





QUALIFICATION FILE - Micro Credentials

Essentials of Mitigating GHG emissions in fish value chain

⊠ Public □ Private
$oxtimes$ Upskilling $oxtimes$ Dual/Flexi Qualification $oxtimes$ For ToT \oxtimes For ToA
\square General \square Multi-skill (MS) \square Cross Sectoral (CS) \boxtimes Future Skills \square OEM
NCrF/NSQF Level: 4

Submitted By:

Agriculture Skill Council of India

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Section 1: Basic Details

1.	Micro Credential-Qualification Name	Essentials of Mitigating GHG emissions in fish value chain				
2.	Sector/s	Agriculture				
3.	National Qualification Register (NQR) Code & Version (Will be issued after NSQC approval.)	NM-04-AG-02666-2024-V1-ASCI 4. NCrF/NSQF Level: 4			SQF Level: 4	
5.	Brief Description of the Micro Credential	This OS unit is about implementing and monitoring environmentally sustainable work practices to Mitigate GHG emissions in fish value chain.				nvironmentally sustainable work practices
6.	Eligibility Criteria for Entry for Students/Trainee/Learner/Employee	а	. Entry	Qualification & Relevant	Experience	
			S. No.	Academic/Skill Qualifi Specialization - if ap	•	Relevant Experience (with Specialization - if applicable)
			1	10th Grade pass		3-year relevant experience in Fisheries and related fields
			2	Previous relevant Qualifi NSQF Level 3.5	cation of	1.5-year relevant experience in Fisheries and related fields
			3	Previous relevant Qualifi NSQF Level 3	cation of	3-year relevant experience in Fisheries and related fields
		b). Age N	A		
7.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	1			8.	Common Cost Norm Category (I/II/III) (wherever applicable): I
9.	Any Licensing Requirements/ Pre-requisites for Undertaking Training (wherever applicable)	NA				
10.	Expected Outcomes of the Micro Credential	Terminal learning outcomes are:				
		 Examine current practices for resource usage in the fish value chain Set targets for improvements in the environmental and resource use efficiency Implement performance improvement strategies for environmental and resource efficiency 			in the fish value chain	
					ental and resource use efficiency	
					gies for environmental and resource use	

		Monitor performance of the applied strategies									
11.	Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of	☑ Offline Only ☐ Online Only ☐ Blended									
	the qualification)	Training Delivery Mode		Training Delivery Mode		raining Delivery Mode		ours) Practical (Hours)		Total (Hours)	
		Classroom (offline)	20		10		30			
		Online									
		(Refer Blended	l Learning Anne	exure for Deto	ails)						
12.	Assessment Criteria						T .	T .	1		
		Theory	Practical	Project		Viva	Total	Passing			
		(Marks) 16	(Marks) 20	(Marks)		(Marks) 14	(Marks) 50	%age 70			
			20			14] 30	70			
13.	Is the Qualification Amenable to Persons with Disability	⊠ Yes □ No	o If "Yes", spe	cify applica	ble type	e of Disabilit	y: LD, SHI				
14.	How participation of women will be encouraged?	Endeavour to	include wom	nen in the ba	atches						
15.	Other Indian Languages in which the Micro Credential will be implemented.	Hindi									
16.	Is similar Micro Credential Qualification(s) available on NQR-if yes, justification for this qualification	☐ Yes N	lo URLs of si	imilar Quali	fication	s:					
17.	Name and Contact Details Submitting / Awarding Body SPOC	Name: Mr Sril	anth Pampana	1							
		Email: standards@asci-india.com Contact No.: 0124-4670			4-4670029						
		Website: www	v.asci-india.con	<u>m</u>							
18.	NSQC Approval Date: 30/05/2024	19. Validity I	Ouration: 3 Ye	ears post	20. Next Review Date: 30/05/2027						
		NSQC Approval									

Section 2: Training Related

1.	Trainer's Qualification and experience in relevant	Graduate in Agriculture / Fisheries with 2 years of industry or training experience in Fisheries related		
	sector (in years) (as per requirement and NCVET	activities		
	guidelines)	OR		
		Graduate in Bachelor of Fisheries Science/B.Sc. (Industrial Fish & Fisheries) with 1 years of industry or		
		training experience in Fisheries related activities		
2.	Master Trainer's Qualification and experience in	5 years of training experience after industry or training experience in Fisheries related activities after		
	relevant sector (in years) (as per requirement and	Graduate in Agriculture / Fisheries with 2 years of relevant industry experience in Fisheries related		
	NCVET guidelines)	activities		
		OR		
		5 years of training experience after industry or training experience in Fisheries related activities after		
		Graduation in Bachelor of Fisheries Science/B.Sc. (Industrial Fish & Fisheries) with 1 years of relevant		
		industry experience in Fisheries related activities		
3.	Tools and Equipment Required for Training	☑ Yes □ No (If "Yes", details to be provided in Annexure)		

Section 3: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per requirement and NCVET guidelines)	Graduate in Agriculture / Fisheries with 3 years of training experience in Fisheries related activities OR Graduate in Bachelor of Fisheries Science/B.Sc. (Industrial Fish & Fisheries) with 2 years of industry experience in Fisheries related activities
2.	Proctor's Qualification and experience in relevant sector (in years) (as per requirement and NCVET guidelines)	Diploma/Graduate (It is mandatory for a proctor to have technical knowledge/IT knowledge Once a proctor has been on-boarded by any AA, they are oriented about skill ecosystem along with dos and don'ts.)
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per requirement and NCVET guidelines)	Post Graduate in Bachelor of Fisheries Science/B.Sc. (Industrial Fish & Fisheries)/Fisheries with 10 years of industry experience in Fisheries related activities
4.	Assessment Mode (Specify the assessment mode)	Mode: □ Online Only ☒ Offline Only □ Blended

5.	Tools and Equipment Required for Assessment	Same as for training ☐ Yes ☐ No (details to be provided in Annexure-if it is different for Assessment)	

Section 4: Evidence of Need of the Micro Credential

As per the NCVET Guidelines for evidence of need, provide the required Annexure/Supporting documents.

1.	Government /Industry initiatives/ requirement (Yes/No): Yes. Scoping Study done for identification of critical skills in Indian agriculture, with the support of Department of Education, Australian Government and ASCI in collaboration with Adelaide University as principal partner and a few other Australian and Indian partners.
2.	Number of Industry validation provided: 9
3.	Estimated number of people to be trained: 100/Year

Section 5: Annexure Check List

Specify Annexure Number and Name.

1.	Annexure: NCrF/NSQF level justification based on	Annexure-1
	NCrF/NSQF descriptors (Mandatory)	
2.	Annexure: List of tools and equipment relevant for NOS	Annexure-2
	(Mandatory, except in case of online course)	
3.	Annexure: Performance and Assessment Criteria	Annexure-6
	(Mandatory)	
4.	Annexure: Assessment Strategy (Mandatory)	Annexure-7
5.	Annexure: Blended Learning (Mandatory, in case	NA NA
	selected Mode of delivery is Blended Learning)	

6.	Annexure: Acronym and Glossary (Optional)	
7.	Annexure/Supporting Document: Standalone NOS-	Annexure-5
	Performance Criteria Details Annexure/Document with	
	PC-wise detailing as per NOS format (Mandatory- Public	
	view)	
8.	Supporting Document: Model Curriculum (Mandatory	Annexure-8
	– Public view)	

Annexure 1: Evidence of Level

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level
Professional Theoretical Knowledge/Process	The individual has knowledge of environmental and resource efficiency issues specific to the fish value chain and standards, guidelines and approaches to environmental sustainability relevant to the fish value chain	Possesses specialized operational knowledge and understanding of the work.	4
Professional and Technical Skills/ Expertise/ Professional Knowledge	 The individual is able to Examine current practices for resource usage Set targets for improvements Implement performance improvement strategies Monitor performance 	Can apply the required knowledge for successfully implementing or applying techniques/processes in a specific field/job role.	4
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	The individual is able to support co-workers and other stakeholders to identify areas for improved practices and resource efficiency in work area as required.	Has good skills for self-employment and entrepreneurship skills/entrepreneurial Mind-set which may potentially create job for more persons	4

Broad Learning Outcomes/Core Skill	The individual is able to provide alternative solutions to workplace environmental issues and also implement environmental and resource efficiency improvement plans.	Able to identify the problems and a wider possible range of solutions with pros and cons in production.	4
Responsibility	The individual is able to apply continuous improvement strategies to own work area, and communicate ideas and possible solutions to co-workers and other stakeholders. Also can make strategies and apply new tools and technology for mitigation of GHG emissions in the fish value chain.	Can perform all non-standard procedures and non-routine tasks with confidence.	4

Annexure 2: Learning Outcomes and Assessment Criteria

Detailed learning outcomes and assessment criteria for the qualification are as follows:

Assessment Criteria					
Passing %: 70		ASSESSME	NT MARKS		
Elements	Theory	Practical	Project	Viva	Total
Examine current practices for resource usage	6	5		4	15
PC1. Identify environmental regulations relevant to the fish value chain, and evaluate procedures for assessing compliance with regulations					
PC2. Collect information on environmental management and resource efficiency systems and procedures					

PC3. Analyse and organise information from a range of sources to provide information, advice, tools and resources for improvement opportunities				
PC4. Measure and document current workplace resource usage to investigate improvement opportunities				
PC5. Analyse and document current workplace purchasing strategies to investigate opportunities for improvement				
PC6. Analyse and document current work processes for accessing information and data to assist in identifying areas for improvement				
Set targets for improvements	2	2	1	5
PC7. Seek input and access sources of information and data from external sources				
PC8. Evaluate alternative solutions to workplace environmental issues				
PC9. Set efficiency targets based on achievable goals and milestones				
Implement performance improvement strategies	6	8	4	18
PC10. Apply methods to assist in achieving efficiency targets				
PC11. Apply continuous improvement strategies to own work area, and communicate ideas and possible solutions to coworkers and other stakeholders				

TOTAL TOTAL	16	20	14	50
PC18. Promote successful strategies and acknowledge				
PC17. Evaluate strategies and improvement plans and set new targets, and apply new tools, technology and strategies				
PC16. Document efficiency outcomes and communicate reports on targets to key personnel and stakeholders				
PC15. Use or develop tools and technology for evaluating and monitoring environmental and resource efficiency performance				
Monitor performance	2	5	5	12
PC14. Seek and act upon suggestions and ideas about environmental and resource efficiency management from stakeholders, as appropriate				
PC13. support co-workers and other stakeholders to identify areas for improved practices and resource efficiency in work area as required				
PC12. Implement and integrate environmental and resource efficiency improvement plans for own work area with other operational activities				

Annexure 3: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

1. Assessment System Overview

In Agriculture Sector it is of ultimate importance that individuals dealing with crop production or livestock have the requisite knowledge and competencies to undertake the task. Based on the Assessment Criteria, SSC in association with empanelled AAs, define the test structure for the given job roles to cover the required skills and competencies. Assessment strategy consists of the following:

- 1. Multiple Choice Questions: To assess basic knowledge (Objective/Subjective)
- 2. Viva: To assess awareness on processes (Oral and/or written questioning)
- 3. Practical: To evaluate skills and identify competencies. (Observation)

Assessments for knowledge and awareness on processes may be conducted through 'real time' internet based evaluation or by conducting the same 'offline' through TABs. Skills and competencies are to be assessed by conducting 'practical' on ground through qualified and ToA certified assessors.

While it is important that an individual has adequate knowledge and skills to perform a specific task, weight age for different aspects for assessment are given as follows:

Multiple Choice Questions: 20%-30%, depending on the specific QP

Viva: 20%

Practical: 50% - 60% (Involves demonstrations of applications and presentations of procedures/tasks and other components)

Assessment will be carried out by certified assessors through empanelled assessment partners. Based on the results of assessment; ASCI will certify the learners/candidates

2. Testing Environment

Assessments are conducted on laptops, Mobiles and android tablets via both offline and online mode depending on the internet connectivity at assessment location.

In remote locations/villages, assessments get delivered through tablets without the requirement of Internet.

- Multilingual assessments (ASCI is conducting assessments in 13 + languages pan India)
- Rubric driven assessments in Practical/Viva sections and responses recorded accordingly
- All responses, data, records and feedback stored digitally on cloud
- Advanced auto-proctoring features photographs, time-stamp, geographic-tagging, toggle-screen/copy-paste disabled, etc.
- Android based monitoring system
- End to end process from allocation of a batch to final result upload, there is no manual intervention
- Assessment will normally be fixed for a day after the end date of training / within 7 days of completion of training.
- Assessment will be conducted at the training venue
- Room where assessment is conducted will be set with proper seating arrangements with enough space to curb copying or other unethical activities
- Question bank of theory and practical will be prepared by ASCI /assessment agency and approved ASCI. Only from approved Question Bank assessment agency will prepare the question paper. Theory testing will include multiple choice questions, pictorial question, etc. which will test the trainee on his theoretical knowledge of the subject.
- The theory, practical and viva assessments will be carried out on same day. In case of more number of candidates, number of assessors and venue facilitation be increased and facilitated

		Assessment	
Assessment	Formative or	Strategies	Examples
Туре	Summative		
Theory	Summative	MCQ/Written exam	Knowledge of facts related to the job role and functions. Understanding of principles and concepts related to the job role and functions
Practical	Summative	Structured tasks/Demonstration	Practical application / Demonstration / Application tasks

Viva	Summative	Questioning and Probing	Mock interviews on usability of job roles/advantages /importance of adherence
			to procedures. Viva will be used to gauge trainee's confidence and correct
			knowledge in handling job situation

The question paper pre-loaded in the computer /Tablet and it will be in the language as requested by the training partner.

3. Assessment Quality Assurance framework

Assessment Framework and Design:

Based on the Assessment Criteria, SSC in association with AAs will define the test structure for the given roles to cover the required skills and competencies. ASCI offer a bouquet of tools for multi- dimensional evaluation of candidates covering language, cognitive skills, behavioral traits and domain knowledge.

Theoretical Knowledge - Item constructs and types are determined by theoretical understanding of the testing objectives and published research about the item-types and constructs that have shown statistical validity towards measuring the construct. Test item types which have been reported to be coachable are not included. Based on these, items are developed by domain experts. They are provided with comprehensive guidelines of testing objectives of each question and other quality measures.

Type – Questions based on Knowledge Required, Case-based practical scenario questions and automated simulation based questions.

Practical Skills - The practical assessments are developed taking into consideration two aspects: what practical tasks is the candidate expected to perform on the job and what aspects of the job cannot be judged through theoretical assessments. The candidates shall be asked to perform either an entire task or a set of subtasks depending on the nature of the job role

Type – Standardized rubrics for evaluation against set of tasks in a demo/practical task

Viva Voce - Those practical tasks which cannot be performed due to time or resource constraints are evaluated through the viva mode. Practical tasks are backed up with Viva for thorough assessment and complete evaluation

Type – Procedural questions, do's and don'ts, subjective questions to check understanding of practical tasks.

Assessor has to go through orientation program organized by Assessment Agency. The training would give an overview to the assessors on the overall framework of QP evaluation. Assessor shall be given a NOS and PC level overview of each QP as applicable. Overall structure of assessment and objectivity of the marking scheme will be explained to them. The giving of marks will be driven by an objective framework which will maintain standardization of marking scheme.

4. Type of Evidence and Evidence Gathering Protocol:

During the assessment the evidences collected by AAs and ASCI are:

- Geo Tagging to track ongoing assessment
- AA's coordinator emails the list of documents and evidences (photos and videos) to the assessor one day prior to the assessment. List is mentioned below:
 - Signed Attendance sheet
 - Assessor feedback sheet
 - Candidate feedback sheet
 - Assessment checklist for assessor
 - Candidate Aadhar/ID card verification
 - o Pictures of classroom, labs to check the availability of adequate equipment's and tool to conduct the training and assessment
 - o Pictures and videos of Assessment, training feedback and infrastructure.
- Apart from the Assessor, Technical assistant popularly known as Proctor also ensures the proper documentation and they verify each other's tasks.
- To validate their work on the day of assessment, regular calls and video calls are done.
- On-boarding and training of assessor and proctor is done on timely basis to ensure that quality of the assessment should be maintained.
- Training covers the understanding of QP, NSQF level, NOS and assessment structure

5. Methods of Validation

- Morning Check (Pre-Assessment): Backend team of AA calls and confirms assessor/technical spoc event status. Assessor/Technical spoc are instructed to reach the centre on time by 9:30 AM / as decided with TC and delay should be highlighted to the Training Partner in advance.
- <u>Video Calls</u>: Random video calls are made to the technical spoc/assessor so as to keep check on assessment quality and ensure assessment is carried out in fair and transparent manner
- Aadhar verification of candidates
- Evening Check (Post Assessment): Calls are made to the ground team to ensure event is over by what time and the documentation is done in proper manner or not.
- <u>TP Calling</u>: To keep check on malpractice activity, independent audit team calls to TP on recorded line to take confirmation if there was any malpractice activity observed in assessment on part of AA/SSC team. If calls are not connected, email is send to TP Spoc for taking their confirmation
- <u>Video and Picture Evidence:</u> Backend team collects video and pictures for assessment on real time basis and highlights any issue like, Students sitting idle/trainer allowed for helping out candidates during assessment.

- Surprise Visit: Time to time SSC/AA Audit team can visit the assessment location and do surprise audit for assessment process carried out by ground team.
- Geo Tagging: On day of assessment, each technical spoc is required to login in our internal app which is Geo tagged. Any deviation with centre address needs to be highlighted to assessment team on real-time basis.

Method for assessment documentation, archiving, and Access:

- ASCI has fully automated result generation process in association with multiple AAs
- Theory, Practical and Viva marks forms the basis of the results and encrypted files generated to avoid data manipulation. All responses captured and stored in System with Time-Stamps at the end of AAs and SSC. NOS-wise and PC-wise scores can be generated.
- Maker Checker concept: 1 person prepares results and other audit result which is internally approved by AA at first and then gets vetted at the end of SSC
- All soft copy of documents is received from the on-ground tech team over mail. The same are downloaded by our internal backend team and saved in Repository. The repository consists of scheme wise folders. These scheme wise folders have job role specific folders. These specific folders have Year wise and Month wise folders where all documents are saved in Batch specific folders. All Hard copies are filed and stored in storeroom.
- Result Review & Recheck Mechanism –
- Time stamped assessment logs
- Answer/Endorsement sheets for each candidate
- Attendance Sheet
- Feedback Forms: Assessor feedback form, Candidate feedback form, TP feedback form
- The results for each of the candidate shall be stored and available for review (retained for 5 years/till conclusion of project or scheme)

Annexure 4: Tools and Equipment

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	White board	Nos	1
2	Marker	Nos	2
3	Overhead projector	Nos	1
4	Laptop	Nos	1
5	Internet access		

Classroom Aids:

The aids required to conduct sessions in the classroom are:

- 1. White board
- 2. Marker
- 3. Overhead projector
- 4. Laptop
- 5. Internet access

Annexure 5: Industry Validations Summary

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1	Livelihood Alternatives(LA) Private Limited	Ratnakar Panigrahi	Director	Bhubaneswar, Odisha	9810687493	ratnakar@livehoodalternatives.com	
2	Siddha Development Research and Consultancy (SDRC)	Ranjana Pandey Panigrahi	Managing Director	Punjabi Colony, Satyanagar, Bhubaneswar, Odisha	7682883102	ranjana@sdrc.co.in	

_	Coninty for the Unliftmant of			District		
3	Society for the Upliftment of			Dwarahat, District:		
	Villagers & Development of			Almora,		
	Himalayan Areas (SUVIDHA)	Santosh Pandey	Director	Uttarakhand	7409888999	santosh@suvidha.org.in
4	Professional Assistance for	Amulya Kumar		Bhubaneswar,		
	development Action (Pradan)	Khandai	Integrator	Odisha	8757593259	amulyakhandai@pradan.net
5	Regional Rainfed Lowland Rice		Principal			
	Research Station, ICAR-National		Scientist &			
	Rice Research Institute	Dr Kanchan Saikia	Incharge Head	Kamrup, Assam	9436108770	kanchansaikia@yahoo.com
6	Krishi Vigyan Kendra, Rewa	Dr A K Pandey		Rewa, Jabalpur, MP	9977879360	kvk-rewa@rediffmail.com
7	Seven Sisters Development			Guwahati, Kamrup		
	Assistance(SeSTA)	Rohan Ahmed	SMS	(M), Assam	9007456276	rohan@sesta.org
8		Dr Bhabesh	Senior Scientist			
	KVK, Golaghat	Chandra Deka	and Head	Khumtai	9435340387	kvk_golaghat@aau.ac.in
9			DIRECTOR-	Bhubaneswar,		
	PANTISS Foundation	Stalin Nayak	CUM-CEO	Odisha	9853939599	info@pantiss.org

Annexure 6: Training Details

Training Projections:

Year	Estimated Training # of Total Candidates	Estimated training # of Women	Estimated training # of People with Disability
2024-25	100	20	
2025-26	100	20	
2026-27	100	20	

Data to be provided year-wise for next 3 years.

Annexure 7: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework

Glossary

Term	Description
National Occupational	NOS define the measurable performance outcomes required from an individual engaged in a particular task.
Standards (NOS)	They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a
	competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.