

Trainer's Guide

Tea Plantation Worker (South)



Qualifications Pack: Tea Plantation Worker

- SECTOR: AGRICULTURE
- SUB-SECTOR: Horticulture
- OCCUPATION: Plantation Crop Cultivation
- REFERENCE ID: AGR / Q 0204

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Welcome Note

Dear Trainer,

A Tea Plantation Worker is responsible to work in the Tea plantation on a given piece of land right from nursery preparation to harvesting and storage. Even though the tea plantation worker works under the direct monitoring of the supervisor there are certain standards of performance an individual must achieve when carrying out a function or task.

The National Occupational Standards specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. These Occupational Standards are applicable both in the Indian and global contexts.

As per these standards the tea plantation worker should work independently, be laborious and must have the ability to make operational decisions pertaining to his area of work. The trainee should gain clarity of work and should be result oriented. The trainee should also be able to demonstrate skills to use various tools in the tea plantation.

As a trainer you will need to guide and train the trainees on the following skills:

- ◆ **Knowledge and Understanding:** Adequate operational knowledge and understanding to perform the required task.
- ◆ **Performance Criteria:** Gain the required skills through hands on training and perform the required operations within the specified standards.
- ◆ **Professional Skills:** Ability to make operational decisions pertaining to the area of work.
- ◆ **Soft Skills:** To observe professional mannerisms and conduct during interaction with others.

The course includes a participant handbook for the trainees and a trainer's guide; assessment guide; session plan and syllabus for you. The course material also includes a few posters as a teaching aid in the classroom.

The assessment guide details the evaluation methodology. As a trainer you will evaluate the trainees' performance and grade them based on the evaluation parameters given in the guide. The programme also includes field visits for the trainees where they will observe the procedure/ operations and services of the tea garden visited. A case study has been included to develop the professional skills like decision making, analytical and critical thinking.

Along with the content for the domain knowledge the course also includes two booklets for trainee engagement activities; "Morning Energiser" and "Activities and Games". Each day pick the activity recommended from the booklet "Morning Energiser" and spend about 10 minutes before starting the class. You will be able to energise the trainees to take on the day.

We hope you will be able to impart your knowledge with our help to make this programme a success and upskill the workers to the recommended standards.

All the best!

Session Plan	
Program Name	Tea Plantation Worker
Name of Client	NSDC
Version No.	1.0
Pre-requisites to Training	<ul style="list-style-type: none"> ◆ 5th standard appeared or pass preferable; ◆ One year prior experience in field (crop) operations.
Training Outcomes	<p>After completing this program, participants will be able to:</p> <ul style="list-style-type: none"> ◆ Carry out ground level activities involved in a tea plantation right from nursery preparation to harvesting.

Sr. No.	Module	Session	Objectives	Methodology	Tools	Duration
1	Internal Assessment	Pre-training Assessment	<ul style="list-style-type: none"> Assess the current knowledge on tea plantation of the trainees. 	<ul style="list-style-type: none"> Theroy Test 	<ul style="list-style-type: none"> Assessment Guide Trainer's Guide 	1 hour
2	Ice Breaker	Ice Breaker	<ul style="list-style-type: none"> Introduce each other and build rapport with fellow trainees and the trainer. 	<ul style="list-style-type: none"> Group Participation Activity 	<ul style="list-style-type: none"> Trainer's Guide 	30 minutes
3	Introduction to Tea Plantation	Interesting Facts about Tea	<ul style="list-style-type: none"> State the interesting facts about tea. 	<ul style="list-style-type: none"> Trainer led Discussion 	<ul style="list-style-type: none"> Trainer's Guide 	30 minutes
4	Introduction to Tea Plantation	Soil and Agro-climatic Requirement for Tea Plantation	<ul style="list-style-type: none"> State the type of soil and climatic conditions suitable for growing tea. 	<ul style="list-style-type: none"> Trainer led Discussion 	<ul style="list-style-type: none"> Participant Handbook Trainer's Guide 	1 hour
5	Recapitulation	Recap	<ul style="list-style-type: none"> Revise the learnings of the module "Introduction to Tea Plantation". 	<ul style="list-style-type: none"> Group Participation Question Answer Session 	<ul style="list-style-type: none"> Trainer's Guide 	15 minutes
6	Nucleus Area/ Multiplication Area for Cuttings	Prepare Nucleus Area/ Multiplication Plot	<ul style="list-style-type: none"> Prepare nucleus area or multiplication plot for obtaining vegetative propagation (VP) cuttings. 	<ul style="list-style-type: none"> Trainer led Discussion 	<ul style="list-style-type: none"> Participant Handbook Trainer's Guide Poster 	30 minutes

Sr. No.	Module	Session	Objectives	Methodology	Tools	Duration
7	Nucleus Area/ Multiplication Area for Cuttings	Caring of Nucleus Area	<ul style="list-style-type: none"> Perform pruning, manuring and plant protection activities for mother bushes. 	<ul style="list-style-type: none"> Trainer led Discussion 	<ul style="list-style-type: none"> Participant Handbook Trainer's Guide Tea plant specimens with nutrient deficiencies Pruning knives, Spraying nozzles 	1 hour
8	Recap	Recap	<ul style="list-style-type: none"> Revise the learnings of the module "Nucleus Area/Multiplication Area for Cuttings". 	<ul style="list-style-type: none"> Group Participation Quiz 	<ul style="list-style-type: none"> Trainer's Guide 	15 minutes
9	Nursery Bed Preparation in Tea Plantation	Selection of Site and Methods of Propagation	<ul style="list-style-type: none"> State the parameters for selection of site for raising tea nursery; State the methods of propagation. 	<ul style="list-style-type: none"> Trainer led Discussion 	<ul style="list-style-type: none"> Trainer's Guide Poster 	30 minutes
10	Nursery Bed Preparation in Tea Plantation	Types of Nursery	<ul style="list-style-type: none"> State the types of nursery practices in tea. 	<ul style="list-style-type: none"> Trainer led Discussion 	<ul style="list-style-type: none"> Participant Handbook Trainer's Guide Poster 	2 hours 30 minutes
11	Nursery Bed Preparation in Tea Plantation	Soil Preparation and Sleeve Filling for Nursery	<ul style="list-style-type: none"> Prepare soil mixture for polythene sleeve/ bed nursery; Prepare polythene bags for planting cuttings. 	<ul style="list-style-type: none"> Trainer led Discussion Practical 	<ul style="list-style-type: none"> Trainer's Guide Participant Handbook Required tools and equipment 	2 hours

Sr. No.	Module	Session	Objectives	Methodology	Tools	Duration
56	Evaluation	Assessment - 4	<ul style="list-style-type: none"> ◆ Test the trainees' on knowledge and skills acquired on training, pruning and harvesting practices. 	<ul style="list-style-type: none"> ◆ Theory ◆ Practical ◆ Viva 	<ul style="list-style-type: none"> ◆ Trainer's Guide ◆ Assessment Guide 	2 hours
57	Professional Skills	Case Study	<ul style="list-style-type: none"> ◆ Make decisions pertaining to the concerned area of work; ◆ Plan and manage time effectively; ◆ Solve technical and operational problems on their own; ◆ Procure and maintain the required tools, material and equipment; ◆ Apply, analyze, and evaluate the information gathered as a guide to thought and action. 	<ul style="list-style-type: none"> ◆ Trainer led Discussion ◆ Activity 	<ul style="list-style-type: none"> ◆ Trainer's Guide ◆ Participant Handbook 	2 hours
58	Internal Assessment	Post-training Assessment	<ul style="list-style-type: none"> ◆ Assess the post training knowledge of the trainees on tea plantation. 	<ul style="list-style-type: none"> ◆ Theory Test 	<ul style="list-style-type: none"> ◆ Trainer's Guide ◆ Assessment Guide 	1 hour
59	Field Trip	Field Visit to a Tea Processing Unit	<ul style="list-style-type: none"> ◆ To observe and understand the procedure of processing tea 	<ul style="list-style-type: none"> ◆ Group Participation 	<ul style="list-style-type: none"> ◆ Trainer's Guide 	4 hours

Module 6: Irrigation and Drainage

Session	Resources Used	Duration
Recap	◆ Trainer's Guide	15 minutes
Irrigation and Drainage	◆ Trainer's Guide ◆ Participant Handbook ◆ Poster	1 hour 30 minutes
Honesty	◆ Trainer's Guide	1 hour
Field Visit to a Tea Garden	◆ Trainer's Guide ◆ Participant Handbook	2 hours

Recap

Objective

After completing this session the trainees will be able to:

- ◆ recap the learnings of the session on "Integrated Nutrient Management".

Say

- ◆ Let us reinforce the learning of the module "Integrated Nutrient Management" through a game.
- ◆ Here is a list of items on the board and some chits with some information/ description on it.
- ◆ Each group will get a chance to pick a chit in rotation.
- ◆ The task is to match the information/description in the chit picked to the correct item in the list.
- ◆ Each item identified correctly will be struck off from this list.
- ◆ Each group will get 2 minutes to discuss and answer.
- ◆ The scoring system will be: 10 points for answering correctly in round one; 5 points for a passed on chit.

Do

- ◆ Divide the class in to 3 groups.
- ◆ List the answers/items on the board:
- ◆ Jumble the chits and ask a participant from the first group to pick one chit.
- ◆ Allow the participant to discuss within the group and come up with the answer.
- ◆ If the answer is correct, ask the participant from the group to read out the information from the chit.

- ◆ If the answer is incorrect pass on the chit to the next group.
- ◆ If the groups are unable to respond with the correct answer, give out the correct answer.
- ◆ Continue the game until all the chits have been used.
- ◆ Item list and chits for the game:

Item List (to be written on the board)	Information for the chits
1. Ring, Half-moon, Broadcasting	Fertiliser application method
2. 4.5 and 5.5	Suitable soil pH for tea growing
3. Dolomite application	When soil pH is less than 4.5
4. FYM	Applied for sustained growth, productivity and replenish any deficiency in soil
5. Soil sample label details	Name of the garden, Section no., type of soil: top or sub-soil and purpose of soil testing.
6. Aluminium Sulphate	Applied when soil pH is more than 5.5
7. 1% to 2%	Recommended limit of organic matter in the soil
8. Fertiliser application	Start when plants produce two flushes of growth
9. Manual, Mechanical, Chemical	Weed control methods

Irrigation and Drainage

Objective

After completing this session the trainees will be able to:

- ◆ state the interaction effects of the soil type, level of the land and water availability on the crop growth and its yield;
- ◆ state the timing and method of irrigation and drainage appropriate for a given soil type and climatic condition;
- ◆ irrigate based on the soil type and land slope;
- ◆ maintain drainage system by regular cleaning and weeding.

Say

Irrigation

- ◆ The plants require moisture for its growth. This moisture comes mainly from rainfall but gets depleted when plants use it for its food preparation.
- ◆ Moisture is also lost through the process of transpiration. During the dry months, from October to March/April, evaporation exceeds rainfall. So irrigation becomes necessary.

- ◆ There are three main types of irrigation:
 - Flood irrigation: Channelise the natural water source to the plantation area.
 - Sprinkler irrigation: Put up sprinklers at appropriate distances in the plantation area.
 - Drip irrigation: Used in areas where water is scarce. Drips are permanently placed around the plants so that water drips directly into the root zone.
- ◆ **Here are a few dos and don'ts to be followed:**
 - Start irrigation when the soil remains dry for one and half week after the last rain.
 - The interval between two irrigations should be lesser in case of sandy soil than of clayey soil.
 - Stop irrigation depending on the commencement of rainfall.
 - Do not interrupt irrigation schedule unless there is 3 to 4 cm of rainfall for two to three days continuously.
 - While irrigation is done with sprinklers the distance between two sprinklers should be such that water from one sprinkler falls on the water of the other sprinkler.
 - To maintain correct pressure, follow the direction given by the manufacturer.

Drainage

- Moisture is required for growth of tea plants, but too much of it is detrimental.
- Hence, it is required to drain out the excess water by constructing drains.
- The whole system of drainage is quite a complicated process, as it depends upon factors such as soil texture, slope of the land, annual rainfall, distance of the outfall from the section etc. Therefore, it is advisable to design a drainage system after proper survey and under the guidance of an expert.
- Drainage is necessary in plains and plateaus where water can stagnate.
- However, in slopes, where excess water runs off, drainage system may not be required.

Do

- ◆ Explain the different methods of irrigation.
- ◆ Illustrate with a diagram the sprinkler method spacing, based on throw and overlapping.

Say

- ◆ We have already seen in South India tea is planted in the slopes, hence the water runs off the slopes so there is no drainage system is required. So how do we conserve moisture and soil in slopes?
- ◆ Let us see some soil and moisture conservation methods generally adopted in South India.
- ◆ The dry spell in South India is during November to March/ April. In order to conserve the moisture especially in new planting/ replanting areas staggered trenches along the contours are created.
- ◆ Trenches are rectangular holes dug in the soil on the walking path between the rows of tea plants. The dimensions are generally 1 foot wide; 1.5 feet deep and 6 feet long. The space between two trenches is 6 feet.

- ◆ After monsoon the soil accumulation is removed from the trenches and spread out in the fields. Sometimes these trenches are used to bury the pruning litters and new trenches are created for the next season.
- ◆ To prevent soil erosion during monsoon months in the slopes; contour revetments, leader drains and contour drains are constructed.

Notes for Facilitation

- ◆ Do a quick recap by asking questions on irrigation and drainage system.

Honesty

Objective

After completing this session the trainees will be able to:

- ◆ imbibe values in life.

Do

- ◆ Read these stories on Honesty.

1. The Honest Taxi Driver

- ◆ Here is a true story from a country called Philippines that happened in 1996.
- ◆ There was a taxi driver in the Philippines.
- ◆ A wealthy passenger forgot her cash and jewellery worth 34 lakhs of rupees in the taxi.
- ◆ The taxi driver could have run away with the money and become rich.
- ◆ But he chose to be honest. He went after his passenger and returned everything.
- ◆ The rich woman rewarded the taxi driver. But he refused the reward. Everyone came to know of his honesty.
- ◆ As a result the Philippine government sponsored his children's education and bought him a brand new taxi.
- ◆ Honesty ended the taxi driver's suffering forever.

2. From Business Tycoon to Jail Bird

- ◆ This is a true story of a businessman who started from scratch. His business empire expanded.
- ◆ But he had built his business through dishonesty and fraud.
- ◆ He did manage to collect enough wealth for his next few generations.
- ◆ But did his wealth and happiness last long? How could it? When the foundation is rotten, can a building last long?
- ◆ People came to know the truth. He has been jailed for 10 years.

3. Gandhiji's Experiments with Truth

- ◆ When Gandhiji was in his early teens, he had stolen stumps of cigarette thrown away by his uncle.
- ◆ He began smoking for fun.
- ◆ But one day he realized his mistake.
- ◆ He was so full of sorrow that he wanted to commit suicide.
- ◆ He later realized it was better to quit smoking than to end his life.
- ◆ He felt that it would be better to face the truth that he had done something wrong than to deny it and kill himself.
- ◆ Conclude the story by telling the audience.
- ◆ Only a coward ends his life because he does not have the will power to face his mistake.

Notes for Facilitation

- ◆ Initiate a discussion in the class after narrating the stories.
- ◆ Let the trainees come up with their views.
- ◆ Ask them questions for which the replies can be "Yes" and "No".
- ◆ Note down the questions under two headings: Y and N. Maximum number of "yes" under the heading "Y" and the maximum number of "no" under "N".
- ◆ Ask those who have said "yes" why they have said so.
- ◆ Do the same for those who have said "no".

Field Visit to a Tea Garden

Objective

After completing this session the trainees will be able to:

- ◆ observe the irrigation and drainage system in the tea garden.

Do

- ◆ Take the class on a field visit to a tea garden nearby.
- ◆ Ask the trainees to observe the leaves of the tea plants and discuss the moisture content retained in the plant.
- ◆ Discuss the irrigation requirement, with respect to the moisture content; climate and season at that point of time.
- ◆ Check moisture level and discuss the irrigation requirement.
- ◆ Recall the dimension and space between drains/trenches.
- ◆ Discuss the existing conditions of the drains with regard to: size, slope and maintenance.
- ◆ Discuss any corrective measures that may be required for the existing drainage system in the tea garden.

Notes for Facilitation

- ◆ Ask the trainees to note down their observations during the field trip.



IL&FS Skills Development Corporation Limited

(A Joint Initiative with National Skill Development Corporation)

Regd. Office: IL&FS Skills Development Corporation Limited,
1st, 2nd & 3rd Floor, NTBCL Building, Toll Plaza, DND Flyway, Noida - 201 301. U.P., India.
Tel.: (0120) 2459200 / 2459201. www.isdc.in

Mumbai Office: IL&FS Education & Technology Services Ltd.,
Aditya Textile Industrial Compound, Corduroy Building, 2nd Floor, Safed Pool, Andheri-Kurla Road,
Mumbai - 400 072. Tel.: 022-6780 9292. www.ilfseducation.com