

# Model Curriculum

## Farm Workshop/Service Manager

**SECTOR: AGRICULTURE & ALLIED**  
**SUB-SECTOR: AGRICULTURE CROP PRODUCTION**  
**OCCUPATION: FARM MACHINERY, EQUIPMENT OPERATION AND MAINTENANCE**  
**REF ID: AGR/Q1110, V1.0**  
**NSQF LEVEL: 6**



## Certificate

### CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

**AGRICULTURE SKILL COUNCIL OF INDIA**

for the

**MODEL CURRICULUM**

Complying to National Occupational Standards of  
Job Role/ Qualification Pack: '**Farm Workshop/Service Manager**' QP No. '**AGR/Q1110 NSQF Level 6**'

Date of Issuance: April 24<sup>th</sup>, 2017

Valid up to: March 31<sup>st</sup>, 2020

\* Valid up to the next review date of the Qualification Pack



Authorised Signatory  
(Agriculture Skill Council of India)

## TABLE OF CONTENTS

<b>1. Curriculum</b>	<b>04</b>
<b>2. Trainer Prerequisites</b>	<b>09</b>
<b>3. Annexure: Assessment Criteria</b>	<b>10</b>

# Farm Workshop Service/ Manager

## CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Farm Workshop/ Service Manager” in the “Agriculture & Allied” Sector/Industry and aims at building the following key competencies amongst the learner

<b>Program Name</b>	<b>Farm Workshop/ Service Manager</b>		
<b>Qualification Pack Name &amp; Reference ID.</b>	AGR/Q1110, v1.0		
<b>Version No.</b>	1.0	<b>Version Update Date</b>	
<b>Pre-requisites to Training</b>	B. Tech /B.E./Graduate in Business Administration		
<b>Training Outcomes</b>	<b>After completing this programme, participants will be able to:</b> <ul style="list-style-type: none"> <li>• Manage the overall operations of the farm workshop</li> <li>• Carry out procurement of farm machineries, equipments and their parts</li> <li>• Ensure implementation of safety procedures and documentation system</li> </ul>		

This course encompasses 3 out of 3 National Occupational Standards (NOS) of “Farm Workshop/Service Manager” Qualification Pack issued by “Agriculture Skill Council of India”.

Sr. No.	Module	Key learning outcomes	Equipment Required
1	<b>Introduction</b>  <b>Theory Duration</b> (hh:mm) 02:00  <b>Practical Duration</b> (hh:mm) 00:00  <b>Corresponding NOS Code</b> Bridge Module	<ul style="list-style-type: none"> <li>Understand general discipline in the class room and workshop (Do's &amp; Don'ts)</li> <li>Study the scope and importance of farm mechanization industry in India</li> <li>Get acquainted with different farm machineries' manufacturers and their brands/models</li> <li>Understand the role of a Farm workshop/Service Manager and the progression pathways</li> </ul>	Laptop, white board, marker, projector and video films and Presentations
2	<b>Manage overall operations of the workshop</b>  <b>Theory Duration</b> (hh:mm) 18:00  <b>Practical Duration</b> (hh:mm) 70:00  <b>Corresponding NOS Code</b> AGR/N1134	<ul style="list-style-type: none"> <li>State the principles of general management</li> <li>Understand the importance and significance of management</li> <li>Understand the decision making process-               <ul style="list-style-type: none"> <li>Definition of problem</li> <li>Gathering information</li> <li>Analysing information</li> <li>Identifying alternatives</li> <li>Selecting alternative</li> </ul> </li> <li>Communicate with employees regularly and effectively, help them identify their strengths, provide support to overcome their weakness, listen to their grievances and provide appropriate solutions, and win their trust and support</li> <li>Explain operation management</li> <li>Prepare strategy for achieving organization goals by understanding the organization and employees</li> <li>Explain organization goals, communicate the organization policies and goals clearly to the employees of workshop,</li> <li>Discuss the organization structure: principles of organization, strategic and functional plans and structural types, management style</li> <li>Explain technique of motivation</li> <li>Motivate and support employees to achieve their work and development objectives, and provide recognition when they are successful</li> <li>Encourage employees to take</li> </ul>	Laptop, white board, marker, projector and video films

Sr. No.	Module	Key learning outcomes	Equipment Required
		<p>responsibilities, to take own decisions within agreed boundaries, to take lead in their own areas of expertise for their development</p> <ul style="list-style-type: none"> <li>• Initiate personnel actions, such as promotions, transfers, discharges or disciplinary measures</li> <li>• Estimate the requirement of number of operators and technicians after consultation with workshop supervisors</li> <li>• Select recruitment process through online or advertisement for staff of workshop based on the demand</li> <li>• Prepare training sessions for employee after joining for right skill</li> <li>• Prepare daily maintenance schedule for the machines and prepare allocation schedule after consultation with workshop supervisors</li> <li>• Discuss technique of monitoring the performance of supervisors, technicians, operators and back end staff</li> <li>• Procure tools, protective devices, etc. for workshop by online or transparent process</li> <li>• Monitor the physical infrastructure of the workshop to determine gaps and arrange for modification after consultation with workshop supervisors</li> <li>• Choose method of store management for storage of materials and tools</li> <li>• Decide on layout of stores, location of spare parts, tools after consulting with supervisors</li> <li>• Follow best practices of workshop like 5s, kaizen, etc. For better functioning</li> </ul>	
3	<p><b>Carry out procurement of machinery and parts</b></p> <p><b>Theory Duration</b> (hh:mm) 15:00</p> <p><b>Practical Duration</b> (hh:mm) 40:00</p> <p><b>Corresponding NOS Code</b></p>	<ul style="list-style-type: none"> <li>• Estimate the demand forecast for the farm machineries and equipments</li> <li>• Estimate the quantity and type of machinery required to meet the estimated demand for the farm</li> <li>• Forecast the spare parts requirement based on the demand and breakage trend parts</li> <li>• Assess the requirement of special tools if needed</li> <li>• Identify the method of procurement</li> </ul>	Computer, internet connection

Sr. No.	Module	Key learning outcomes	Equipment Required
	AGR/N1135	<ul style="list-style-type: none"> <li>○ Quotation</li> <li>○ Tender</li> <li>○ Spot purchase</li> <li>● Assess the technical specification, costs and other terms and conditions</li> <li>● Plan and place the purchase order for workshop items</li> <li>● Inspect the purchased machinery</li> <li>● Check the document and receipt notes, log book, etc. with respect to purchase</li> <li>● Select the location of placement of machinery</li> <li>● Conduct training of technicians and supervisors for the maintenance and repair of new machinery, need and importance of training</li> <li>● Carry out regular preventive maintenance as per standard procedure</li> </ul>	
4	<p><b>Manage documentation system and implement safety and environmental policies in farm workshop</b></p> <p><b>Theory Duration</b> (hh:mm) 15:00</p> <p><b>Practical Duration</b> (hh:mm) 40:00</p> <p><b>Corresponding NOS Code</b> AGR/N1136</p>	<ul style="list-style-type: none"> <li>● Explain the importance of documentation, inventory document, issue document, sales document, consumption documents, provide training on documentation system, and ensure all documents are maintained systematically</li> <li>● Keep all relevant records and documents up-to-date and accessible for audits on production process</li> <li>● Coordinate with the auditor to access all relevant information, records and documents</li> <li>● State the importance of corrective actions of document with regulatory standards</li> <li>● Develop methods to track production information from documented and maintained records</li> <li>● Resolve issues with workshop employees pertaining to safety and environment requirements of the workshop</li> <li>● Prepare policies and SOPs on safety and environment requirements related to workshop with quality team</li> <li>● Ensure safety and environment policies and standard operating procedures as per regulatory</li> </ul>	Different type of documents, safety equipments,

Sr. No.	Module	Key learning outcomes	Equipment Required
		<p>requirements</p> <ul style="list-style-type: none"> <li>Identify hazards relevant to workshop and implement system to handle risks</li> <li>Arrange training through relevant authorities on safety and environmental management system,</li> <li>Conduct audits and review records on safety and environmental system</li> <li>Implement system on waste management</li> <li>Ensure proper waste treatment, recycling or disposal as per industry requirements and environmental regulations</li> <li>Follow the environmental management hazard practice</li> <li>Analyze data to evaluate effectiveness of the environmental management system</li> <li>Identify areas for improvement, plan and implement improvements to meet regulatory requirements</li> </ul>	
	<p><b>Total Duration:</b></p> <p><b>Theory Duration</b> (hh:mm) <b>50:00</b></p> <p><b>Practical Duration</b> (hh:mm) <b>150:00</b></p>	<p><b>Unique equipment required:</b> Laptop, white board, marker, projector, vertical conveyor, reaper or self propelled reaper, cleaner/ grader like air screen cleaners, rotary cleaners, dryer, straw chopper, straw baler, repairing tools, etc</p>	

Grand Total Course Duration: **200 Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by [Agriculture Skill Council of India](#))



## Trainer Prerequisites for Job role: “Farm Workshop Service/Manager” mapped to Qualification Pack: “AGR/Q1110, v1.0”

Sr. No.	Area	Details
1	<b>Description</b>	Trainer is responsible for educating the trainees- managing the overall operations of the farm workshop, servicing and repairing of farm machinery equipment, documentation and adopting safety procedures of Farm machineries
2	<b>Personal Attributes</b>	Trainer should be Subject Matter Expert. He/ she should have good communication, leadership, observation and practical oriented skills.
3	<b>Minimum Educational Qualifications</b>	Diploma / ITI (Mechanical / Agriculture engineering)[after 10+2 Science]
4a	<b>Domain Certification</b>	Certified for Job Role: “Farm Workshop Service/Manager” mapped to QP: “AGR/Q1110, v1.0”. Minimum accepted score is 80%.
4b	<b>Platform Certification</b>	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “MEP/Q0102”. Minimum accepted % as per respective SSC guidelines is 80%.
5	<b>Experience</b>	<ul style="list-style-type: none"> <li>• BE/B.Tech in Mechanical with 2 years of relevant work experience and 3 years of total work experience</li> <li>• Graduate in Agriculture engineering with 2 years of relevant work experience and 3 years of total work experience</li> <li>• Diploma / ITI (Mechanical / Agriculture engineering)[after 10+2 Science] with 3 years of relevant work experience and 5 years of total work experience</li> </ul>

## Annexure: Assessment Criteria

<b>Job Role</b>	Farm Workshop Service/Manager
<b>Qualification Pack</b>	AGR/Q1110, v1.0
<b>Sector Skill Council</b>	Agriculture

### **Guidelines for Assessment**

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
6. To pass the Qualification Pack , every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Compulsory NOS		Marks Allocation			
<b>Total Marks: 300</b>		Total Marks	Out Of	Theory	Skills Practical
Assessment outcomes	Assessment criteria for outcomes				
1. AGR/N1134 Manage overall operations of the workshop	PC1. communicate the organization policies and goals clearly to the employees of workshop, make them understand and commit their energy and expertise to achieve organization goals	<b>100</b>	6	2	4
	PC2. make a plan to achieve organization goals by understanding the organization and employees		6	2	4
	PC3. communicate with employees regularly and effectively, help them identify their strengths, provide support to overcome their weakness, listen to their grievances and provide appropriate solutions, and win their trust and support		6	2	4
	PC4. motivate and support employees to achieve their work and development objectives, and provide recognition when they are successful		6	2	4
	PC5. encourage employees to take responsibilities, to take own decisions within agreed boundaries, to take lead in their own areas of expertise for their development		6	2	4
	PC6. initiate personnel actions, such as promotions, transfers, discharges or disciplinary measures		5	2	3
	PC7. forecast the requirement of number of operators and technicians after consultation with workshop supervisors		6	1	5
	PC8. carry out recruitment of operators and technicians based on the demand		6	2	4
	PC9. prepare seasonal work plan for operators and arrange training sessions prior to season to equip them with right skill		6	2	4
	PC10. prepare daily maintenance schedule for the machines and prepare allocation schedule after consultation with workshop supervisors		6	2	4
	PC11. establish systems for monitoring performance of supervisors, technicians, operators and back end staff		6	2	4
	PC12. arrange for procurement of tools, protective devices, etc. to ensure smooth working of workshop		6	1	5

	PC13. analyses the infrastructure of the workshop to determine gaps and arrange for modification after consultation with workshop supervisors		6	1	5
	PC14. establish systems for storage of materials and tools		5	2	3
	PC15. decide on layout of stores, location of spare parts, tools after consulting with supervisors		6	1	5
	PC16. establish standard operating procedures for repair and maintenance through discussions with supervisors		6	2	4
	PC17. establish best practices of workshop like 5S, Kaizen, etc. for better functioning		6	2	4
			<b>100</b>	<b>30</b>	<b>70</b>
2. AGR/N1135 Carry out procurement of machinery and parts	PC1. analyze the demand forecast for the coming year	<b>100</b>	8	3	5
	PC2. decide on the quantity and type of machinery to meet the estimated demand for the farm		8	3	5
	PC3. estimate the spare parts required based on the demand requirements and breakage trend parts		8	2	6
	PC4. estimate the requirement of special tools if required		8	2	6
	PC5. decide on the method of procurement				
	· quotation		9	3	6
	· tender				
	· spot purchase				
	PC6. carry out comparative assessment with regard to technical specification, costs and other terms and conditions		9	3	6
	PC7. place the purchase order after consultation with workshop supervisors		8	2	6
	PC8. verify and inspect the machinery and communicate faults to the supplier		9	2	7
	PC9. document receipts, inspection notes, log book, etc. with respect to purchase		8	3	5
	PC10. decide on the location of placement of machinery after consultation with the workshop supervisor		8	2	6
PC11. arrange for the training of technicians and supervisors for the maintenance and repair of new machinery, if necessary	9	2	7		
PC12. prepare standard operating procedures for carrying out regular preventive maintenance	8	3	5		
			<b>100</b>	<b>30</b>	<b>70</b>

3. AGR/N1136 Manage documentation and implement safety and environmental policies in workshop	PC1. establish the importance of documentation, provide training on documentation system, and ensure all documents are maintained systematically	<b>100</b>	5	1	4
	PC2. ensure all relevant records and documents are complete, up-to-date and accessible for audits on production process		5	1	4
	PC3. during audit, provide the auditor with access to all relevant information, records and documents		5	2	3
	PC4. ensure corrective actions recommended and implemented are documented to assure compliance with organization and regulatory standards		5	1	4
	PC5. establish methods to track production information from documented and maintained records		5	2	3
	PC6. establish the importance of safety and environment requirements related to workshop, communicate information about safety and environmental policies and related procedures to the team		6	1	5
	PC7. co-ordinate with quality team to prepare policies and SOPs on safety and environment requirements related to workshop, and ensure those procedures are followed in production area and during production process		6	1	5
	PC8. ensure safe work procedures are followed in workshop area		5	2	3
	PC9. ensure policies and standard operating procedures on safety and environment requirements are accessible to all employees and are followed to meet the regulatory requirements		5	2	3
	PC10. identify safety and environmental hazards relevant to workshop and implement systems to handle risks		5	2	3
	PC11. provide or organize training through relevant authorities on safety and environmental management system		5	1	4
	PC12. conduct inspections in work place on use of protective clothing and accessories		5	2	3
	PC13. ensure safety system is followed during production process		5	2	3
	PC14. conduct audits and review records on safety and environmental system to monitor if control systems are followed by production team, and address non-compliance following organization standards		5	1	4
	PC15. implement system on waste management and monitor and confirm waste collection, treatment, recycling or disposal is carried out meeting industry requirements and		6	1	5

	environmental regulations				
	PC16. respond to environmental management hazard identification and incidents in an appropriate and timely way		5	2	3
	PC17. review practice and procedures followed on safety, conduct risk assessments, identify non-compliance, and provide recommendations to address gaps and non-conformances		6	2	4
	PC18. review environmental records of documents maintained, analyze data to evaluate effectiveness of the environmental management system		6	2	4
	PC19. identify areas for improvement, plan and implement improvements to meet regulatory requirements		5	2	3
			<b>100</b>	<b>30</b>	<b>70</b>
	<b>GRAND TOTAL</b>	<b>300</b>	<b>300</b>	<b>90</b>	<b>210</b>