



# Model Curriculum

**QP Name: Neera Technician cum Primary Processor**

**QP Code: AGR/Q0505**

**Version: 3.0**

**NSQF Level: 3**

**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

<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop production
<b>Occupation</b>	Plantation Crops Cultivation
<b>Country</b>	India
<b>NSQF Level</b>	3
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/6112.0201
<b>Minimum Educational Qualification and Experience</b>	<p>Grade 10 OR Grade 8 with two years of (NTC/ NAC) after 8th OR Grade 8 pass and pursuing continuous schooling in regular school with vocational subject OR 8th grade pass with 2-year relevant experience OR 5th grade pass with 5-year relevant experience OR Previous relevant Qualification of NSQF Level 2 with 1-year relevant experience OR Previous relevant Qualification of NSQF Level 2.5 with 6 months' relevant experience</p>
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	17 Years
<b>Last Reviewed On</b>	31/03/2022
<b>Next Review Date</b>	31/03/2025
<b>NSQC Approval Date</b>	31/03/2022
<b>QP Version</b>	3.0
<b>Model Curriculum Creation Date</b>	31/03/2022
<b>Model Curriculum Valid Up to Date</b>	31/03/2025
<b>Model Curriculum Version</b>	2.0
<b>Minimum Duration of the Course</b>	270 Hours

<b>Maximum Duration of the Course</b>	270 Hours
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## 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:

- Demonstrate the process of assisting in carrying out nutrient management of coconut crop.
- Demonstrate the process of assisting in carrying out pest and disease management.
- Describe the process of assisting in irrigation, moisture conservation, intercropping and weed control.
- Demonstrate the process of assisting in extracting neera from coconut/ palm trees.
- Demonstrate the process of assisting in carrying out post-harvest processing of neera.
- Explain the basic entrepreneurial activities for small enterprise.
- Describe the process of undertaking employability and entrepreneurial practices.
- Demonstrate various practices to maintain personal hygiene, cleanliness, and safety at the workplace.

### 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
<b>Bridge Module</b>	<b>05:00</b>	<b>00:00</b>	<b>0:00</b>	<b>0:00</b>	<b>05:00</b>
Module 1: Introduction to the role of a Neera Technician cum Primary Processor	05:00	0:00	0:00	0:00	05:00
<b>AGR/N0517 Assist in carrying out nutrient management of coconut crop</b> <b>NOS Version- 2.0</b> <b>NSQF Level- 3</b>	<b>10:00</b>	<b>15:00</b>	<b>0:00</b>	<b>0:00</b>	<b>25:00</b>
Module 2: Process of assisting in carrying out nutrient management of coconut/ palm crop	10:00	15:00	0:00	0:00	25:00
<b>AGR/N0518: Assist in carrying out pest and disease management</b> <b>NOS Version- 2.0</b> <b>NSQF Level- 3</b>	<b>10:00</b>	<b>20:00</b>	<b>0:00</b>	<b>0:00</b>	<b>30:00</b>

Module 3: Process of assisting in carrying out pest and disease management	10:00	20:00	0:00	0:00	30:00
<b>AGR/N0519: Assist in irrigation, moisture conservation, intercropping and weed control</b> <b>NOS Version-2.0</b> <b>NSQF Level- 3</b>	<b>20:00</b>	<b>40:00</b>	<b>0:00</b>	<b>0:00</b>	<b>60:00</b>
Module 4: Process of assisting in irrigation, moisture conservation, intercropping and weed control	20:00	40:00	0:00	0:00	60:00
<b>AGR/N0524 Assist in extracting neera from coconut/ palm trees</b> <b>NOS Version-2.0</b> <b>NSQF Level- 3</b>	<b>10:00</b>	<b>20:00</b>	<b>0:00</b>	<b>0:00</b>	<b>30:00</b>
Module 5: Process of assisting in extracting neera from coconut/ palm trees	10:00	20:00	0:00	0:00	30:00
<b>AGR/N0525 Assist in carrying out post-harvest processing of neera</b> <b>NOS Version-2.0</b> <b>NSQF Level- 3</b>	<b>10:00</b>	<b>20:00</b>	<b>0:00</b>	<b>0:00</b>	<b>30:00</b>
Module 6: Process of assisting in carrying out post-harvest processing of neera	15:00	15:00	0:00	0:00	30:00
<b>AGR/N0536: Assist in carrying out primary processing of Neera- based products</b> <b>NOS Version-2.0</b> <b>NSQF Level- 3</b>	<b>10:00</b>	<b>20:00</b>	<b>0:00</b>	<b>0:00</b>	<b>30:00</b>
Module 7: Primary processing of Neera- based products	10:00	20:00	0:00	0:00	30:00
<b>AGR/N9903 Maintain health and safety at the workplace</b> <b>NOS Version- 3.0</b> <b>NSQF Level-4</b>	<b>15:00</b>	<b>15:00</b>	<b>0:00</b>	<b>0:00</b>	<b>30:00</b>

Module 8: Hygiene and cleanliness	03:00	03:00	0:00	0:00	6:00
Module 9: Safety and emergency procedures	12:00	12:00	0:00	0:00	24:00
<b>DGT/VSQ/N0101 Employability Skills NOS Version-1.0 NSQF Level-2</b>	<b>30:00</b>	<b>0:00</b>	<b>0:00</b>	<b>0:00</b>	<b>30:00</b>
<b>Total Duration</b>	<b>120:00</b>	<b>150:00</b>	<b>0:00</b>	<b>0:00</b>	<b>270:00</b>

# Module Details

## Module 1: Introduction to the role of a Neera Technician cum Primary Processor

### Bridge Module

#### Terminal Outcomes:

- Discuss the job role of a Neera Technician cum Primary Processor.

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

## Module 2: Process of assisting in carrying out nutrient management of coconut crop

*Mapped to AGR/N0517 v2.0*

### Terminal Outcomes:

- Demonstrate the process of assisting in soil testing.
- Demonstrate the process of assisting in preparing the field.
- Demonstrate various practices for effective resource optimisation.
- Demonstrate various waste management practices
- Discuss ways to promote diversity and inclusion at the workplace.

<b>Duration: 10:00</b>	<b>Duration: 15:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the use of various farm tools and implements for maintaining the soil.</li> <li>• Explain the importance of testing soil through an approved soil-testing laboratory to determine the ratio of macro and micronutrients in it.</li> <li>• State the appropriate time for applying fertilisers with the required nutrients as per the crop cycle.</li> <li>• Explain the importance of applying fertilisers in the recommended quantity as per the prescribed schedule.</li> <li>• Explain the importance and process of carrying out various intercultural practices to maintain the nutrient levels in the soil and improve the yield.</li> <li>• Explain the benefits of resource optimisation.</li> <li>• Explain the importance of recycling and disposing different types of waste as per the applicable regulations.</li> <li>• Explain the importance of inclusion of all genders and People with Disability (PwD) at the workplace.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate how to collect the soil sample from the coconut field as per the supervisor’s instruction.</li> <li>• Demonstrate how to pack and label the soil sample.</li> <li>• Demonstrate the process of applying the organic or inorganic fertilisers recommended by the laboratory to meet the macro and micronutrients needs of the coconut crop.</li> <li>• Demonstrate the process of installing the appropriate irrigation or fertigation system such as the drip irrigation system through coordination with the supervisor.</li> <li>• Prepare a sample record of fertilisers used in the field through coordination with the supervisor.</li> <li>• Demonstrate various practices to optimise the usage of various resources such as water and electricity.</li> <li>• Demonstrate the process of recycling and disposing different types of waste appropriately.</li> <li>• Demonstrate appropriate verbal and non-verbal communication that is respectful of genders and disability.</li> </ul>
<b>Classroom Aids</b>	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
<b>Tools, Equipment and Other Requirements</b>	

Khurpa, Sickle, Weeder, Sprayer, Chemicals

## Module 3: Process of assisting in carrying out pest and disease management

### Mapped to ARG/N0518 v2.0

#### Terminal Outcomes:

- Demonstrate the process of assisting in preventing pests and disease.
- Describe the process of assisting in identifying pests, disease and their remedy.
- Demonstrate the process of applying the necessary treatment.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Explain various disease-resistant varieties of coconut and their suitability to different agro-climatic zones.</li> <li>• Explain how to adopt the natural enemies of the coconut pests and disease such as Bethyid fly, Bracon spp. Ichneumonid wasp, Goniozus nephantidis, etc.</li> <li>• Explain the importance of cleaning the coconut palm crown regularly.</li> <li>• Explain how to remove the crown tissues and coconut tree parts severely affected by pests and disease.</li> <li>• Explain the symptoms of various pests, diseases and disorders in coconut crops such as rhinoceros beetle, black-headed caterpillar red palm weevil, termites, bud rot, leaf rot, stem bleeding, pencil point disorder, button shedding, barren nuts etc.</li> <li>• State the appropriate treatment to be used for removing different types of coconut pests and diseases.</li> <li>• Explain how to use and maintain different types of plant protection equipment such as a hydraulic sprayer, plunger duster, etc.</li> <li>• Explain how to prepare Bordeaux mixture and other bio-pesticides</li> <li>• Explain the importance of maintaining the record of the use of any pesticides, insecticides and any</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the process of carrying out appropriate treatment of the seeds as per the supervisor's instructions.</li> <li>• Demonstrate how to clean the palm crown to protect from common pests and remove the crown tissues and coconut tree parts severely affected by pests and disease.</li> <li>• Demonstrate the use of trap light and pheromone to catch bugs as per the supervisor's instructions.</li> <li>• Show how to remove the dry leaves, sheaths and spathe at the recommended intervals.</li> <li>• Demonstrate the process of applying the recommended treatment as per the prescription in an appropriate dose to remove pests and disease, using the relevant PPE.</li> <li>• Prepare a sample record of the use of pesticides, insecticides and any other treatment through coordination with the supervisor.</li> </ul>

other treatment.	
<b>Classroom Aids</b>	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
<b>Tools, Equipment and Other Requirements</b>	
Chemicals, Sprayer	

## Module 4: Process of assisting in irrigation, moisture conservation, intercropping and weed control

*Mapped to AGR/N0519 v2.0*

### Terminal Outcomes:

- Describe the process of assisting in irrigation and moisture conservation.
- Describe the process of assisting in intercropping, pruning and weed control.

<b>Duration: 20:00</b>	<b>Duration: 40:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the importance of irrigating the coconut crop with the recommended quantity and as per the recommended irrigation schedule.</li> <li>• Explain the recommended practices to be followed to maintain the required level of moisture in the soil such as mulching with coconut husks, leaves or coir pith.</li> <li>• State the appropriate crops to be cultivated as part of intercropping based on the climate and suitability to the selected coconut variety.</li> <li>• Describe the process of intercropping to increase the ratio of organic matters in the soil and prevent its erosion.</li> <li>• Describe the process of identifying and removing the weeds found in the coconut field.</li> <li>• Explain various practices to be followed to increase the yield and decrease the pest and disease incidence.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the process of installing the appropriate irrigation or fertigation system through coordination with the supervisor.</li> <li>• Demonstrate how to irrigate the coconut crop as per the recommended irrigation schedule and supervisor's instructions.</li> <li>• Demonstrate the process of carrying out intercropping under supervision to increase the ratio of organic matters in the soil and prevent its erosion.</li> <li>• Demonstrate how to prune or remove the dry coconut leaves as per the supervisor's instructions.</li> <li>• Show to remove the dead plants and trees.</li> <li>• Demonstrate the process of using the organic waste to prepare compost or mulch as directed by the supervisor.</li> <li>• Demonstrate the process of applying the recommended pre-emergent herbicide in an appropriate quantity as per the supervisor's instructions.</li> <li>• Show how to remove weeds manually or till the field as per the supervisor's instructions.</li> </ul>
<b>Classroom Aids</b>	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
<b>Tools, Equipment and Other Requirements</b>	
NA	

## Module 5: Process of assisting in extracting neera from coconut/ palm trees

### Mapped to NOS AGR/N0524 v2.0

#### Terminal Outcomes:

- Describe the process of preparing to collect neera.
- Demonstrate the process of extracting neera from coconut/ palm trees.

<b>Duration: 10:00</b>	<b>Duration: 20:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the applicable procedures for neera production.</li> <li>• State the appropriate type of ropes and with to be used for climbing coconut and palm trees.</li> <li>• Explain the use of the relevant PPE, tools and accessories required for neera extraction.</li> <li>• Explain various precautions to be taken while using the relevant tools while extracting neera.</li> <li>• Explain the importance of sanitising the tools and containers before use.</li> <li>• Explain the importance of applying Anti-Fermentation Solution (AFS) in an appropriate quantity in the containers to be used for collecting neera.</li> <li>• Explain the signs of growth and maturity of inflorescence on coconut and palm trees.</li> <li>• State the recommended disinfectant to be used to remove any microorganisms from the mature inflorescence selected for neera extraction.</li> <li>• Explain the importance of applying clay or other recommended material on the exposed part o inflorescence to prevent neera from flowing down.</li> <li>• Explain the importance of extracting neera at sunrise to obtain its best quality.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate how to sanitise the tools and containers as per the supervisor’s instructions for neera collection.</li> <li>• Demonstrate the process of applying Anti-Fermentation Solution (AFS) in an appropriate quantity in the containers as instructed by the supervisor.</li> <li>• Show how to climb the coconut/ palm tree safely using ropes and PPE.</li> <li>• Demonstrate the process of cleaning the mature inflorescence with the recommended disinfectant to remove any microorganisms.</li> <li>• Demonstrate how to create a cut of the recommended dimension on the tip of the inflorescence on the coconut/ palm tree and secure the inflorescence with strings.</li> <li>• Demonstrate the process of applying clay or other recommended material on the exposed part of inflorescence to prevent neera from flowing down.</li> <li>• Show how to fasten a container below the inflorescence to collect neera, ensuring it has AFS applied in it.</li> <li>• Demonstrate the process of tapping and rubbing inflorescence to stimulate the formation of neera and cause it to rise up to the tip of inflorescence.</li> </ul>
<b>Classroom Aids:</b>	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	

### **Tools, Equipment and Other Requirements**

Disinfectant, Sprayer, Strings, Stick, Knife, Clay, Storage Can/ Collection Box, Anti-Fermenting Solution

## Module 6: Process of assisting in carrying out post-harvest processing of neera

*Mapped to AGR/N0525 v2.0*

### Terminal Outcomes:

- Demonstrate the process of carrying out post-harvest processing.

<b>Duration: 10:00</b>	<b>Duration: 20:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain how to carry out post-harvest processing of neera and prepare neera-based products.</li> <li>• Explain how to protect neera from contamination and fermentation during processing and the use of relevant technologies for the purpose.</li> <li>• State the appropriate temperature and humidity for storing neera and neera-based products, and its impact on the quality of neera.</li> <li>• Explain the appropriate practices to be followed for safe loading of produce in the transport vehicle.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate how to climb down the coconut/ palm tree safely and protecting the extracted neera.</li> <li>• Show how to accumulate the neera extracted from different trees in a large container and filter it through a fine-mesh cloth or wire-mesh as per the supervisor’s instructions.</li> <li>• Demonstrate the use of measuring cans and pH meters to determine the quantity and quality of neera.</li> <li>• Demonstrate the process of preparing neera-based products as per the supervisor's instructions.</li> <li>• Demonstrate the process of preparing the storage area to ensure hygienic conditions and protection of neera from microbial contamination.</li> <li>• Demonstrate the process of loading the processed neera and neera-based products in the transport vehicle to be transported to the buyer or target market.</li> <li>• Prepare a sample record of harvesting and processing of neera.</li> </ul>
<b>Classroom Aids</b>	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
<b>Tools, Equipment and Other Requirements</b>	
Tapping Tools, Collection Box, Measuring Can, Ph Meter, Ice Boxes, Anti-Fermenting Solution	

## Module 7: Primary processing of Neera- based products

### Mapped to AGR/N0536 v1.0

#### Terminal Outcomes:

- List different types of neera products.
- Demonstrate the process of preparing various neera products through primary processing.

<b>Duration: 10:00</b>	<b>Duration: 20:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the use of neera as an energy drink and its medicinal benefits.</li> <li>• Explain the uses and benefits and different neera products.</li> <li>• Describe the process of delimiting the palm juice.</li> <li>• Explain the precautions to be taken while preparing neera products.</li> <li>• Explain the use of appropriate packing material for packing different types of neera products.</li> <li>• Explain the importance of ensuring hygiene during the processing and packing of neera products to maintain product quality and prevent contamination.</li> <li>• Explain the recommended temperature for storing different neera products.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the process of preparing various neera products, such as palm syrup, palm wine, palm jaggery, liquid palm jaggery, palm honey, palm sugar, palm candy, palm vinegar, etc.</li> <li>• Demonstrate the use of by-products obtained from the processing of neera, e.g. use of molasses for preparing bio-chemical products, golden syrup, etc.</li> </ul>
<b>Classroom Aids</b>	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
<b>Tools, Equipment and Other Requirements</b>	
NA	

## Module 8: Hygiene and cleanliness

### Mapped to NOS AGR/N9903 v3.0

#### Terminal Outcomes:

- Discuss how to adhere to personal hygiene practices.
- Demonstrate ways to ensure cleanliness around the workplace.

<b>Duration: 03:00</b>	<b>Duration: 03:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the requirements of personal health, hygiene and fitness at work.</li> <li>• Describe common health-related guidelines laid down by the organizations/ Government at the workplace.</li> <li>• Explain the importance of good housekeeping at the workplace.</li> <li>• Explain the importance of informing the designated authority on personal health issues related to injuries and infectious diseases.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate personal hygiene practices to be followed at the workplace.</li> <li>• Demonstrate the correct way of washing hands using soap and water, and alcohol-based hand rubs.</li> <li>• Demonstrate the steps to follow to put on and take off a mask safely.</li> <li>• Show how to sanitize and disinfect one's work area regularly.</li> <li>• Demonstrate adherence to the workplace sanitization norms.</li> <li>• Show how to ensure the cleanliness of the work area.</li> </ul>
<b>Classroom Aids:</b>	
Computer, Projection Equipment, PowerPoint Presentation and Software, Facilitator's Guide, Participant's Handbook.	
<b>Tools, Equipment and Other Requirements</b>	
Personal Protective Equipment, Cleaning Equipment and Materials, Sanitizer, Soap, Mask	

## Module 9: Safety and emergency procedures

### Mapped to NOS AGR/N9903 v3.0

#### Terminal Outcomes:

- Describe how to adhere to safety guidelines.
- Show how to administer appropriate emergency procedures.

<b>Duration: 12:00</b>	<b>Duration: 12:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• List the PPE required at the workplace.</li> <li>• Describe the commonly reported hazards at the workplace.</li> <li>• Describe the hazards caused due to chemicals/pesticides/fumigants.</li> <li>• Describe the basic safety checks to be done before the operation of any equipment/machinery.</li> <li>• Describe the common first aid procedures to be followed in case of emergencies.</li> <li>• State measures that can be taken to prevent accidents and damages at the workplace.</li> <li>• Explain the importance of reporting details of first aid administered, to the reporting officer/doctor, in accordance with workplace procedures.</li> <li>• State common health and safety guidelines to be followed at the workplace.</li> </ul>	<ul style="list-style-type: none"> <li>• Check various areas of the workplace for leakages, water-logging, pests, fire, etc.</li> <li>• Demonstrate how to safely use the PPE and implements as applicable to the workplace.</li> <li>• Display the correct way of donning, doffing and discarding PPE such as face masks, hand gloves, face shields, PPE suits, etc.</li> <li>• Sanitize the tools, equipment and machinery properly.</li> <li>• Demonstrate the safe disposal of waste.</li> <li>• Demonstrate procedures for dealing with accidents, fires and emergencies.</li> <li>• Demonstrate emergency procedures to the given workplace requirements.</li> <li>• Demonstrate the use of emergency equipment in accordance with manufacturers' specifications and workplace requirements.</li> <li>• Demonstrate the administration of first aid.</li> <li>• Prepare a list of relevant hotline/emergency numbers.</li> </ul>
<b>Classroom Aids:</b>	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook.	
<b>Tools, Equipment and Other Requirements</b>	
Personal Protective Equipment, First Aid Kit, Equipment used in Medical Emergencies.	

## Module 10: Employability Skills (30 hours)

*Mapped to NOS DGT/VSQ/N0101 v1.0*

**Duration: 30:00**

### Key Learning Outcomes

#### Introduction to Employability Skills Duration: 1 Hour

After completing this programme, participants will be able to:

1. Discuss the importance of Employability Skills in meeting the job requirements

#### Constitutional values - Citizenship Duration: 1 Hour

2. Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.
3. Show how to practice different environmentally sustainable practices

#### Becoming a Professional in the 21st Century Duration: 1 Hours

4. Discuss 21st century skills.
5. Display positive attitude, self -motivation, problem solving, time management skills and continuous learning mindset in different situations.

#### Basic English Skills Duration: 2 Hours

6. Use appropriate basic English sentences/phrases while speaking

#### Communication Skills Duration: 4 Hour

7. Demonstrate how to communicate in a well -mannered way with others.
8. Demonstrate working with others in a team

#### Diversity & Inclusion Duration: 1 Hour

9. Show how to conduct oneself appropriately with all genders and PwD
10. Discuss the significance of reporting sexual harassment issues in time

#### Financial and Legal Literacy Duration: 4 Hours

11. Discuss the significance of using financial products and services safely and securely.
12. Explain the importance of managing expenses, income, and savings.
13. Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws

#### Essential Digital Skills Duration: 3 Hours

14. Show how to operate digital devices and use the associated applications and features, safely and securely
15. Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely

#### Entrepreneurship Duration: 7 Hours

16. Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges

#### Customer Service Duration: 4 Hours

17. Differentiate between types of customers
18. Explain the significance of identifying customer needs and addressing them
19. Discuss the significance of maintaining hygiene and dressing appropriately

**Getting ready for apprenticeship & Jobs Duration: 2 Hours**

20. Create a biodata
21. Use various sources to search and apply for jobs
22. Discuss the significance of dressing up neatly and maintaining hygiene for an interview
23. Discuss how to search and register for apprenticeship opportunities

## Annexure

### Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
10th Class		7	Plantation Crop Cultivation	0		Neera Collector /Coconut Farmer with 7 Years of experience.Certificate from coconut FPO or Coconut Development board or state horticulture departments
12 <sup>th</sup> Class		4	Plantation Crop Cultivation	0		Ex-Service-Man including Ex-Paramilitary personnel: Minimum Qualification is 10+2 with an Honourable Discharge/Pension. SSC would consider a relaxation/waiver of sector-specific experience on case-to-case basis.
Diploma	Agriculture/ Horticulture	3	Plantation Crop Cultivation	0		
Graduate	Graduate in any stream except Agriculture / Horticulture/ Botany/ Forestry/ Food Technology	2	Plantation Crop Cultivation	0		For the school Program minimum qualification of the Trainer should be Graduate ( Agriculture / Horticulture/ Botany/ Forestry/ Food Technology ) with minimum 3 years Teaching experience (will be considered industry experience)
Graduate	Agriculture / Horticulture/ Botany/ Forestry/ Food Technology	1	Plantation Crop Cultivation	0		
Post-Graduate	Agriculture/ Horticulture/ Botany/ Forestry/ Food Technology	0		0		

Trainer Certification	
Domain Certification	Platform Certification
<p>Certified for Job Role “<b>Neera Technician cum Primary Processor</b>”, mapped to QP: “AGR/Q0505, v3.0”, Minimum accepted score is 80%</p>	<p>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 MEPSC guidelines is 80%.</p>

## Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
<b>B.Sc</b>	B.Sc (Agriculture/ Botany/ Forestry/ Agronomy/ Horticulture/plantation and related streams)	5	Agriculture/ Forestry/ plantation and horticulture and related experience	0		Practical skills and knowledge required in Neera tapping & processing
<b>M.Sc</b>	M.F.Sc)Agriculture/ Botany/ Forestry/ Agronomy/ Horticulture/plantation and related streams	2	Agriculture/ Forestry/ plantation and horticulture and related experience	0		Practical skills and knowledge required in Neera tapping & processing
<b>PhD</b>	PhD(Agriculture / Botany/ Forestry/ Agronomy/ Horticulture/plantation and related streams)	1	Agriculture/ Forestry/ plantation and horticulture and related experience	0		Practical skills and knowledge required in Neera tapping & processing

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role “ <b>Neera Technician cum Primary Processor</b> ”, mapped to QP: “AGR/Q0505, 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 empaneled 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

<b>Assessment</b>			
<b>Assessment Type</b>	<b>Formative or Summative</b>	<b>Strategies</b>	<b>Examples</b>
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 tools 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 the assessor and proctor are 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 candidates shall be stored and available for review (retained for 5 years/ till the conclusion of the project or scheme)

## References

### Glossary

Term	Description
<b>Declarative Knowledge</b>	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.
<b>Key Learning Outcome</b>	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).
<b>OJT (M)</b>	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on-site
<b>OJT (R)</b>	On-the-job training (Recommended); trainees are recommended the specified hours of training on-site
<b>Procedural Knowledge</b>	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.
<b>Training Outcome</b>	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
<b>Terminal Outcome</b>	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
AFS	Anti-Fermentation Solution
FYM	Farm Yard Manure
NOS	National Occupational Standard (s)
NSQF	National Skills Qualifications Framework
OJT	On-the-job Training
PwD	People with Disability
PPE	Personal Protective Equipment
QP	Qualifications Pack