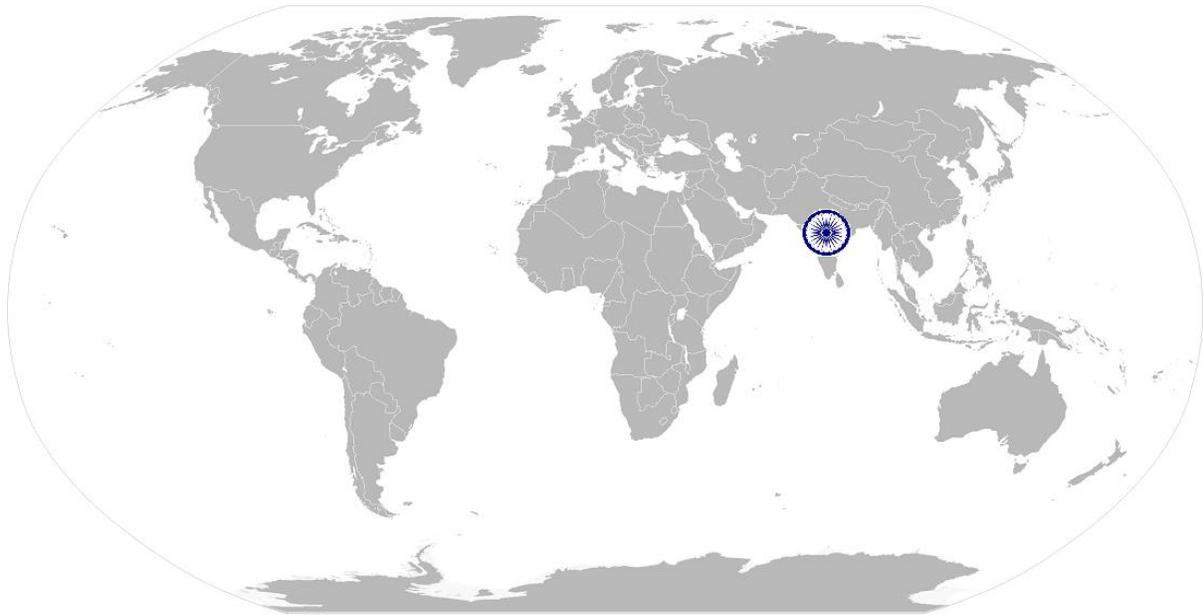
	SB13. how to reduce repetitive errors while capturing and improve the number of catches and fishing methods
	<b>Labour Management</b>
	The user/individual on the job needs to know and understand: SB14. how to manage relationships with co-fishermen
	<b>Adherence to standards</b>
	The user/individual on the job needs to know and understand: SB15. how to use relevant information and individual judgment to determine if the process complies with laws, regulations or standards of fishing industry

**AGR/N5002**
**Capture the fish**

## **NOS Version Control**

NOS Code	AGR/N5002		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Agriculture and Allied	Drafted on	01/03/14
Industry Sub-sector	Agriculture Allied Activity	Last reviewed on	24/03/14
		Next review date	24/09/14

# National Occupational Standard



## Overview

This unit is about performing maintenance of the decks, sort the captured fish and sell them.

**AGR/N5003**
**Perform post fishing activities**

<b>Unit Code</b>	<b>AGR /N5003</b>
<b>Unit Title (Task)</b>	<b>Perform post fishing activities</b>
<b>Description</b>	This OS unit is about maintaining the deck ensuring its cleanliness and repairs, sort and store the captured fish and sell them.
<b>Scope</b>	This unit/ task covers the following: <ul style="list-style-type: none"> <li>• Maintain the deck</li> <li>• Store and sell the captured fish</li> <li>• Document the capture and other necessary details</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Maintaining deck</b>	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> <li>PC1. maintain engines, fishing gear, and other on-board equipment by doing minor repairs</li> <li>PC2. ensure decks are clear and clean at all times and that the vessel's engines and equipment are kept in good working condition</li> <li>PC3. repair fishing gears, vessel engines, equipments, nets and accessories when necessary</li> <li>PC4. wash decks, conveyors, knives, and other equipment, using brushes, detergents and water</li> </ul>
<b>Storing and selling the captured fish</b>	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> <li>PC5. remove catches from fishing equipment and measure them to ensure compliance with legal size</li> <li>PC6. process the fish caught on board and prepare for sale</li> <li>PC7. sort the species according to buying capability or customer requirements</li> <li>PC8. wash, pack and store fish with salt and ice to bring them back to shore for sale</li> <li>PC9. ensure the fish is maintained fresh after the capture till sale</li> <li>PC10. transport fish to processing plants or to buyers</li> <li>PC11. sell the fish directly contacting and negotiating with buyers or through a fish auction</li> </ul>
<b>Documentation</b>	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> <li>PC12. record in logbooks specifics of fishing activities such as dates, harvest areas, yields, and weather and sea conditions</li> </ul>
<b>Knowledge and Understanding (K)</b>	
<b>A. Technical Knowledge</b>	The individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KA1. principles for selling and transport the captured fish</li> <li>KA2. raw materials, capture processes, quality control, costs, and other techniques for maximizing the effective capture number and distribution of goods</li> <li>KA3. machines and tools, including their designs, uses, repair, and maintenance</li> <li>KA4. storing techniques of the captured fish using ice and salt</li> <li>KA5. equipments and detergents to use for maintenance of decks</li> <li>KA6. species type and their natural habitat</li> <li>KA7. rules and regulations to be followed according to fishing industry standards</li> </ul>

**AGR/N5003**
**Perform post fishing activities**

Skills (S)	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading and Writing Skills</b>
	The user/individual on the job needs to know and understand: SA1. how to record and maintain information on capture, sale, weather conditions and other necessary information
	<b>Communication Skills</b>
	The user/individual on the job needs to know and understand: SA2. how to effectively communicate with the customers and co fishermen for selling and to coordinate on their needs and issues
<b>B. Professional Skills</b>	<b>Decision Making and Problem Solving</b>
	The user/individual on the job needs to know and understand: SB1. how to analyze information and evaluate results to choose the best solution and solve problems
	<b>Negotiation Skills</b>
	The user/individual on the job needs to know and understand: SB2. how to effectively negotiate the price and other aspects with the buyers
	<b>Marketing Skills</b>
	The user/individual on the job needs to know and understand: SB3. how to sell and market his capture
	<b>Maintenance Skills</b>
	The user/individual on the job needs to know and understand: SB4. how to perform routine maintenance on equipment and determining when and what kind of maintenance is needed
	<b>Labour Management</b>
	The user/individual on the job needs to know and understand: SB5. how to manage relationships with labourers and other neighbouring farmers
<b>Adherence to Standards</b>	
The user/individual on the job needs to know and understand: SB6. how to use relevant information and individual judgment to determine if the process comply with laws, regulations or standards in the fishing industry	

**AGR/N5003**
**Perform post fishing activities**

## NOS Version Control

NOS Code	AGR/N5003		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Agriculture and Allied	Drafted on	01/03/14
Industry Sub-sector	Agriculture Allied Activity	Last reviewed on	24/03/14
		Next review date	24/09/14

## Definitions

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or an area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Sub-function	Sub-functions are sub-activities essential to fulfil the achieving the objectives of the function.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance criteria are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (OS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
Knowledge and Understanding	Knowledge and understanding are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.

## Acronyms

Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills	Core skills or generic skills are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Keywords /Terms	Description
NOS	National Occupational Standard(s)
NVQF	National Vocational Qualifications Framework
NSQF	National Qualifications Framework
NVEQF	National Vocational Education Qualifications Framework
QP	Qualifications Pack