







Model Curriculum

QP Name: Agri Warehouse Supervisor

QP Code: AGR/Q7510

Version: 2.0

NSQF Level: 5

Model Curriculum Version: 1.0

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







Table of Contents

Contents

Training Parameters	3
Program Overview	5
Training Outcomes	5
Compulsory Modules	5
Module 1: Introduction to the role of an Agri Warehouse Supervisor	7
Module 2: Process of supervising the delivery and dispatching of agricultural produce	8
Module 3: Process of maintaining optimum stock levels, produce and the warehouse	10
Module 4: Process of utilizing human resources and ensuring the delivery of quality service	12
Module 5: Process of maintaining the relevant records concerning the warehouse operations	14
Module 6: Hygiene and cleanliness	16
Module 7: Safety and emergency procedures	17
Module 8: Employability Skills	18
Module 9: On-the-Job Training	20
Annexure	21
Trainer Requirements	21
Assessor Requirements	23
Assessment Strategy	24
References	29
Glossary	29
Acronyms and Abbreviations	30







Training Parameters

Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Post-Harvest Supply Chain Management
Country	India
NSQF Level	5
Aligned to NCO/ISCO/ISIC Code	NCO-2015/1324.1200
Minimum Educational Qualification and Experience	Completed 2nd year of UG OR Pursuing 2nd year of UG and continuous education OR Completed 2nd year of diploma (after 12th) OR Pursuing 2nd year of 2-year diploma after 12th OR 12th grade pass with 2 years of relevant experience OR 10th grade pass with 4 years of relevant experience OR Previous relevant qualification of NSQF Level 4 and with minimum education as 8th grade pass with 3 years of relevant experience OR Previous relevant qualification of NSQF Level 4.5 with 1.5 years of relevant experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	21 Years
Last Reviewed On	29/03/2023
Next Review Date	29/03/2026
NSQC Approval Date	29/03/2023
QP Version	2.0
Model Curriculum Creation Date	29/03/2023
Model Curriculum Valid Up to Date	29/03/2026







Model Curriculum Version	1.0
Minimum Duration of the Course	510 Hours
Maximum Duration of the Course	510 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:

- Elucidate ways to supervise the delivery and dispatch of agricultural produce.
- Explain the process of maintaining the optimum stock levels, produce and the warehouse.
- Explain the importance of utilizing the human resources and ensuring the delivery of quality service.
- Explain the process of maintaining the relevant records concerning the warehouse operations.
- Demonstrate various practices to ensure health and safety at work.

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	00:00	05:00
Module 1: Introduction to the role of an Agri Warehouse Supervisor	05:00	00:00	0:00	00:00	05:00
AGR/N7540: Supervise the delivery and dispatch of agricultural produce NOS Version- 2.0 NSQF Level- 5	20:00	35:00	0:00	00:00	55:00
Module 2: Process of supervising the delivery and dispatching of agricultural produce	20:00	35:00	0:00	00:00	55:00
AGR/N7541: Maintain the optimum stock levels, produce and the warehouse NOS Version- 2.0 NSQF Level- 5	60:00	30:00	0:00	00:00	90:00
Module 3: Process of maintaining the optimum stock levels, produce and the warehouse	60:00	30:00	0:00	00:00	90:00
AGR/N7542: Utilize the human resources and ensure the delivery of quality service	30:00	30:00	0:00	00:00	60:00







NOS Version- 2.0 NSQF Level- 5					
Module 4: Process of utilizing the human resources and ensuring the delivery of quality service	30:00	30:00	0:00	00:00	60:00
AGR/N7543: Maintain the relevant records concerning the warehouse operations NOS Version- 2.0 NSQF Level- 5	30:00	30:00	0:00	00:00	60:00
Module 5: Process of maintaining the relevant records concerning the warehouse operations	30:00	30:00	0:00	00:00	60:00
AGR/N9903 Maintain health and safety at the workplace NOS Version- 3.0 NSQF Level- 4	05:00	25:00	0:00	00:00	30:00
Module 6: Hygiene and cleanliness	02:00	10:00	0:00	00:00	12:00
Module 7: Safety and emergency procedures	03:00	15:00	0:00	00:00	18:00
DGT/VSQ/N0103: Employability Skills NOS Version- 1.0 NSQF Level- 5	90:00	00:00	0:00	00:00	90:00
Module 8: Employability Skills	90:00	00:00	0:00	00:00	90:00
Total Duration	240:00	150:00	0:00	00:00	390:00
OJT: 120 Hours					







Module Details

$\begin{tabular}{ll} \textbf{Module 1: Introduction to the role of an Agri Warehouse Supervisor} \\ \textbf{Bridge Module} \end{tabular}$

Terminal Outcomes:

• Discuss the job role of an Agri Warehouse Supervisor.

Duration: 05:00	Duration: 0:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Describe the size and scope of the agriculture industry and its subsectors. Discuss the role and responsibilities of an Agri Warehouse Supervisor. Identify various employment opportunities for an Agri Warehouse Supervisor. 	
Classroom Aids	
Training Kit - Trainer Guide, Presentations, White	board, Marker, Projector, Laptop, Video Films
Tools, Equipment and Other Requirements	
NA	







Module 2: Process of supervising the delivery and dispatching of agricultural produce

Mapped to AGR/N7540 v2.0

Terminal Outcomes:

- Elucidate ways to order the agricultural produce.
- Explain the process of coordinating the delivery of agricultural produce.
- Explain the process of coordinating the dispatch of agricultural produce.

Duration: 20:00	Duration: 35:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Describe the process of determining the requirement of agricultural produce in the warehouse and ordering it. Explain the importance of checking the produce for the required quantity and quality at delivery. Explain how to check the weight and volume of produce manually or using the relevant equipment. List the appropriate documentation to be carried out concerning the delivery and dispatch of produce. State the conditions required for the safe storage of different types of agricultural produce. Discuss the appropriate practices to be followed for efficient space utilization in the warehouse. Explain the use of relevant pesticides to make the warehouse pest and disease free. State the applicable packing, labelling and tagging requirements for the produce. State the appropriate mode of transport for different types of agricultural produce. Explain the importance of coordinating logistics for timely dispatch and delivery of produce to the relevant markets/ buyer. 	 Demonstrate the process of carrying out appropriate documentation concerning the agricultural produce supply orders. Show how to inspect the quality of supplies and identify the quality issues. Demonstrate the process of carrying out appropriate documentation concerning the delivery of produce and issue the relevant receipt to the logistics partner. Prepare sample paperwork for the dispatch of produce. Prepare sample records concerning the dispatch of produce.

Classroom Aids

Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements

Strapping/Tape/Glue, Palletizers, Lift/Tilt/Turn Table, Fire Extinguisher, Hand Truck, Pallet Truck, Pallets, Platform Truck, Counterbalanced (CB) Lift Truck, Balancer, Selective Pallet Rack, Digital Weigh Machine, Bin Shelving, Storage Drawers, Pallet Jack, Tractor-trailer, Drive-through Rack,







Installed Video camera with high resolution and recording facility, First Aid Kit, Audio/ Visual Aids, Laptops/Computers, PPE (Safety gloves, Safety footwear, Eye protection, Safety helmets, Respiratory protecting equipment, Safety harnesses, Full body suits), Cartons, Bulk Load Containers, Tote Pans







Module 3: Process of maintaining optimum stock levels, produce and the warehouse

Mapped to ARG/N7541 v2.0

Terminal Outcomes:

- Explain the process of projecting the demand for agricultural produce.
- Elucidate ways to maintain the optimum inventory levels.
- Explain the importance of ensuring the maintenance of the produce warehouse.

Duration: 60:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Explain the process of projecting the demand for agricultural produce in different seasons and the relevant factors to be considered. Explain how to calculate the optimum stock levels to be maintained in the warehouse. Explain the importance of maintaining the appropriate inventory levels at different sales cycle stages. Elucidate the importance and process of developing a contingency plan to deal with any emergencies to ensure minimum impact on the warehouse operations. Explain the concept of safety stock and the importance of maintaining it. Explain the use of relevant inventory management system and effective inventory management practices. Describe the process of identifying and discarding the unsuitable and deteriorating produce from the warehouse. Explain the importance of maintaining a hygienic and pest and disease-free warehouse. Elucidate the benefits and process of carrying out fumigation. State the common repair and maintenance needs of the warehouse infrastructure, tools and equipment. Classroom Aids	 Demonstrate how to analyze the sales and stock movement data. Show how to calculate the appropriate safety stock level required to be maintained in the warehouse to mitigate the risks caused by uncertainties in supply and demand. Show how to conduct regular inspections of the produce and warehouse. Demonstrate the process of applying the recommended pesticides using the appropriate Personal Protection Equipment (PPE).

Classroom Aids

Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements







Strapping/Tape/Glue, Palletizers, Lift/Tilt/Turn Table, Fire Extinguisher, Hand Truck, Pallet Truck, Pallets, Platform Truck, Counterbalanced (CB) Lift Truck, Balancer, Selective Pallet Rack, Digital Weigh Machine, Bin Shelving, Storage Drawers, Pallet Jack, Tractor-trailer, Drive-through Rack, Installed Video camera with high resolution and recording facility, First Aid Kit, Audio/ Visual Aids, Laptops/Computers, PPE (Safety gloves, Safety footwear, Eye protection, Safety helmets, Respiratory protecting equipment, Safety harnesses, Full body suits), Cartons, Bulk Load Containers, Tote Pans







Module 4: Process of utilizing human resources and ensuring the delivery of quality service

Mapped to AGR/N7542 v2.0

Terminal Outcomes:

- Elucidate ways to supervise the warehouse workers.
- Explain the importance of ensuring appropriate training for warehouse workers.
- Explain the importance of ensuring adherence to the applicable quality standards.
- Explain the importance of ensuring quality services to clients.

ration: 30:00	Duration: 30:00
eory – Key Learning Outcomes	Practical – Key Learning Outcomes
Explain how to estimate the time and human resources required for different warehouse activities and allocate resources accordingly. Explain the importance of allocating work to warehouse workers according to their job profiles and skills. Elucidate the importance of specifying the work requirements and applicable quality parameters to the workers. Elucidate how to plan and utilize the human and other resources appropriately. Explain how to prepare a work plan, scheduling the relevant tasks as per the priority. Elucidate the importance and process of maintaining the worker attendance records/ muster roll accurately. Discuss the effective resource planning and utilization practices, including leave management for workers. Elucidate the importance and process of monitoring the workers to ensure timely completion of relevant warehouse tasks. Explain the importance of conducting regular meetings with the warehouse workers to identify and resolve their concerns and conflicts. List the appropriate warehouse tools, equipment and support required for	 Prepare sample work plan for warehouse workers, scheduling various warehouse tasks as per the priority. Demonstrate how to maintain the worker attendance records/ muster roll accurately recording their presence and absence. Roleplay how to conduct regular meetings with the warehouse workers to identify and resolve their relevant concerns and conflicts. Show how to calculate the wages/salary payable to the number of days worked and organizational policies. Roleplay how to conduct relevant training sessions and demonstrations for the warehouse workers as appropriate, e.g. the use of relevant tools and equipment, inventory management, record keeping, etc. Show how to analyze the client feedback to identify the areas of improvement in the warehouse services. Prepare sample relevant records manually and electronically as per the organizational procedures.







warehouse workers.

- Explain how to calculate the payable wages/salary.
- Explain the importance of identifying and arranging appropriate training and demonstrations for workers.
- Explain the importance of adhering to the applicable quality standards.
- Describe the process of identifying lapses in quality of service and produce, and taking appropriate remedial measures.
- Discuss the appropriate practices to be followed to deliver good quality services to clients.
- Explain the importance of collecting client feedback and making appropriate improvements accordingly.

Classroom Aids

Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements

Strapping/Tape/Glue, Palletizers, Lift/Tilt/Turn Table, Fire Extinguisher, Hand Truck, Pallet Truck, Pallets, Platform Truck, Counterbalanced (CB) Lift Truck, Balancer, Selective Pallet Rack, Digital Weigh Machine, Bin Shelving, Storage Drawers, Pallet Jack, Tractor-trailer, Drive-through Rack, Installed Video camera with high resolution and recording facility, First Aid Kit, Audio/ Visual Aids, Laptops/Computers, PPE (Safety gloves, Safety footwear, Eye protection, Safety helmets, Respiratory protecting equipment, Safety harnesses, Full body suits), Cartons, Bulk Load Containers, Tote Pans







Module 5: Process of maintaining the relevant records concerning the warehouse operations

Mapped to AGR/N7543 v2.0

Terminal Outcomes:

- Explain the process of maintaining the relevant warehouse records.
- Explain the importance of storing the warehouse records safely.
- Elucidate ways to arrange for the audit of warehouse records.

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 List different types of general and accounting records to be maintained concerning the agricultural warehouse operations. Explain the use of appropriate information management computer software for effective management of organizational information/data and documents. Explain the importance of arranging regular audits by an independent auditor to ensure the completion, accuracy and up-to-date status of all the relevant records and documents. Describe the process of reviewing organizational records to evaluate the business performance and preparation of an action plan based on the review. Explain the use of relevant computer software for the statistical analysis of data. List the applicable financial reporting requirements. Describe different methods of safely storing organizational records and documents. Explain the importance of creating data backup and ensuring data access by authorized personnel only. 	 Prepare sample records concerning the incoming, stored and outgoing stock, warehouse assets, expenditure and operations. Demonstrate the use of the appropriate computer software to maintain electronic records. Show how to evaluate the relevant records and documents to ensure they are complete, accurate and upto-date. Demonstrate how to analyze the relevant records to evaluate the business performance. Prepare sample electronic backup of the critical records to protect against accidental damage or loss of physical documents.

Classroom Aids

Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements

Strapping/Tape/Glue, Palletizers, Lift/Tilt/Turn Table, Fire Extinguisher, Hand Truck, Pallet Truck, Pallets, Platform Truck, Counterbalanced (CB) Lift Truck, Balancer, Selective Pallet Rack, Digital Weigh Machine, Bin Shelving, Storage Drawers, Pallet Jack, Tractor-trailer, Drive-through Rack,







Installed Video camera with high resolution and recording facility, First Aid Kit, Audio/ Visual Aids, Laptops/Computers, PPE (Safety gloves, Safety footwear, Eye protection, Safety helmets, Respiratory protecting equipment, Safety harnesses, Full body suits), Cartons, Bulk Load Containers, Tote Pans







Module 6: 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.

Duration: 02:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Explain the requirements of personal health, hygiene and fitness at work. 	 Demonstrate personal hygiene practices to be followed at the workplace.
 Describe common health-related guidelines laid down by the organizations/ Government at the workplace 	 Demonstrate the correct way of washing hands using soap and water, and alcohol- based hand rubs.
 Explain the importance of good housekeeping at the workplace. 	 Demonstrate the steps to follow to put on and take off a mask safely.
 Explain the importance of informing the designated authority on personal health 	 Show how to sanitize and disinfect one's work area regularly.
issues related to injuries and infectious diseases.	Demonstrate adherence to the workplace sanitization norms.
	Show how to ensure the cleanliness of the work area.
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







Module 7: 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.

Duration: 03:00	Duration: 15:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 List the Personal Protective Equipment (PPE) required at the workplace. Describe the commonly reported hazards at the workplace. Describe the hazards caused due to chemicals/pesticides/fumigants. Describe the basic safety checks to be done before the operation of any equipment/machinery. Describe the common first aid procedures to be followed in case of emergencies. State measures that can be taken to prevent accidents and damage s at the workplace. Explain the importance of reporting details of first aid administered, to the reporting officer/doctor, in accordance with workplace procedures State common health and safety guidelines to be followed at the workplace. 	 Check various areas of the workplace for leakages, water-logging, pests, fire, etc. Demonstrate how to safely use the PPE and implement it as applicable to the workplace. Display the correct way of donning, doffing and discarding PPE such as face masks, hand gloves, face shields, PPE suits, etc. Sanitize the tools, equipment and machinery properly. Demonstrate the safe disposal of waste. Demonstrate procedures for dealing with accidents, fires and emergencies. Demonstrate emergency procedures to the given workplace requirements. Demonstrate the use of emergency equipment in accordance with manufacturers' specifications and workplace requirements. Demonstrate the administration of first aid. Prepare a list of relevant hotline/emergency numbers

Classroom Aids:

Computer, Projection Equipment, PowerPoint Presentation and Software, Facilitator's Guide, Participant's Handbook.

Tools, Equipment and Other Requirements

Personal Protective Equipment, First Aid Kit, Equipment used in Medical Emergencies.







Module 8: Employability Skills Mapped to NOS DGT/VSQ/N0103 v1.0

Duration: 90:00

Key Learning Outcomes

Introduction to Employability Skills Duration: 3 Hours

After completing this programme, participants will be able to:

- 1. Outline the importance of Employability Skills for the current job market and future of work
- 2. List different learning and employability related GOI and private portals and their usage
- 3. Research and prepare a note on different industries, trends, required skills and the available opportunities

Constitutional values – Citizenship Duration: 1.5 Hours

- 4. 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
- 5. Demonstrate how to practice different environmentally sustainable practices

Becoming a Professional in the 21st Century Duration: 5 Hours

- 6. Discuss relevant 21st century skills required for employment
- 7. Highlight the importance of practicing 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
- 8. Create a pathway for adopting a continuous learning mindset for personal and professional development

Basic English Skills Duration: 10 Hours

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

Career Development & Goal Setting Duration: 4 Hours

- 12. Create a career development plan
- 13. Identify well-defined short- and long-term goals

Communication Skills Duration: 10 Hours

- 14. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette
- 15. Write a brief note/paragraph on a familiar topic
- 16. Explain the importance of communication etiquette including active listening for effective communication
- 17. Role play a situation on how to work collaboratively with others in a team

Diversity and Inclusion Duration: 2.5 Hours

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

Financial and Legal Literacy Duration: 10 Hours

20. Discuss various financial institutions, products, and services







- 21. Demonstrate how to conduct offline and online financial transactions, safely and securely and check passbook/statement
- 22. Explain the common components of salary such as Basic, PF, Allowances (HRA, TA, DA, etc.), tax deductions
- 23. Calculate income and expenditure for budgeting
- 24. Discuss the legal rights, laws, and aids

Essential Digital Skills Duration: 20 Hours

- 25. Describe the role of digital technology in day-to-day life and the workplace
- 26. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely
- 27. Demonstrate how to connect devices securely to internet using different means
- 28. Follow the dos and don'ts of cyber security to protect against cyber crimes
- 29. Discuss the significance of displaying responsible online behavior while using various social media platforms
- 30. Create an e-mail id and follow e- mail etiquette to exchange e -mails
- 31. Show how to create documents, spreadsheets and presentations using appropriate applications
- 32. utilize virtual collaboration tools to work effectively

Entrepreneurship Duration: 7 Hours

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

Customer Service Duration: 9 Hours

- 37. Classify different types of customers
- 38. Demonstrate how to identify customer needs and respond to them in a professional manner
- 39. Discuss various tools used to collect customer feedback
- 40. Discuss the significance of maintaining hygiene and dressing appropriately

Getting ready for apprenticeship & Jobs Duration: 8 Hours

- 41. Draft a professional Curriculum Vitae (CV)
- 42. Use various offline and online job search sources to find and apply for jobs
- 43. Discuss the significance of maintaining hygiene and dressing appropriately for an interview
- 44. Role play a mock interview
- 45. List the steps for searching and registering for apprenticeship opportunities







Module 9: On-the-Job Training

Mapped to Agri Warehouse Supervisor

Mandatory Duration: 120:00 Recommended Duration: 00:00

Location: On-Site

Terminal Outcomes

- Explain the process of determining the requirement of agricultural produce in the warehouse and ordering it.
- Inspect the quality of supplies and identify the quality issues.
- Carry out appropriate documentation concerning the delivery of produce and issue the relevant receipt to the logistics partner.
- Analyze the sales and stock movement data.
- Conduct regular inspections of the produce and warehouse.
- Calculate the wages/salary payable to the warehouse workers according to the number of days worked and organizational policies.
- Use of the appropriate computer software to maintain electronic records.
- Prepare sample electronic backup of the critical records to protect against accidental damage or loss of physical documents.
- Use of emergency equipment in accordance with manufacturers' specifications and workplace requirements.







Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational	Specialization	Relevant Industry Experience		Training Experience		Remarks
Qualificatio n		Years	Specialization	Years	Specialization	
12th Class	Class 12th with Mathematics/ Business Studies/ Economics as one of the elective subjects.	3	Post-harvest Supply Chain Management	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 a caseto-case basis.
Certificate	Regular Certification in Supply Chain Management, Logistics Management, Inventory Control/ Management or equivalent degree [After 10+2]	2	Post-harvest Supply Chain Management	0		
Diploma	Regular Diploma in Supply Chain Management, Logistics Management, Inventory Control/Management or equivalent degree [After 10+2]	2	Post-harvest Supply Chain Management	0		
Graduate	BSc/ BBA in Logistics and Supply Chain Management, Inventory Control, Inventory Management or an equivalent degree	1	Post-harvest Supply Chain Management	0		For the school Program minimum qualification of the Trainer should be a Graduate (Logistics and Supply Chain Management Inventory Control, Inventory Management or







					equivalent degree/ Botany). Their Teaching experience will be considered industry experience
Post Graduate	MBA in Logistics and Supply Chain Management or another equivalent degree.	0.5	Post-harvest Supply Chain Management	0	
Certificate- NSQF	Agri Warehouse Manager	5	Post-harvest Supply Chain Management	0	Agri Warehouse Supervisor with 5 Years of experience with corporate

Trainer Certification				
Domain Certification	Platform Certification			
Supervisor", mapped to QP: "AGR/Q7510, v2.0", 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 MEPSC guidelines is 80%.			







Assessor Requirements

Assessor Prerequisites						
Minimum Educational	Specialization		televant Industry xperience		g/Assessment ince	Remarks
Qualification		Years	Specialization	Years	Specialization	
Graduation	B.Sc (Agriculture/ Supply Chain/ Agri Business/ Agri finance and related streams)	5	Agriculture/ Post- Harvest Management/ Supply Chain/ Logistics/ Agri- Business and Marketing related experience	0		Practical skills and knowledge required in Agri warehouse operations
Post- Graduation	M.Sc /MBA (Agri Business/ Agri warehousing/ Agri Marketing/ Agri Finance/ Logistics/ SCM and related streams)	2	Agriculture/ Post- Harvest Management/ Supply Chain/ Logistics/ Agri- Business and Marketing related experience	0		Practical skills and knowledge required in Agri warehouse operations
PhD	Agriculture Marketing/ Supply Chain/ Agri Business/ Agri finance and related streams	1	Agriculture/ Post- Harvest Management/ Supply Chain/ Logistics/ Agri- Business and Marketing related experience	0		Practical skills and knowledge required in Agri warehouse operations

Assessor Certification				
Domain Certification	Platform Certification			
	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:

- Multiple Choice Questions: To assess basic knowledge (Objective/Subjective)
- <u>Viva:</u> To assess awareness on processes (Oral and/or written questioning)
- <u>Practical</u>: 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%
- <u>Practical:</u> 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

	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

- <u>Morning Check (Pre-Assessment)</u>: 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 a check on assessment quality and ensure assessment is carried out in a fair and transparent manner
- Aadhar verification of candidates
- <u>Evening Check (Post Assessment)</u>: Calls are made to the ground team to ensure the event is over by what time and the documentation is done properly or not.
- <u>TP Calling</u>: 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
- <u>Video and Picture Evidence:</u> 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.
- <u>Surprise Visit:</u> 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 rolespecific 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	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	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	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
NOS	National Occupational Standard (s)
NSQF	National Skills Qualifications Framework
OJT	On-the-job Training
QP	Qualifications Pack
PwD	People with Disability
PPE	Personal Protective Equipment