



NATIONAL OCCUPATIONAL STANDARD FOR FISHERIES EXTENSION ASSISTANT



NOS.FEA.01
FIRST EDITION

APPROVING AUTHORITY

This National Occupational Standard has been prepared and published under the authority of the Zambia Qualifications Authority Board on 30th September, 2020.

ZAMBIA QUALIFICATIONS AUTHORITY

The Zambia Qualifications Authority Act No. 13 of 2011 was enacted by the Government of the Republic of Zambia to ***“provide for the development and implementation of a national qualifications framework; establish the Zambia Qualifications Authority; provide measures to ensure that standards and registered qualifications are internationally comparable; and provide for matters connected with, or incidental to the foregoing”***. Among other functions, ZAQA is responsible for *determining national standards for any occupation*, through various sector specific National Occupational Standards Development Teams (NOSDTs).

REVISION OF NATIONAL OCCUPATIONAL STANDARDS

National Occupational Standards shall be revised every after **5 years**, or whenever necessary, by the issue of either amendments or of revised editions. It is important that users of National Occupational Standards (NOS) should ascertain that they are in possession of the latest amendments or editions.

NOS DEVELOPMENT TEAM RESPONSIBLE

This National Occupational Standard was prepared by the Agriculture National Occupational Standards Development Team, upon which the following organisations were represented:

1. University of Zambia (UNZA);
2. Zambian Aquaculture Cooperative Society (ZACOSO);
3. Aquaculture Development Association of Zambia (ADAZ);
4. Natural Resources Development College (NRDC);
5. Ministry of Agriculture (MoA);
6. Zambia Agriculture Research Institute (ZARI);
7. Zambian Forum for Agricultural Extension and Advisory Services (ZAFAAS);
8. Zambia Qualifications Authority (ZAQA) – Secretariat.

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1. Dr. Wilson Mwenya (University of Zambia);
2. Mr. Freznarnd Simfukwe (Zambian Aquaculture Cooperative Society);
3. Mr. Baldwin Chibuta (Aquaculture Development Association of Zambia);
4. Mr. Masautso E. Sakala (Natural Resources Development College);
5. Mr. Katupa Chongo (Ministry of Agriculture);
6. Dr. Batiseba Tembo (Zambia Agriculture Research Institute);
7. Mr. Vincent M. Akamandisa (Zambian Forum for Agricultural Extension and Advisory Services).

The Authority wishes to also acknowledge the efforts of all stakeholders that took time to review and submit comments on this NOS and those that participated in the national validation process.

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FOREWORD

The Zambia Qualifications Authority (ZAQA) is a statutory body under the Ministry of Higher Education established by ZAQA Act No. 13 of 2011 to “**provide for the development and implementation of a national qualifications framework; provide measures to ensure that standards and registered qualifications are internationally comparable; and provide for matters connected with, or incidental to the foregoing**”.

Among other functions, ZAQA is responsible for “*determining national standards for any occupation*”, through various sector specific National Occupational Standards Development Teams (NOSDTs) of experts composed of representation from appropriate authorities, government departments, industry, academia, regulators, consumer associations and non-governmental organisations, etc.

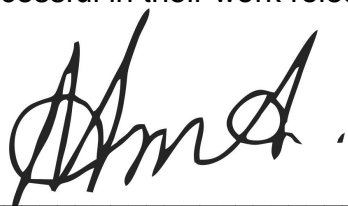
This National Occupational Standard (NOS) has been developed by the Agriculture National Occupational Standards Development Team in accordance with the procedures and guidelines of ZAQA. All users should ensure that they have the latest edition of this publication as National Occupational Standards are revised from time to time.

This NOS shall be used by, among others, industry, employers, quality assurance bodies, awarding and professional bodies and education and training institutions, as a benchmark to identify training needs, develop job profiles/descriptions, develop curricula and learning programmes, in various sectors where the occupation exists. In the Agriculture sector, demonstration of competence against this NOS may be required in order to run a business or practice a craft or profession.

There has been a notable increase in the number of small-scale aquaculture farmers in Zambia. However, this increase is being stifled, in part, by the inadequate trained fisheries extension staff to help farmers and fishermen with technical information necessary for the growth of their enterprises. As a result, efficient extension services are required to support the existing fish farmers and fishermen as well as the new entrants for effectively promoting equitable and sustainable development of aquaculture in particular and fisheries in general that will contribute to overall rural and urban socio-economic life, a job in which the Fisheries Extension Assistant plays a critical part.

As fisheries science is a highly technical, the technology transfer requires skill, expertise and experience on the part of the extension staff.

This National Occupational Standard highlights core knowledge, skills, competences and personal attributes that Fisheries Extension Assistants must possess to be successful in their work roles.



Mirriam M. A Chiyaba (Mrs)
Director and Chief Executive Officer

ACRONYMS AND ABBREVIATIONS

CS	Core Skill
FEA	Fisheries Extension Assistant
OK	Organisational Knowledge
NOS	National Occupational Standard
NOSDT	National Occupational Standards Development Team
PC	Performance Criteria
PS	Professional Skill
RPL	Recognition of Prior Learning
TK	Technical Knowledge
ZAQA	Zambia Qualifications Authority
ZQF	Zambia Qualifications Framework

GLOSSARY OF TERMS

For the purposes of this NOS, the following terms and definitions shall apply:

Core Skills/Generic Skills: are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the NOS, these include communication related skills that are applicable to most job roles.

Function: is an activity necessary for achieving the key purpose of the sector, occupation, or 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 NOS.

Job Role: defines a unique set of functions that together form a unique employment opportunity in an organisation.

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.

National Occupational Standards (NOS): are statements of the standards of performance individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding. They are precise descriptions of what an individual is expected to be able to do in his/her work role.

National Occupational Standards (NOS) Code: is a unique reference code that identifies a NOS.

National Occupational Standards Development Team (NOSDT): means an established group of national stakeholders/experts responsible for the development of National Occupational Standards within a specific economic sector or occupation.

Occupation: is a set of job roles, which perform similar/related set of functions in an industry.

Organisational Context: includes the way the organisation is structured and how it operates, including the extent of operative knowledge that managers have in their relevant areas of responsibility.

Performance Criteria: are statements that together specify the standard of performance required when carrying out a task.

Scope: is the 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 the quality of performance required.

Sector: is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.

Sub-Sector: is derived from a further breakdown based on the characteristics and interests of its components.

Technical Knowledge: is the specific knowledge needed to accomplish specific designated responsibilities.

Unit Title: gives a clear overall statement about what the incumbent should be able to do.

1. OVERVIEW

This is an introductory section providing a brief summary and specific information or commentary about the content of the NOS and the targeted sector and occupation to help the user judge whether it is relevant to them.

NOS Code	NOS.FEA.01
Occupation	Fisheries Assistance
Job Title	Fisheries Extension Assistant
Job Description	A Fisheries Extension Assistant is responsible for making field visits, mobilising members of the fishing community for extension training, gathering of information and other activities at community level
Job Purpose	This job role is responsible for providing assistance in ensuring active community participation, identifying target group for the training and other community level activities This position is responsible for providing fisheries extension services in the community
ZQF Level	5
Sector	Agriculture
Sub sector	Fisheries and Aquaculture
Other Economic Sector(s) in which the Occupation is Practiced	N/A
Other Similar Jobs Performed in the Occupation	Fisheries Assistant, Field/Farm Assistant, Community co-coordinator, Cooperative Extension Worker, etc.
Minimum Educational Job Entry Qualification(s)	Senior Secondary Education (Grade 12) Certificate or equivalent
Practicing License Requirements (if any)	N/A
Training/RPL (Optional)	On the job training/Prior work in Fisheries extension operations
Minimum Job Entry Age	18
Prior Experience (Optional)	Minimum 6 months as a facilitator in development projects or Fishery Operations
Performance Criteria	As described in the Units under Section 4

2. SCOPE

This National Occupational Standard specifies the fundamental knowledge and understanding, skills and competences that Fisheries Extension Assistants must possess to be successful in their job roles. It is applicable to Fisheries Extension Assistants working in agriculture or fisheries, governmental or non-governmental organisations, etc.

3. PERSONAL ATTRIBUTES (VALUES, ETHICS AND ATTITUDES)

A Fisheries Extension Assistant must possess excellent communication, facilitation, organising and implementations skills for various development programmes. He/she must be able to comprehend and synthesise the socio-political situation and decide strategies and actions accordingly, must be physically fit, be honest and have integrity, be polite, etc.

4. UNITS AND ELEMENTS

This National Occupational Standard is divided into 2 Units representing the tasks that a job holder should undertake in his/her day to day work. Each Unit is further broken down into elements depicting the number of activities to be carried out for the successful execution of a particular task.

UNIT 1 [This Unit is about providing assistance in organising extension training and implementation of development programmes in fisheries].

Unit No.	01
Unit Title (Task)	Assist in organising extension training and implementation of fisheries extension and development programmes
Description	This Unit is about providing assistance in organising extension training and implementation of development programmes in fisheries
Scope	This Unit covers the following: <ul style="list-style-type: none"> Identify target group and determine number, location, date and time of training Organise logistics and provide assistance in organising the training Collect feedback, responses and announce follow-ups, if any Introducing new technology and monitoring adoption.
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria (PC)
Identify target group, and determine number, location, date and time of training	To be competent, the individual must be able to: PC1. identify the target group in the village community and number of trainees PC2. plan the training keeping in mind fishing season
Organise logistics and provide assistance during the training	To be competent, the individual must be able to: PC3. organise the logistics required for the training, such as: <ul style="list-style-type: none"> venue training materials training equipments practical handouts/training handouts participant handbooks PC4. provide assistance during the training as guided by the trainer PC5. keep records of the training process and ensure the training proceeds smoothly
Collect feedback, responses and announce follow ups if any	To be competent, the individual must be able to: PC6. assist the trainer in- collecting feedback from the training PC7. collect outputs if any, attendance lists and signatures of participants whenever required PC8. announce the date and time of the next training, which would be carried out as a follow up
Introducing new technology and monitor their adoption	To be competent, the individual must be able to: PC9. to be competent the individual must be able to introduce new technologies in fish farming to the communities PC10. monitor the adoption rate of new technologies PC11. assess impact of new technology
Knowledge and Understanding (K)	
A. Organisational Context (Knowledge)	The individual on the job must demonstrate knowledge and understanding of: OK1. procedures followed for community participation and

of the company/ organisation and its processes)	<p>mobilisation by the training organisation OK2. rules and regulations to be followed according to fishing industry standards and as set by the training organisation OK3. administrative and financial rules of the training organisation OK4. record keeping procedures followed by the organisation</p>
B. Technical Knowledge	<p>The individual on the job must demonstrate knowledge and understanding of: TK1. community mobilisation techniques TK2. dynamics of the fishing community in terms of individuals and groups TK3. constraints of time for the fish farmer/fishermen TK4. daily routine of fish farmers/fishermen TK5. effective methods of disseminating information about training and its efficacy</p>
Skills (S)	
A. Core Skills/ Generic Skills	Reading Skills
	<p>The individual on the job must be able to: CS1. read and understand all basic documents pertaining to the conduct of the training CS2. read procedure and any material that may be required to be read while carrying out training activities</p>
	Writing Skills
	<p>The individual on the job must be able to: CS3. maintain minutes of the training CS4. maintain attendance reports/records CS5. write simple letters for invitation and other purposes to community leaders CS6. fill in feedback forms and prepare short reports</p>
	Oral Communication (Listening and Speaking skills)
<p>The individual on the job must be able to: CS7. interact positively with members of the fishing community/ cooperative</p>	
B. Professional Skills	Decision Making Skills
	<p>The individual on the job must be able to: PS1. assist in deciding target group for training and choose participants as indicated by the training organisation</p>
	Plan and Organise
	<p>The individual on the job must be able to: PS2. plan and organise trainings way ahead keeping in mind participants' schedules and holidays</p>
	Customer Centricity
	<p>The individual on the job must be able to: PS3. maintain good relationships and politeness with fish farmers and fishermen and encourage them to attend trainings</p>
Problem Solving Skills	
<p>The individual on the job must be able to: PS4. assist in solving problems that may occur at any stage during the course of the programme</p>	

	Analytical Thinking
	The individual on the job must be able to: PS5. apply domain information about the fishing community/ cooperative so as to mobilise them effectively for training
	Critical Thinking
	The individual on the job must be able to: PS6. use common sense and make judgments on day to day basis PS7. use reasoning skills to identify and resolve basic problems PS8. understand and analyse dynamics of the fishing community

UNIT 2 [This Unit is about providing assistance in ensuring the highest level of participation by the fishing community for training activities].

Unit No.	02
Unit Title	Ensure fish farming community participation
Description	This Unit is about providing assistance in ensuring the highest level of participation by the fishing community for training activities
Scope	This Unit covers the following: <ul style="list-style-type: none"> • Conduct meetings with community leaders and other key informants • Identify location, date and time of training in advance • Mobilise community for training
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria (PC)
Conduct meetings with community/cooperative leaders and other key informants	To be competent, the individual must be able to: PC1. locate active fish farmers/fishermen or influential (key) fish famers/fishermen PC2. find out the times they are available for meetings PC3. assist in organising series of meetings with active and influential people and provide information on importance of the training PC4. assist in providing a comfortable meeting place PC5. ensure interactive training sessions by use of modern teaching aids
Identify location, date and time of training in advance	To be competent, the individual must be able to: PC6. identify a venue suitable, accessible and acceptable to the members of community PC7. fix a date and time that's convenient for fish farmers/fishermen PC8. send timely reminders
Mobilise community/cooperative for training	To be competent, the individual must be able to: PC9. mobilise the fishing community from all sectors and gender to attend the meeting PC10. listen, contribute and assist in decision making in formal and informal community meetings PC11. assist in addressing issues and grievances arising from the community PC12. create awareness amongst the community about the importance of training
Knowledge and Understanding (K)	
A. Organisational Context (Knowledge of the company/organisation and its processes)	The individual on the job must demonstrate knowledge and understanding of: OK1. guidelines on community mobilisation and participation OK2. best practices in community participation

B. Technical Knowledge	The individual on the job must demonstrate knowledge and understanding of: TK1. tools and techniques of community mobilisation and organisation TK2. sequence of arrangement of training tools and techniques
Skills (S)	
A. Core Skills/ Generic Skills	Reading Skills
	The individual on the job must be able to: CS1. read all base documents pertaining to the conduct of the training CS2. read procedure and any material that may be required to be read while carrying out training activities
	Writing Skills
	The individual on the job must be able to: CS3. maintain minutes of the training CS4. maintain attendance reports/records CS5. write simple letters for invitation and other purposes to community leaders CS6. fill in feedback forms and prepare short reports
B. Professional Skills	Oral Communication (Listening and Speaking skills)
	The individual on the job must be able to: CS7. interact positively with members of the fishing community
	Decision Making Skills
	The individual on the job must be able to: PS1. assist in deciding target group for training and choose participants as indicated by the training organisation
	Plan and Organise
	The individual on the job must be able to: PS2. plan and organise trainings way ahead keeping in mind participants' schedules and holidays
	Customer Centricity
	The individual on the job must be able to: PS3. maintain good relationships and politeness with fish farmers and fishermen and encourage them to attend trainings
	Problem Solving Skills
	The individual on the job must be able to: PS4. assist in solving problems that may occur at any stage during the course of the programme
	Analytical Thinking
	The individual on the job must be able to: PS5. apply the domain information about the fishing community so as to mobilise them effectively for training
	Critical Thinking
	The individual on the job must be able to: PS6. use common sense and make judgments on day to day basis PS7. use reasoning skills to identify and resolve basic problems PS8. understand and analyse dynamics of the fishing community/ cooperative

5. EQUIPMENT, TOOLS AND CONSUMABLE MATERIALS

These include water source, ponds, boats and docks, submersible cages and nets/hooks, aerators and diffusers, filters and tanks, skimmers and smokers, fish feed, chemicals, fish storage facilities, note pads and pens, projector, laptop markers, cardboards, flipchart/board, protective equipment, company's standard operating procedures, reporting templates, etc.

6. DILEMMAS/CHALLENGES AND COMPLEXITIES FOR A JOB HOLDER

Dilemmas associated with the job of Fisheries Extension Assistant include handling dangerous chemicals, long working hours, pressure from fish farmers/fishermen and supervisors, language barriers, working in extreme weather, having to overstate points, resistance by fish farmers/fishermen to adopt new fish farming/fishing technics, etc.

6.1 Alternative Choices (Solutions) to Dilemmas and Complexities

Solutions to dilemmas include exercising regularly to maintain physical fitness, learning local languages, undertake training in customer service and team management, undertaking training in teaching/material delivery, wearing protective clothing and request for local escort in dangerous areas.

7. WORKING CONDITIONS/ENVIRONMENT

Working conditions include working/moving on lakes, rivers or swampy areas, working in rural areas, slippery areas and heights, cold, hot and rainy conditions, stand/walk for long hours for field visits, handling harmful chemicals, dealing with large groups of people with differing information assimilation abilities, etc.

8. PARTIES INVOLVED/INTERACTING WITH THE JOB HOLDER OR TRAINEE

8.1 Internal/Within the Organisation

Trainers, supervisors, colleagues, etc.

8.2 External/Outside the Organisation

Fish farmers/fishermen, trainers, government regulators, suppliers of equipment/tools/consumables, Extension Assistants from other organisations, donor agencies/non-governmental organisations, etc.

9. PHYSICAL DEMANDS ON THE BODY

- Be able to walk and stand for long periods of time;
- Be able to climb to and from high altitudes;
- Bend, stretch, twist, or reach out;
- Be able to lift relatively heavy materials, tools and equipment;
- Coordinate movement of several parts of the body, such as arms and legs, while the body is moving;
- Be able to withstand feelings of wetness, itching, burning or coldness on the body;
- Etc.

ANNEX A

Criteria for Assessments based on this NOS

A.1 Guidelines for Assessment

A.1.1 Criteria for assessment for curricula and learning programmes based on this NOS will be created by curricula and programmes developers. Each Performance Criteria (PC) will be assigned marks proportional to its importance in the NOS. Curricula and programmes developers will also lay down proportion of marks for theory and practical skills for each performance criteria, giving more weight to practical skills.

There shall be allocated the 'Total Mark', which will be the sum of all marks in each Unit, distributed across the number of PCs in that particular Unit. The 'Out Of' mark will be the mark allocated to each PC, which will be shared between theory and practical skills assessments.

A.1.2 Awarding/assessment bodies or institutions and other users of the NOS will create unique question papers for the theory part and evaluations for skill practical part for their respective candidates.

ANNEX B NOS Version Control

This Annex gives details necessary for the tracking of the NOS versions based on the number of revisions.

NOS Code	NOS.FEA.01		
ZQF Level	5	Version Number	01
Sector	Agriculture	Date of Approval	September, 2020
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Occupation	Fisheries Assistance	Date of Next Review	October, 2025

REGISTERED OFFICE

Zambia Qualifications Authority
Ground Floor, Finsbury Park
P.O Box 51103
Lusaka,Zambia

Tel: +260 211 843050/ 843053

Mobile: + 260 963 922 730/ 0956 037 185 / 0972 559 301

Email: info@zaqa.gov.zm

Website: www.zaqa.gov.zm