



Model Curriculum

QP Name: Shrimp Farmer

QP Code: AGR/Q4902

Version: 3.0

NSQF Level: 4

Model Curriculum Version: 2.0

Agriculture Skill Council of India | | Agriculture Skill Council of India (ASCI), 6th Floor, GNG Tower, Plot
No. 10, Sector - 44

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Training Parameters

Sector	Agriculture
Sub-Sector	Fisheries
Occupation	Aquaculture
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6221.0101
Minimum Educational Qualification and Experience	<p>Minimum Educational Qualification: 12th grade pass OR Completed 2nd year of 3-year diploma (after 10th) and pursuing regular diploma OR 10th grade pass plus 2-year NTC OR 10th grade pass plus 1-year NTC plus 1 year NAC OR 8th pass plus 2-year NTC plus 1-Year NAC plus CITS OR 10th grade pass and pursuing continuous schooling OR 10th Grade Pass with 2-year relevant experience OR Previous relevant Qualification of NSQF Level 3.0 with minimum education as 8th Grade pass with 3- year relevant experience OR Previous relevant Qualification of NSQF Level 3.5 with 1.5- year relevant experience</p>
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	30/12/2021
Next Review Date	30/12/2024
NSQC Approval Date	30/12/2021
QP Version	3.0
Model Curriculum Creation Date	30/12/2021
Model Curriculum Valid Up to Date	30/12/2024

Model Curriculum Version	2.0
Minimum Duration of the Course	390 Hours
Maximum Duration of the Course	390 Hours

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills to:

- Describe the process of preparing for carrying out shrimp culture.
- Demonstrate the process of stocking and maintaining the shrimp culture.
- Demonstrate the process of harvesting, processing and marketing the aquaculture organisms.
- Explain the basic entrepreneurial activities for small enterprise.
- Describe the process of undertaking employability and entrepreneurial practices.
- Describe the process of engaging in collective farming/activity.
- Demonstrate various practices to maintain personal hygiene and safety in culture operations.

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
Bridge Module	05:00	00:00	0:00	0:00	05:00
Module 1: Introduction to the role of a Shrimp Farmer	05:00	00:00	0:00	0:00	05:00
AGR/N4961 Prepare to carry out shrimp culture NOS Version-1.0 NSQF Level- 4	30:00	55:00	0:00	0:00	85:00
Module 2: Preparation for carrying out shrimp culture	30:00	55:00	0:00	0:00	85:00
AGR/N4962 Stock and maintain the shrimp seeds NOS Version-1.0 NSQF Level- 4	30:00	60:00	0:00	0:00	90:00
Module 3: Process of stocking and maintaining the seeds	30:00	60:00	0:00	0:00	90:00
AGR/N4923 Harvest, process and market the aquaculture organisms NOS Version-2.0 NSQF Level- 4	20:00	40:00	0:00	0:00	60:00

Module 4: Process of harvesting, processing and marketing the aquaculture organisms	20:00	40:00	0:00	0:00	60:00
AGR/N9922 Engage in collective farming/activity NOS Version-1.0 NSQF Level- 4	20:00	10:00	0:00	0:00	30:00
Module 5: Engagement in collective/ farming activities	20:00	10:00	0:00	0:00	30:00
AGR/N4955 Follow the hygiene and safety practices in culture operations NOS Version-1.0 NSQF Level- 4	15:00	15:00	0:00	0:00	30:00
Module 6: Health, hygiene and safety in culture operations	15:00	15:00	0:00	0:00	30:00
DGT/VSQ/N0102 Employability Skills NOS Version-1.0 NSQF Level-4	60:00	00:00	0:00	0:00	60:00
Module 7: Employability Skills	60:00	00:00	0:00	0:00	60:00
Total Duration	180:00	180:00	0:00	0:00	360:00
OJT : 30 hours					

Module Details

Module 1: Introduction to the role of a Shrimp Farmer

Bridge Module

Terminal Outcomes:

- Discuss the job role of a Shrimp Farmer.

Duration: 05:00	Duration: 0:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the size and scope of the Agriculture industry and its sub-sectors. • Discuss the role and responsibilities of a Shrimp Farmer. • Identify various employment opportunities for a Shrimp Farmer. 	
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
NA	

Module 2: Preparation for carrying out shrimp culture

Mapped to NOS AGR/N4961 v1.0

Terminal Outcomes:

- Describe the process of selecting the shrimp species and culture system.
- Describe the process of selecting the site for shrimp farming.
- Demonstrate the process of preparing the layout of the shrimp farm.
- Demonstrate the process of setting up the shrimp farm.
- Describe the process of procuring the shrimp seeds.

Duration: 30:00	Duration: 55:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the criteria for selecting the shrimp species to be cultured such as its growth potential, profitability and suitability to the local conditions. • Explain different types of shrimp culture systems such as extensive/ semi-intensive/ intensive and the criteria for selecting one. • Explain the criteria for selecting a site for a shrimp farm: such as proximity to the sea/ river/ stream, clean water, minimum vegetation, moderate rainfall and temperature etc. • Explain the importance and process of getting the soil sample tested to ensure the soil at the site has the required fertility levels and ability to hold water. • List various inputs required for a shrimp farm. • List the appropriate material required for carrying out pond lining. • Describe the process of preparing a perennial pond i.e. draining out, sun-drying and de-mudding. • State various measures to be taken to control the growth of aquatic weeds and insects during shrimp culture. • Explain the importance of constructing a sedimentation pond to collect effluents before releasing the pond water. • Explain the importance of erecting 	<ul style="list-style-type: none"> • Demonstrate how to calculate the elevation and orientation of the culture pond. • Prepare a sample layout of the shrimp farm as per the selected culture system. • Demonstrate the process of constructing the culture pond as per the layout through co-ordination with an expert. • Show how to construct earthen/ concrete dykes of appropriate height. • Demonstrate the process of carrying out pond lining with the appropriate material to minimise erosion and water seepage. • Show how to construct the inlet and outlet gates of appropriate size according to the size of the culture pond. • Demonstrate how to de-mud the pond and remove the aquatic weeds. • Demonstrate the process of applying the recommended treatment such as chlorine, lime and gypsum to adjust the soil pH and disinfect the pond. • Demonstrate the process of applying organic/ inorganic fertilizers in the culture pond to stimulate plankton bloom. • Show how to construct a sedimentation pond to collect the effluents before releasing the pond

<p>fences and installing nets to protect the shrimp farm from external threats.</p> <ul style="list-style-type: none"> • Describe the process of procuring, transporting and storing shrimp seeds. • State the appropriate characteristics to look for while procuring the shrimp seeds. 	<p>water.</p> <ul style="list-style-type: none"> • Demonstrate the process of installing a screen with the appropriate mesh-size at the inlet gate. • Demonstrate the process of installing the water pump at a spot with minimum sedimentation. • Demonstrate the process of setting up aerators according to the size of the culture pond. • Demonstrate how to construct a store room for storing the shrimp farming inputs, tools, equipment, etc. • Show how to erect fences of appropriate height and install nets to protect the shrimp farm from external threats.
<p>Classroom Aids</p>	
<p>Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>Land Survey Equipment, Engineering Chain, Tape, Ranging Rod, Digital Distance Meter, Pheodo Light, Dumpy Level, Compass (Prismatic), Plain Table Set, Total Stations, Soil and Water Analysis Equipment Such as Soil Sampling Kit, Ph Meter, Oxygen Meter, Refractometer, Nutrient Analysis Kits, Glass Wares (Beakers, Measuring Cylinders, Funnels, Pipettes, Burets, Test Tubes), Filter Papers</p>	

Module 3: Process of stocking and maintaining the seeds

Mapped to NOS AGR/N4962 v1.0

Terminal Outcomes:

- Demonstrate the process of stocking the shrimp seeds.
- Demonstrate the process of carrying out feed and disease management.
- Demonstrate the process of maintaining the culture pond.
- Demonstrate various practices for effective resource optimisation.
- Demonstrate various waste management practices.

Duration: 30:00	Duration: 60:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • State the appropriate measures to be followed while stocking the seeds to minimise the damage and mortality rate. • Describe the process of identifying the feed and nutrition requirements of the selected shrimp species. • Describe the process of procuring and storing the shrimp feed/ feed ingredients. • Explain the importance of preparing shrimp feed maintaining different nutrients such as protein, carbohydrates, vitamins and minerals in the recommended ratio. • Explain the importance of making necessary changes to the shrimp feed according to their stages of growth. • Explain how to maintain the optimum pH and dissolved oxygen levels in the culture pond. • Explain how to how to identify and remove aquatic weeds and predators from the pond. • State various signs of stress and disease in shrimps. • Describe the process of sampling shrimps and coordinating with an approved lab to identify various diseases and infections in shrimp. • Explain the benefits of resource optimisation. 	<ul style="list-style-type: none"> • Demonstrate the process of applying the appropriate treatment such as chlorine to treat water and storing the treated water in the reservoir. • Show how to draw treated water from the reservoir to the culture pond up to the required level. • Demonstrate how to acclimatise the seeds before stocking them. • Demonstrate the process of stocking the seeds in the culture pond, maintaining the recommended stocking density. • Show how to prepare the shrimp feed maintaining different nutrients such as protein, carbohydrates, vitamins and minerals in the recommended ratio. • Demonstrate the process of feeding the shrimp using automatic feed dispensers or manually by spreading the feed in the culture pond. • Show how to dispose the rancid feed appropriately. • Demonstrate how to aerate the culture pond using the aerators. • Demonstrate the process of carrying out regular cleaning of the culture pond to remove sludge, faeces and uneaten feed from the pond. • Demonstrate how to remove the aquatic weeds and predators from

<ul style="list-style-type: none"> • Explain the criteria for segregating waste into appropriate categories. 	<p>the pond.</p> <ul style="list-style-type: none"> • Demonstrate the process of applying the recommended treatment in the pond to treat disease and infections. • Demonstrate various practices to optimise the usage of various resources such as water and electricity. • Demonstrate the process of recycling and disposing different types of waste appropriately.
<p>Classroom Aids</p>	
<p>Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>Pond Construction Equipment-JCB, Tractor with Accessories, Roller, Farm Equipment Such As Aerators, Generator, Water Pumps (Diesel & Electric Operated), Plastic Wares, Glasswares, Check Trays, Plankton Nets, Cast Nets, Bag Nets Etc.</p>	

Module 4: Process of harvesting, processing and marketing the aquaculture organisms

Mapped to NOS AGR/N4923 v2.0

Terminal Outcomes:

- Demonstrate the process of harvesting the aquaculture organisms.
- Demonstrate the process of sorting, grading, storing and marketing the aquaculture organisms.
- Discuss ways to promote diversity and inclusion at the workplace.

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List maturity indicators of various aquaculture organisms. • State the appropriate time and method to harvest the aquaculture organisms such as ring seine, shore seine, etc. • List various tools and equipment used for harvesting the aquaculture organisms. • Describe the process and criteria for sorting and grading harvested aquaculture organisms. • State appropriate conditions to store the harvested aquaculture organisms. • Explain various activities in the process of marketing the produce such as identify market demand, connecting with buyers and negotiating the price, processing orders and payments, etc. • State the recommended practices for packing and transporting aquaculture organisms while protecting them from contamination. • Explain how to calculate the benefit-cost (B:C) ratio. • Explain the importance of inclusion of all genders and people with disability (PwD) at the workplace. 	<ul style="list-style-type: none"> • Demonstrate the use of various tools and equipment such as dip net, cast net, portable lift net, gill nets. • Demonstrate the process of harvesting the aquaculture organisms partially or completely according to the local demand and proximity to the relevant markets/ buyers. • Prepare a sample record of the harvested organism. • Demonstrate the process of carrying out sorting of organisms as per the relevant criteria such as species and maturity. • Demonstrate the process of grading the organisms mechanically on appropriate quality parameters such as size and appearance. • Show how to pack the aquaculture organisms in appropriate containers for being transported to the market/ buyer. • Demonstrate the use of relevant e-payment methods such as the Aadhaar Enabled Payment System (AEPS), Unified Payment Interface (UPI), Unstructured Supplementary Service Data (USSD) payment, etc. • Prepare a sample record of sales and payments. • Demonstrate appropriate verbal and non-verbal communication that is respectful of genders and disability.

Classroom Aids

Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements

Hand Nets and Cast Nets, Dip Nets, Hand Gloves, Boots, Head Gear, Autoclave, Transport Vehicles with Water storage capacity, Oxygen Cylinders, Ropes, Threads, Polypropylene Tanks, Oxygen Tablets, Vitamin B 12 tablets for removal of stress during transportation, Siphoning pipes, Portable DC Chargeable Battery Aerators, Small Ice Machine

Module 5: Basic entrepreneurial activities for small enterprise

Mapped to AGR/N9908 v2.0

- Describe the process of planning the agricultural enterprise/ business.
- Describe the process of managing the agricultural production process.
- Describe the process of managing the post-production and marketing processes.

Duration: 20:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain how to analyse the demand and supply of the relevant agricultural produce in the market • Describe the process of identifying the target customers and assess their needs and expectations with respect to the quality and price of the produce. • Explain how to identify various types of agricultural entrepreneurship/ business opportunities. • Explain how to prepare a basic business plan for agricultural entrepreneurship/business activities. • State the appropriate sources of funding for the agricultural entrepreneurship/ businesses • State the relevant government schemes and programs • Explain the importance of ensuring compliance with the government structural reforms and framework, along with the applicable rules and regulations. • List various resources required for agricultural production • Describe the process of planning agricultural production and the use of relevant technologies to enhance production • Explain the importance of ensuring no cause adverse impact on the environment and produce during production 	<ul style="list-style-type: none"> • Demonstrate how to analyse the demand and supply of the relevant agricultural produce in the market. • Prepare a sample basic business plan for agricultural entrepreneurship/business activities. • Demonstrate how to calculate the costs incurred and determine the price of the product for profitability. • Prepare a sample marketing plan considering the 4Ps i.e., product, price, promotion, and place and 4As i.e., acceptability, affordability, accessibility, and awareness. • Demonstrate the process of using the relevant digital services such as e-commerce, e-payments, electronic recordkeeping, etc.

- State the recommended practices to be followed for efficient input resource management.
- Describe the process of optimising the production processes and output through the amalgamation of existing practices with smart technologies.
- Explain the recommended sustainability practices to be followed during agricultural production to prevent and deal with deforestation, loss of biodiversity, soil degradation, etc.
- Explain how to collect information related to the wholesale and retail price of agricultural produce.
- Explain how to calculate the economics of the produce viz. production cost, price of the produce, B:C Ratio etc.
- Explain the relevant government schemes with the provision of subsidies/funds for the promotion of agricultural produce.
- Describe the process of selecting appropriate marketing channels for marketing agricultural produce, and the applicable requirements and constraints.
- List the relevant buyers of different types of agricultural produce.
- Explain how to identify and manage various risks to production and post-production processes.
- Explain how to undertake outreach programs to promote agricultural products and services, and expand agri-business.
- Explain the 4Ps i.e., product, price, promotion, and place and 4As i.e., acceptability, affordability, accessibility, and awareness considered while preparing and executing a marketing plan.
- Explain the use of the relevant digital services such as e-commerce, e-payments, electronic recordkeeping,

<p>etc.</p> <ul style="list-style-type: none"> • Explain the importance of using efficient post-production logistics. • Explain the importance of maintaining various records accurately. 	
<p>Classroom Aids</p>	
<p>Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>NA</p>	

Module 6: Engagement in collective farming/activities

Mapped to NOS AGR/N9922 v1.0

Terminal Outcomes:

- Describe the process of creating PGs/ FIGs/ SHGs and preparing for its operations.
- Demonstrate the process of conducting group meetings and training sessions.
- Demonstrate the process of carrying out collective farming/activities.

Duration: 04:00	Duration: 12:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the process of preparing for the Producer Groups (PGs)/Farmers Interest Groups (FIGs)/ Self-Help Groups (SHGs) operations such as fundraising, induction of Subject Matter Experts (SMEs), investing in Information and Communication Technology (ICT) products, etc. • Explain how to obtain access to the relevant government development programmes and funds. • Describe the process of commodity convergence with the relevant developmental programmes. • Explain the importance of planning optimal production to meet the market and household food security needs. • Explain the importance of setting the group objectives and deciding the group income-generating enterprises/ activities, methods of operation, benefits, etc. • Explain the importance of organising the PG/FIG/ SHG meetings and training sessions to resolve common concerns and get information about the latest developments in the field of work. • Explain the benefits of various capacity building exercises such as skill development and training programmes. • Explain the importance and process of conducting field trials to identify and resolve problems encountered 	<ul style="list-style-type: none"> • Roleplay to illustrate how to conduct the initial group meetings to introduce the members, discuss the group objectives, group income-generating enterprises/ activities, methods of operation, etc. • Roleplay to illustrate how to organise field trials to identify and resolve problems encountered by group members in the field operations.

<p>by farmers in the field operations.</p> <ul style="list-style-type: none"> • Explain the concept of the group-owned bank to provide quality seeds, fertilisers, pesticides, tools and equipment to the member farmers. • Describe the process of using the group's credit facility. • Explain various core collective farming activities such as procuring inputs in bulk, large-scale farming, etc. • Explain the concept and benefits of forming forward and backward linkages. • State the relevant value addition practices such as processing, packing, upgrading the quality, etc. • Explain the benefits of connecting with similar groups to address common problems on a large scale. 	
<p>Classroom Aids</p>	
<p>Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>NA</p>	

Module 7: Health, hygiene and safety in culture operations

Mapped to NOS AGR/N4955 v1.0

Terminal Outcomes:

- Demonstrate the process of maintaining the water body and its hygiene.
- Demonstrate the process of maintaining the health of cultured organisms.
- Describe how to maintain personal health and safety.

Duration: 04:00	Duration: 12:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain how to protect the aquaculture farm and cultured species from various threats. • Describe the process of identifying and removing predators or preying organisms from the culture pond or tank. • Explain the importance and process of carrying out regular cleaning of the culture pond or tank to remove sludge, algae, uneaten feed, etc. • State the recommended disinfectants for water bodies and the process of applying them. • State the recommended practices to protect the cultured organisms from air/ water/ fomite-borne contamination and diseases during and after harvesting. • Describe the process of sampling the cultured organisms to identify disease, disorders and presence of parasites and pathogens. • List the signs of stress or disease in the cultured organisms such as spots, lesions, erratic movement, etc. • Describe the process of identifying, quarantining and treating the diseased organisms. • List the signs of improvement in the quarantined organisms. • Explain the importance of removing the dead or moribund organisms from the water body promptly and 	<ul style="list-style-type: none"> • Demonstrate the process of carrying out regular maintenance of dykes or fences in the culture pond. • Show how to remove sludge, algae, uneaten feed and any other waste materials from the culture pond or tank. • Demonstrate the process of applying necessary disinfectants or treatment in the culture pond or tank, to prevent disease outbreak and the growth of harmful organisms. • Demonstrate the process of sampling the cultured organisms regularly to identify the signs of stress, disease, phenotypic disorders and the presence of parasites and pathogens. • Demonstrate how to remove the dead and moribund organisms and dispose them in an environment-friendly manner. • Demonstrate how to safely use the PPE during hazardous aquaculture operations. • Demonstrate procedures for dealing with accidents and emergencies. • Demonstrate the administration of first aid.

<p>disposing them safely.</p> <ul style="list-style-type: none"> • Explain the importance of using the relevant PPE and ensuring it is damage-free. • State appropriate practices to be followed to maintain personal hygiene and prevent infections. • Explain the importance of storing hazardous chemicals, tools and equipment safely. • Describe the common first aid procedures to be followed in case of emergencies. 	
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and Software, Facilitator’s Guide, Participant’s Handbook.	
Tools, Equipment and Other Requirements	
Personal Protective Equipment, Cleaning Equipment and Materials, Sanitizer, Soap, Mask, First Aid Kit, Equipment used in Medical Emergencies.	

Module8: Employability Skills (60 hours)

Mapped to NOS DGT/VSQ/N0102 v1.0

Duration: 60:00

Key Learning Outcomes

Introduction to Employability Skills Duration: 1.5 Hours

After completing this programme, participants will be able to:

1. Discuss the Employability Skills required for jobs in various industries
2. List different learning and employability related GOI and private portals and their usage

Constitutional values - Citizenship Duration: 1.5 Hours

3. Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen
4. Show how to practice different environmentally sustainable practices.

Becoming a Professional in the 21st Century Duration: 2.5 Hours

5. Discuss importance of relevant 21st century skills.
6. Exhibit 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.
7. Describe the benefits of continuous learning.

Basic English Skills Duration: 10 Hours

8. Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone
9. Read and interpret text written in basic English
10. Write a short note/paragraph / letter/e -mail using basic English

Career Development & Goal Setting Duration: 2 Hours

11. Create a career development plan with well-defined short- and long-term goals

Communication Skills Duration: 5 Hours

12. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
13. Explain the importance of active listening for effective communication
14. Discuss the significance of working collaboratively with others in a team

Diversity & Inclusion Duration: 2.5 Hours

15. Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD
16. Discuss the significance of escalating sexual harassment issues as per POSH act.

Financial and Legal Literacy Duration:5 Hours

17. Outline the importance of selecting the right financial institution, product, and service
18. Demonstrate how to carry out offline and online financial transactions, safely and securely
19. List the common components of salary and compute income, expenditure, taxes, investments etc.
20. Discuss the legal rights, laws, and aids

Essential Digital Skills Duration: 10 Hours

21. Describe the role of digital technology in today's life
22. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely
23. Discuss the significance of displaying responsible online behavior while browsing, using various social media platforms, e-mails, etc., safely and securely
24. Create sample word documents, excel sheets and presentations using basic features
25. utilize virtual collaboration tools to work effectively

Entrepreneurship Duration: 7 Hours

26. Explain the types of entrepreneurship and enterprises
27. Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan
28. Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement
29. Create a sample business plan, for the selected business opportunity

Customer Service Duration: 5 Hours

30. Describe the significance of analysing different types and needs of customers
31. Explain the significance of identifying customer needs and responding to them in a professional manner.
32. Discuss the significance of maintaining hygiene and dressing appropriately

Getting Ready for apprenticeship & Jobs Duration: 8 Hours

33. Create a professional Curriculum Vitae (CV)
34. Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively
35. Discuss the significance of maintaining hygiene and confidence during an interview
36. Perform a mock interview
37. List the steps for searching and registering for apprenticeship opportunities

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Diploma	Fisheries	3	Fish Production and Management	0		Regular Diploma more than 15 months in fisheries
B. Sc.	Zoology	3	Fish Production and Management	0		For the school Program minimum qualification of the Trainer should be Graduate (Fisheries Science/ Industrial Fish & Fisheries/ Zoology). Their Teaching experience will be considered industry experience
Graduate	Agriculture	2	Fish Production and Management	0		
Graduate	Fisheries Science	0		0		

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role “ Shrimp Farmer ”, mapped to QP: “AGR/Q4902, v3.0”, Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: “Trainer (Vet and Skills)”, mapped to the Qualification Pack: “MEP/Q2601, v2.0”. The minimum accepted score as per MEPS guidelines is 80%.

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
Graduation	B.F. Sc	4	In Fisheries Science/ Aquaculture/ Applied aquaculture/ Marine Biology or related experience and fields	0		Practical skills and knowledge required in Shrimp Farming
Graduation	B. Sc (Fisheries and related streams)	5	In Fisheries Science/ Aquaculture/ Applied aquaculture/ Marine Biology or related experience and fields	0		Practical skills and knowledge required in Shrimp Farming
Post-Graduation	M. F. Sc	2	In Fisheries Science/ Aquaculture/ Applied aquaculture/ Marine Biology or related experience and fields	0		Practical skills and knowledge required in Shrimp Farming
Post-Graduation	M.Sc (Fisheries/ Applied Aquaculture and related streams)	2	In Fisheries Science/ Aquaculture/ Applied aquaculture/ Marine Biology or related experience and fields	0		Practical skills and knowledge required in Shrimp Farming
PhD	PhD (Fisheries Science/ Aquaculture and related streams)	1	In Fisheries Science/ Aquaculture/ Applied aquaculture/ Marine Biology or related experience and fields	0		Practical skills and knowledge required in Shrimp Farming

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role “ Shrimp Farmer ”, mapped to QP: “AGR/Q4902, v3.0”, Minimum accepted score is 80%	Certified for the Job Role: “Assessor (Vet and Skills)”, mapped to the Qualification Pack: “MEP/Q2701, v2.0”, with a minimum score of 80%.

Assessment Strategy

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 empaneled 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 the ground through qualified and ToA certified assessors.

An individual must have adequate knowledge and skills to perform a specific task, weightage for different aspects of the assessment is 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 the assessment; ASCI will certify the learners/candidates

Testing Environment

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

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

- Multilingual assessments (ASCI is conducting the 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 the 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 the training / within 7 days of completion of training.
- Assessment will be conducted at the training venue
- The 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 practice 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 questions, etc. which will test the trainee on his theoretical knowledge of the subject.
- The theory, practical and viva assessments will be carried out on the same day. In case of a greater number of candidates, the number of assessors and venue facilitation be increased and facilitated

Assessment			
Assessment Type	Formative or Summative	Strategies	Examples
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 the usability of job roles/advantages /importance of adherence to procedures. Viva will be used to gauge trainee's confidence and correct knowledge in handling the job situation

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

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, behavioural traits and domain knowledge.

Theoretical Knowledge - Item constructs and types are determined by a 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 that 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 the 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 a 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, dos and don'ts, subjective questions to check the understanding of practical tasks.

The assessor has to go through an orientation program organized by the Assessment Agency. The training would give an overview to the assessors on the overall framework of QP evaluation. The assessor shall be given a NOS and PC level overview of each QP as applicable. The 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 that will maintain the standardization of the marking scheme.

Type of Evidence and Evidence Gathering Protocol:

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

- Geotagging to track ongoing assessment
- AA's coordinator emails the list of documents and evidence (photos and videos) to the assessor one day before the assessment. The list is mentioned below:
 - Signed Attendance sheet
 - Assessor feedback sheet
 - Candidate feedback sheet

- Assessment checklist for assessor
- Candidate Aadhar/ID card verification
- Pictures of the classroom, labs to check the availability of adequate equipment's and tool to conduct the training and assessment
- Pictures and videos of Assessment, training feedback and infrastructure.
- Apart from the Assessor, a Technical assistant is popularly known as Proctor also ensures the proper documentation and they verify each other's tasks.
- To validate their work on the day of the assessment, regular calls and video calls are done.
- On-boarding and training of assessor and proctor is done on a timely basis to ensure that the quality of the assessment should be maintained.
- Training covers the understanding of QP, NSQF level, NOS and assessment structure

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.
- Video Calls: Random video calls are made to the technical SPOC/assessor so as to keep a check on assessment quality and ensure assessment is carried out in a fair and transparent manner
- Aadhar verification of candidates
- Evening Check (Post Assessment): Calls are made to the ground team to ensure the event is over by what time and the documentation is done properly or not.
- TP Calling: To keep a check on malpractices, an independent audit team calls the TP on a recorded line to take confirmation if there was any malpractice activity observed in the assessment on part of the AA/SSC team. If calls are not connected, an email is sent to TP SPOC for taking their confirmation
- Video and Picture Evidence: Backend team collects video and pictures for assessment on a real-time basis and highlights any issue such as students sitting idle/ trainer helping the candidates during the assessment.
- Surprise Visit: Time to time SSC/AA Audit team can visit the assessment location and conduct a surprise audit for the assessment carried out by the ground team.
- Geo Tagging: On the day of the assessment, each technical SPOC is required to login into our internal app which is Geotagged. Any deviation with the centre address needs to be highlighted to the assessment team on a real-time basis.

Method for assessment documentation, archiving, and Access:

- ASCI have a fully automated result generation process in association with multiple AAs
- Theory, Practical and Viva marks form the basis of the results and encrypted files generated to avoid data manipulation. All responses were captured and stored in the System with Time-Stamps at the end of AAs and SSC. NOS-wise and PC-wise scores can

be generated.

- Maker Checker concept: One person prepares the results and another audit result which is internally approved by AA at first and then gets vetted at the end of SSC
- All softcopies of documents are received from the on-ground tech team over email. The same is downloaded by our internal backend team and saved in Repository. The repository consists of scheme-wise folders. These scheme-wise folders have two 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 the 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 the conclusion of the project or scheme)

References

Glossary

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
Key Learning Outcome	The Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on-site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on-site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	The Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	The Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.

Acronyms and Abbreviations

Term	Description
AGR	Agriculture
FIGs	Farmers Interest Groups
ICT	Information and Communication Technology
NOS	National Occupational Standard (s)
NSQF	National Skills Qualifications Framework
OJT	On-the-job Training
PwD	People with Disability
PGs	Producer Groups
PPE	Personal Protective Equipment
QP	Qualifications Pack
SHGs	Self-Help Groups
SMEs	Subject Matter Experts