

# Model Curriculum

## Tea Plantation Worker

**SECTOR: AGRICULTURE & ALLIED**

**SUB-SECTOR: AGRICULTURE CROP PRODUCTION**

**OCCUPATION: PLANTATION CROP CULTIVATION**

**REF ID: AGR/Q0502, V1.0**

**NSQF LEVEL: 2**



**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: 'Tea Plantation Worker' OP No. 'AGR/Q0902 NSQF Level 2'

---

Date of issuance: March 15<sup>th</sup>, 2015  
Valid up to: March 31<sup>st</sup>, 2016  
*\* Valid up to the next review date of the Qualification Pack*

  
S.S. Arora  
Authorised Signatory  
(Agriculture Skill Council of India)

# Tea Plantation Worker

## CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Tea Plantation Worker”, in the “Agriculture & Allied” Sector/Industry and aims at building the following key competencies amongst the learner

<b>Program Name</b>	<b>Tea Plantation Worker</b>		
<b>Qualification Pack Name &amp; Reference ID. ID</b>	AGR/Q0502, v1.0		
<b>Version No.</b>	1.0	<b>Version Update Date</b>	
<b>Pre-requisites to Training</b>	No entry barrier, 5 <sup>th</sup> standard pass preferable		
<b>Training Outcomes</b>	<p><b>After completing this programme, participants will be able to:</b></p> <ul style="list-style-type: none"> <li>• <b>Raise and manage the Nursery bed:</b> Preparation of Soil, soil treatment, polybags, cuttings/</li> <li>• <b>Grow and manage crop:</b> Inputs requirement, Land preparation, sowing, soil testing, application of fertilizer &amp; nutrients, training, pruning</li> <li>• <b>Harvest the crop and maintain the quality:</b> Time of Harvesting, method of harvesting, post harvest practice, packing and transportation.</li> <li>• <b>Become well versed with Environment Health &amp; Safety:</b> Well versed with health and safety measures in terms of personal safety and others as well.</li> </ul>		

This course encompasses 8 out of 8 National Occupational Standards (NOS) of “Tea Plantation Worker” 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) 5:00  <b>Practical Duration</b> (hh:mm) 0:00  <b>Corresponding NOS Code</b>	<ul style="list-style-type: none"> <li>Understand the General Discipline in the class room (Do's &amp; Don'ts)</li> <li>Understand the Role of a Tea Plantation Worker</li> <li>Learn and practice Basic skills of communication</li> <li>Learn and Practice Basic reading capabilities to enable reading of signs, notices and/or cautions at site.</li> </ul>	White Board, Marker, Laptop, projector
2	<b>Nursery Bed Preparation in Tea Plantation</b>  <b>Theory Duration</b> (hh:mm) 10:00  <b>Practical Duration</b> (hh:mm) 10:00  <b>Corresponding NOS Code</b> AGR/No508	<ul style="list-style-type: none"> <li>Identify, Select and use the tools and equipments for nursery bed preparation</li> <li>Prepare the soil mixture</li> <li>Undertake the soil treatment</li> <li>Prepare the polybags</li> <li>Prepare the Cuttings/ Vegetative Propagations</li> <li>Understand and perform the pre planting activities</li> </ul>	White Board, Marker, Laptop, projector, budding knife, grafting knife, dormant scions, Tying material such as grafting tape, adhesive tape, electrician's ber tape or rubber strips
3	<b>Land preparation and Transplanting in Tea Plantation</b>  <b>Theory Duration</b> (hh:mm) 10:00  <b>Practical Duration</b> (hh:mm) 10:00  <b>Corresponding NOS Code</b> AGR/ No509	<ul style="list-style-type: none"> <li>Plan the Layout for Tea Plantation</li> <li>Level the land as per the requirement</li> <li>Understand the crop spacing required for Tea Plantation</li> <li>Understand the pits measurement</li> <li>Understand the Pre-planting activities</li> <li>Perform planting activity</li> <li>Understand the soil moisture level required for the plant</li> <li>Understand the importance of shade trees</li> <li>Estimate the manure requirement for the crop</li> <li>Understand the importance of mulching and practice</li> <li>Perform weeding</li> </ul>	Marker, Laptop, projector,
4	<b>Integrated Nutrient Management (scientific word) in Tea Plantation</b>  <b>Theory Duration</b> (hh:mm) 10:00	<ul style="list-style-type: none"> <li>Understand the Nutrient requirement for the Tea Plantation</li> <li>Understand and perform the soil sampling test</li> <li>Understand the Micro and Macro Nutrients in soil</li> </ul>	White Board, Marker, Laptop, projector,

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	<b>Practical Duration</b> (hh:mm) 16:00  <b>Corresponding NOS Code</b> AGR/No510	<ul style="list-style-type: none"> <li>Understand the required fertilizer dosage for the nutrient enrichment in soil</li> <li>Understand the various soil microorganisms beneficial for the nutrient enrichment in soil</li> <li>Use the bio fertilizer/organic manure in the cultivation of Tea Plantation</li> <li>Estimate the quantity of fertilizer to be applied at various stages in relation to NPK and other secondary nutrients.</li> <li>Perform the weeding management</li> <li>Maintain the record of application of fertilizers and intervals</li> </ul>	
5	<b>Training and Pruning in Tea Plantation</b>  <b>Theory Duration</b> (hh:mm) 10:00  <b>Practical Duration</b> (hh:mm) 18:00  <b>Corresponding NOS Code</b> AGR/No511	<ul style="list-style-type: none"> <li>Understand the importance of Training and Pruning of Tea Plantation</li> <li>Understand the stages of Training and Pruning</li> <li>Select and follow the right Method of Training and Pruning</li> </ul>	White Board, Marker, Laptop, projector, Sprayer, fertilizers, bio fertilizers,
6	<b>Integrated Pest and Disease Management (scientific word) in Tea Plantation</b>  <b>Theory Duration</b> (hh:mm) 10:00  <b>Practical Duration</b> (hh:mm) 15:00  <b>Corresponding NOS Code</b> AGR/No512	<ul style="list-style-type: none"> <li>Understand the major pests and disease in Tea Plantation</li> <li>Understand the Characters of different insect pests</li> <li>Understand the symptoms and precaution measures for different diseases</li> <li>Understand the suitable chemical for the insect pest and diseases attack</li> <li>Identify, select and place the different insect traps in the field</li> <li>Understand the importance of Integrated Pest and Disease Management</li> <li>Perform the Integrated Pest and Disease Management</li> </ul>	White Board, Marker, Laptop, projector,
7	<b>Irrigation in Tea Plantation</b>  <b>Theory Duration</b> (hh:mm) 10:00  <b>Practical Duration</b>	<ul style="list-style-type: none"> <li>Understand the Water requirement for the Tea Plantation</li> <li>Plan for the Irrigation system</li> <li>Understand the soil texture, porosity etc</li> <li>Understand the importance of and perform the water drainage in the field</li> <li>Understand the effects of water clogging in the field</li> </ul>	White Board, Marker, Laptop,

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	(hh:mm) 13:00  <b>Corresponding NOS Code</b> AGR/No513	<ul style="list-style-type: none"> <li>Prepare Irrigation Schedule</li> <li>Perform the Irrigation Management</li> </ul>	
8	<b>Harvesting in Tea Plantation</b>  <b>Theory Duration</b> (hh:mm) 10:00  <b>Practical Duration</b> (hh:mm) 18:00  <b>Corresponding NOS Code</b> AGR/No514	<ul style="list-style-type: none"> <li>Understand and practice the proper method of harvesting</li> <li>Practice the proper method for plucking the leaf</li> <li>Understand the frequency of harvesting</li> <li>Make arrangements for the Transportation</li> </ul>	White Board, Marker, Laptop, projector,
9	<b>Maintain Health &amp; Safety at the work place</b>  <b>Theory Duration</b> (hh:mm) 05:00  <b>Practical Duration</b> (hh:mm) 10:00  <b>Corresponding NOS Code</b> AGR/N9903	<ul style="list-style-type: none"> <li>Perform General safety Rules</li> <li>Gain Knowledge of various health hazards relevant to workplace and basic first aid training.</li> <li>Understand the basic safety checks and other common reported hazards before all field operation</li> <li>Understand, identify and study the use of equipment and materials safely and correctly</li> <li>Understand and handle the emergency situation in workplace</li> </ul>	White Board, Marker, Laptop, projector,
	<b>Total Duration:</b>  <b>Theory Duration</b> (hh:mm) <b>80:00</b>  <b>Practical Duration</b> (hh:mm) <b>110:00</b>	<b>Unique Equipment Required:</b> White Board, Marker, Laptop, projector, budding knife, grafting knife, dormant scions, Tying material such as grafting tape, adhesive tape, electrician's ber tape or rubber strips, Sprayer, fertilizers, bio fertilizers,	

Grand Total Course Duration: **190 Hours, 0 Minutes**

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

## Trainer Prerequisites for Job role :“Tea Plantation Worker” mapped to Qualification Pack: “AGR/Q0502, v1.0”

Sr. No.	Area	Details
1	<b>Description</b>	Trainer is responsible for providing the education and skills development training related to work in the Tea plantation on a given piece of land right from nursery preparation to harvesting and storage. He works under the direct monitoring by the supervisor and works based on the instructions of the supervisor.
2	<b>Personal Attributes</b>	Trainer should be Subject Matter Specialist. He/ She should have good communication and observation skill, leadership skill, practical oriented skill
3	<b>Minimum Educational Qualifications</b>	Diploma, Bachelor Degree in Agriculture Science/Horticulture Science
4a	<b>Domain Certification</b>	Certified for Job Role: <u>“Tea Plantation Worker”</u> mapped to QP: <u>“AGR/Q0502, v1.0”</u> . Minimum accepted score is 80%.
4b	<b>Platform Certification</b>	Certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “SSC/Q1402”. Minimum accepted score is 70%
5	<b>Experience</b>	<ul style="list-style-type: none"> <li>• Post graduate with an experience of 1 Year,</li> <li>• Graduate with experience of 3 + Years,</li> <li>• Diploma with relevant experience of 5+ Years.</li> </ul>

### Annexure: Assessment Criteria

<b>Assessment Criteria</b>	
<b>Job Role</b>	Tea Plantation Worker
<b>Qualification Pack</b>	AGR/Qo502, v1.0
<b>Sector Skill Council</b>	Agriculture

Sr. No.	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	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria
5	To pass the Qualification Pack, every trainee should score a minimum of 50% in aggregate
6	The marks are allocated PC wise; however, every NOS will carry a weight age in the total marks allocated to the specific QP



Assessable Outcome	Assessment Criteria	Total Mark (500)	Out Of	Marks Allocation	
				Theory	Skills Practical
1.AGR/N0508 Nursery Bed Preparation in Tea Plantation	PC1. Mix sand and soil (Preparation of Soil)	50	10	5	5
	PC2. Prepare poly bags		5	2	3
	PC3.Prepare Nucleus areas for obtaining VP (vegetative propagation) cuttings		10	5	5
	PC4. Sow seeds or vegetative clonal propagation		5	3	2
	PC5. Prepare cuttings for raising nursery		10	5	5
	PC6. Harden the seedling or cuttings before taking to field for planting		10	5	5
	<b>Total</b>		<b>50</b>	<b>25</b>	<b>25</b>
2.AGR/N0509 Land preparation and Transplanting in Tea Plantation	PC1. Clean the field for planting of new tea plants after rehabilitation by green crop	100	5	3	2
	PC2. Level the field through mechanical and manual means after ploughing& sub-soiling		5	3	2
	PC3. Construct drains		10	5	5
	PC4. Layout of the field		10	5	5
	PC5. Prepare field for planting		5	3	2
	PC6. Put out stakes (markers) for planting pits		10	5	5
	PC7. Making Pits for planting		10	5	5

	PC8. Apply planting manure as per recommendation		5	2	3
	PC9. Plant tea plants		5	2	3
	PC10. Plant shade trees at suitable recommended distances		10	5	5
	PC11. Perform mulching & required field practices		10	5	5
	PC12. Control weeds		10	5	5
	PC13. Infilling vacancy		5	2	3
	<b>Total</b>		<b>100</b>	<b>50</b>	<b>50</b>
3.AGR/N0510 Integrated Nutrient Management (scientific word) in Tea Plantation	PC1. Take soil as per the recommended sampling procedure from the field (V/Z/W shape)	<b>100</b>	15	8	7
	PC2. Dry the soil and prepare samples as per procedure		5	2	3
	PC3. Pack and label the soil sample for submission to nearby soil testing laboratory for analysis		5	2	3
	PC4. Amend soil as per need under management guidance & recommendation		5	3	2
	PC5. Apply the FYM to the soil as per recommended dosage and procedure before planting and during crop cultivation (if required)		10	5	5
	PC6. Adopt various cultural practices that enhances the soil nutrient status for the benefit of crop stand		10	5	5
	PC7. Apply recommended dose of manure and fertilizers as ground application		10	5	5
	PC8. Apply micro-nutrients by foliar spray as per the recommendation		15	8	7
	PC9. Take up Weed control as per recommendation		10	5	5

	PC10. Remove rogue infected plant/ plant parts		5	2	3
	PC11. Perform weeding manually / herbicides as per the recommendations and instructions		10	5	5
	<b>Total</b>		<b>100</b>	<b>50</b>	<b>50</b>
4.AGR/N0511 Training and Pruning in Tea Plantation	PC1.Undertake centering (or decentring as it is commonly called) (this promotes the growth of auxiliary buds and lateral branches are formed).	<b>50</b>	10	5	5
	PC2.Train growing branches by two stage tipping for further lateral branch formation, good spread and establishment of plucking surface		10	5	5
	PC3.Take up formative pruning for young tea plant as per pruning cycle		10	5	5
	PC4.Take up Table formation for bushes		10	5	5
	PC5.Bring planted area in the Pruning Cycle to keep the bushes continuously under vegetative stage		10	5	5
	<b>Total</b>		<b>50</b>	<b>25</b>	<b>25</b>
5.AGR/N0512 Integrated Pest and Disease Management (scientific word) in Tea Plantation	PC1.Identify signs and symptoms of damage	<b>75</b>	10	5	5
	PC2.Identify behavior of the pest (like diurnal or nocturnal, egg laying behavior, attraction to coloursetc)		10	5	5
	PC3.Identify natural enemies of the pests		10	5	5
	PC4.Identify signs and symptoms of different diseases		15	5	10
	PC5.Identify mode of transmission (implements, vectors, water, rain, wind)		10	5	5
	PC6.Take up chemical and non-chemical approaches to pest and disease control		20	10	10
	<b>Total</b>		<b>75</b>	<b>35</b>	<b>40</b>
6.AGR/N0513 Irrigation in Tea Plantation	PC1.Irrigate based on the soil type and land slope and as per the recommendations / instruction of the supervisor	<b>50</b>	30	15	15

	PC2.Maintain drainage system by regular cleaning and weeding		20	10	10
	<b>Total</b>		<b>50</b>	<b>25</b>	<b>25</b>
7.AGR/N0514 Harvesting in Tea Plantation	PC1.Leaf plucking at appropriate stage	50	30	15	15
	PC2.Perform periodical harvesting		20	10	10
	<b>Total</b>		<b>50</b>	<b>25</b>	<b>25</b>
8.AGR/N9903 Health & Safety at the workplace	PC1.Undertake basic safety checks before operation of all machinery and vehicles and hazards are reported to the appropriate supervisor		3	1	2
	PC2.Work for which protective clothing or equipment is required is identified and the appropriate protective clothing or equipment is used in performing these duties in accordance with workplace policy.		3	1	2
	PC3.Read and understand the hazards of use and contamination mentioned on the labels of pesticides/fumigants etc		3	1	2
	PC4.Assess risks prior to performing manual handling jobs, and work according to currently recommended safe practice.		1	1	0
	PC5.Use equipment and materials safely and correctly and return the same to designated storage when not in use	25	3	1	2
	PC6.Dispose of waste safely and correctly in a designated area		1	1	0
	PC7.Recognise risks to bystanders and take action to reduce risk associated with jobs in the workplace		1	1	0
	PC8.Perform your work in a manner which minimizes environmental damage all procedures and work instructions for controlling risk are followed closely.		1	1	0
	PC9.Report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger.		1	1	0

PC10. Follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.			1	1	0
PC11. Follow emergency procedures to company standard / workplace requirements			1	1	0
PC12. Use emergency equipment in accordance with manufacturers' specifications and workplace requirements			3	1	2
PC13. Provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques			1	1	0
PC14. Recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate			1	1	0
PC15. Report details of first aid administered in accordance with workplace procedures.			1	1	0
			<b>25</b>	<b>15</b>	<b>10</b>
	<b>Total</b>	<b>500</b>	<b>500</b>	<b>250</b>	<b>250</b>
	<b>Percentage Weightage:</b>			<b>50%</b>	<b>50%</b>
	<b>Minimum Pass% to qualify (aggregate):</b>				<b>60%</b>