CURRICULUM GUIDE
[SHORT COURSE]

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TEA PLANTATION

Council for Technical Education and Vocational Training
CURRICULUM DEVELOPMENT DIVISION
Sanothimi, Bhaktapur
2002

Aim and Objectives:

The aim of this course is to produce basic tea plantation and management technicians. The objectives of this course include;

- To upgrade indigenous knowledge and skill of the farmers who have already involved in tea growing.
- To develop basic tea plantation and management technicians in local level.

Course Description:

This course deals with knowledge and skill towards the tea plantation and management. This course also deals field activities. This course includes various activities inside and outside classroom situation such as land matters, drainage, soil parameters, climate, planting material, nursery management, tea plantation, diseases control, field operations, fertiliser management and land extension etc.

Target Group:

Farmers and people interested to take up tea growing as a means of livelihood.

***Group Size*:** 30 nos.

Duration: 197 hours

Medium of Instruction:

Nepali and English (with proper interpretation of technical terms in simple language which they understand)

Pattern Of attendance:

90% attendance should secure during the training period.

Entry Criteria:

Minimum 10-class Pass

Certificate requirement:

Institute itself provides certificate to those trainees who successfully complete the prescribed course.

Trainers' qualification:

1. B.Sc. Ag.
2. Diploma in tea plantation and management.

Trainees Evaluation:

Both in theory and practical emphasis should be given on more practical competence in the field with a keen power of observation and rational reasoning.

Facilities:

Descriptions	Numbers:
1. Class room for 30 students	1
2. A / V room	1
3. Slide presenter	1
4. Computer with CD ROM attachment	2
5. Motor Blow Spraying Equipment	5
6. Back Pack Sprayer with all nozzles types used in Tea	10
7. Pruning Knives 6,8,10,12 inches blade size	12 each size
8. First aid kit	1
9. Cheel hoe	5
10. Spade	30
11. Sickle	30
12. Planting Hoe	30
13. Planting Chain	5
14. Bamboo Sticks 1.5 Feet Size	5 poles
15. Polythene sleeves	5 kg.
16. Sand, Silt, Clay Types of Soil	3 cu.ft per items
17. Shaving Blades for cuttings	30
18. Protective clothing for Spraying Person, Masks goggles, gloves	30
19. Auger for soil sample drawing	5
20. Khurpi	30
21. Land (can be rented)	2 hectors (min.)
22. Vehicle (can be rented)	1

Tasks list

S.N.	Tasks	Time distributions		
		Th	Pr.	Total
1	Identify various land matters	3	1	4
2	Design / construct drains	4	4	8
3	Manage soil for tea plantation	4	2	6
4	Take climatic data / conserve water	2	2	4
5	Select / choose planting materials	5	3	8
6	Establish / Manage tea nursery	3	3	6
7	Carryout tea plantation	3	4	7
8	Bring up young tea	12	8	20
9	Carry out field operations for old tea	10	34	44
10	Provide shade in tea	4	12	16
11	Manage fertiliser for tea	6	10	16
12	Perform weed control in old tea area	12	8	20
13	Control pests of tea	7	5	12
14	Carry out disease management practices in tea	8	5	13
15	Handle / Maintain spraying equipment	2	5	7
16	Carryout land extension activities	2	4	6
Total		87	110	197

Task Analysis

Time: 4 hrs
Theory: 3 hrs
Practical: 1 hrs

Task No:**1 Identify various land matters**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6.	Receive instruction Collect necessary reading materials Identify grant documents Identify rights of land owners Identify land measurers of Nepal Keep records	**Condition (Given):** Teaching and learning materials and supplies **Task (What):** **Identify various land matters.** **Standard (How well):** Various land matters identified as per the instruction and the record kept.	➢ Concept of land matters. ➢ Grant documents ➢ Rights of land owners ➢ Nepal land measures ➢ Record keeping

Required tools/equipment:

Safety:

Task Analysis

Time: 8 hrs
Theory: 4 hrs
Practical: 4 hrs

Task No: **2** **Design / construct drains**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	Receive instruction Collect necessary tools / equipment / materials Identify concept of drainage Identify drainage parameters Design drains / contour drains Construct drains / contour drains Follow precautions. Clean tools/ equipment used Store tools / equipment Keep records	**Condition (Given):** Necessary tools, equipment & materials in field condition. **Task (What):** **Design / construct drains** **Standard (How well):** • Drainage parameters well identified. • Drains and contour drains designed and constructed as per the instruction • Tools / equipment cleaned and stored safely • Record well kept.	➢ Tools, materials equipment / supplies for designing / constructing drains. ➢ Concept & need of drainage in tea plantations. ➢ Drainage parameters ➢ Process of designing drains. ➢ Process of constructing drains. ➢ Contour drains ➢ Precautions ➢ Storing and record keeping.

Required tools/equipment:

Safety:

Task Analysis

Time: 6 hrs
Theory: 4 hrs
Practical: 2 hrs

Task No: **3 Manage soil for tea plantation**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	Receive instruction. Collect necessary tools / materials / equipment Take soil sample. Carry out pH test Classify the soil.. Identify specific soil needs for tea plantation. Amend soil. Improve soil status for new tea plantation. Carry out basic soil conservation practices Follow precautions. Clean / store tools / equipment. Keep records.	**Condition (Given):** Necessary tools, materials, equipment in field cond^{n}. **Task (What):** **Manage soil for tea plantation** **Standard (How well):** Soil Management practices specified well carried out as per the instruction given.	➢ Tools, materials, equipment / supplies for management of soil in tea field. ➢ Soil classification. ➢ Soil sampling technique for tea plantation. ➢ Soil amendments to modify tea soil parameters. ➢ Specific soil needs for tea plantation. ➢ Basis of soil conservation. ➢ Precautions ➢ Storing of tools / equipment ➢ Record keeping.

Required tools/equipment:.

Safety:

Task analysis

Time: 4 hrs
Theory: 2 hrs
Practical: 2 hrs

Task no. **4 Take climatic data / conserve water**

S.N.	Steps	Terminal Performance Objectives	Related knowledge
1	Receive instruction.	**Condition (Given):** • Necessary tools, materials & equipment. • Teaching and learning materials. **Task (What):** • **Take climatic data** • **conserve water** **Standard (How well):** • Climatic data well took and waters conservation techniques carried out as per the instruction given.	➢ Climate ➢ Tools, materials, equipment needed to take climatic date and to conserve water. ➢ Instruments to set up a simple observatory. ➢ Climatic parameters needed to grow tea. ➢ Effects of rain, drought and frost on tea. ➢ Water conservation techniques. ➢ Precautions ➢ Record keeping.
2	Collect necessary tools / materials / equipment.		
3	Identify instruments to set up a simple observatory.		
4	Collect / keep climatic data.		
5	Identify climatic parameters for growing tea.		
6	Identify effect of rain / drought / frost on tea.		
7	Apply various water conservation techniques		
8	Follow precautions.		
9	Keep records.		

Required tools/equipment:

Safety:

Task Analysis

Time: 8 hrs
Theory: 5 hrs
Practical: 3 hrs

Task No: 5 **Select / choose planting materials.**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1 2 3 4 5 6	Receive instruction. Identify the concept of planting materials. Identify the criteria for selecting / choosing planting materials. Choose planting materials. Follow precautions Keep records.	**Condition (Given):** Various planting materials, teaching and learning materials. **Task (What):** **Select / choose planting materials.** **Standard (How well):** Planting materials selected based on the performance evaluation of them as per the instruction given.	➢ Choice of planting materials. ➢ Performance evaluation of planting materials. ➢ Need for seed bari. ➢ General concept of maintaining seed baris. ➢ Vegetative propagation on techniques. ➢ Cultural techniques for maintaining seed baris & clonal mother bushes. ➢ Propagation of clonal cuttings and seed. ➢ Precautions.

Required tools/equipment:

Safety:

Task analysis

Time: 6 hrs

Task no. **6 Establish / manage tea nursery** Theory: 3 hrs

Practical: 3 hrs

S.N.	Steps	Terminal performance objectives	Related knowledge
1 2 3 4 5 6 7 8 9	Receive instructions Collect tools / materials / equipment needed. Identity a seed nursery. Make a new tea nursery. Bring up a tea nursery. Manage tea nursery. Follow precautions. Clean / store tools/ equipment. Keep records.	**Condition (Given):** • Tools / equipment & input for tea nursery making. • Teaching and learning materials. **Task (What):** **Establish / manage tea nursery** **Standard (How well):** A new tea nursery established and managed following all necessary precautions as per the instruction given.	➢ Basis of tea nursery management. ➢ Tools, materials, equipment / input for establishing and managing tea nursery. ➢ Seed nursery. ➢ How to make a new tea nursery ➢ Materials / inputs for a new tea nursery. ➢ Step wise procedure to bring up tea nursery. ➢ Precautions ➢ Record keeping.

Required tools/equipment:

Safety:

Task Analysis

Time: 7 hrs
Theory: 3 hrs
Practical: 4 hrs

Task No:7 **Carry out tea Plantation**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6. 7. 8.	Receive instructions. Collect tools / materials / equipment needed. Prepare land. Carry out plantation of tea maintaining standard spacing. Carry out post planting routine techniques. Follow precautions Clean / store tools / equipment. Keep records.	**Condition (Given):** Tools / equipment / materials in field condition needed. **Task (What):** **Carry out tea Plantation** **Standard (How well):** Tea plantation carried out as per the instruction given following all necessary precautions within the given time.	➢ Plantation of tea. ➢ Precondition. ➢ Planting time. ➢ Operational sequence. ➢ Staking ➢ Layout ➢ Spacing technique ➢ Formula to calculate plant population. ➢ Land preparation technique ➢ Post planting routine technique ➢ Precautions ➢ Record keeping.

Required tools/equipment:
Safety:

Task Analysis

Time: 20 hrs
Theory: 12 hrs
Practical: 8 hrs

Task No: **8** **Bring up young tea**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	Receive instruction. Collect tools / materials / equipment needed. Identify / control weeds of young tea. Identify / control insect / pest / disease of young tea. Carryout manuring. Carryout shading Irrigate young tea as per the need. Clean / store tools / equipment. Follow precautions. Keep records.	**Condition (Given):** • Necessary tools/ materials / equipment in field condition. • Teaching and learning materials. **Task (What):** **Bring up young tea** **Standard (How well):** • The task steps carried out in a sequential order. • All the necessary activities carried out to bring up young tea as per the instruction given.	➢ Tools / materials / equipment. ➢ Bring up young tea. ➢ Weed control. ➢ Cultural practices to bring up young tea. ➢ Pest controls. ➢ Disease control ➢ Manuring. ➢ Shade ➢ Irrigation. ➢ Precautions ➢ Record keeping.

Required tools/equipment:

Safety:

Task Analysis

Time: 44 hrs
Theory: 10 hrs
Practical: 34 hrs

Task No:**9 Carryout field operations for old tea.**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.	Receive instructions. Enlist field operations for old tea. Collect tools / materials / equipment needed. Carryout pruning methods. Identify pruning cycle Carryout tipping / plucking Identify plucking / leaf standards. Handle leaf safely Follow precautions Clean / store tools / equipment. Keep records.	**Condition (Given):** Necessary tools, materials, equipment in field condition. **Task (What):** **Carryout field operations for old tea.** **Standard (How well):** • All the field operations specified for old tea carried out as per the instruction given with precautions..	➢ Field operations for old tea. ➢ Necessary tools, materials and equipment for field operations. ➢ Pruning types and methods. ➢ Time & conditions prior to pruning operations. ➢ Pruning administration & procedures. ➢ Basis of crop distribution. ➢ Pruning cycles. ➢ Tipping. ➢ Plucking standards. ➢ Leaf standards ➢ Leaf handling procedures. ➢ Precautions.

Required tools/equipment:

Safety:

Task Analysis

Time: 16 hrs
Theory: 4 hrs
Practical: 12 hrs

Task No: **10** **Provide shade in tea.**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6. 7. 8. 9.	Receive instructions. Collect tools / materials / equipment. Identify types of shade trees for tea plantation. Make tea shade nursery. Carry out cultural practices to raise tea shade nursery. Establish young shade plants in the main field. Follow precautions Clean / store tools / equipment. Keep records.	**Condition (Given):** Necessary tools, materials & equipment in field condition. **Task (What):** • **Provide shade in tea.** • **Make tea shade nursery.** • **Establish young shade plants in the main field.** **Standard (How well):** • Tea shade nursery well raised. • Young shade plants established in the main field as per the instruction given.	➢ Shade in tea & its importance. ➢ Necessary tools, materials and equipment for performing this task. ➢ Types of shade trees for tea plantation. ➢ Making of tree shade nursery. ➢ Cultural practices to raise a successful tea shade nursery. ➢ Establishment of young shade plants in the main field. ➢ Precautions. .

Required tools/equipment:

Safety:

Task Analysis

Time: 16 hrs
Theory: 6 hrs
Practical: 10 hrs

Task No: **11 Manage fertiliser for tea.**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.	Receive instruction. Collect tools / materials / fertiliser / manure / equipment needed. Identify types of fertiliser need for tea plantation. Identify purity parameters for tea fertilisers. Carryout simple calculation for YTD mixtures. Compute manurial requirement for a tea estate based on NPK recommendation. Carry out manurial practices for tea plantations. Practise foliar application techniques. Apply micronutrient / growth promoters in tea. Apply organic tea cultivation practices. Follow precautions.	**Condition (Given):** Necessary tools, materials & equipment. • Fertilisers • Manure • Microneutrient • Growth relaters. **Task (What):** **Manage fertiliser for tea.** **Standard (How well):** Fertiliser management practices in tea well carried out as per the instruction given following all necessary precautions.	➢ Fertiliser management in tea. ➢ Types of fertilisers need for tea plantation. ➢ Purity parameters for tea fertilisers. ➢ Manurial practices for tea plantations. ➢ Calculate of FTD mixture. ➢ Computing manurial requirement for tea estate based on NPK recommendation. ➢ Foliar application techniques. ➢ Use of micronutrient & growth promoters in tea. ➢ Organic fertilisers. ➢ Basics of organic tea cultivation.

Required tools / equipment:.

Safety:

Task Analysis

Time: 20 hrs
Theory: 12 hrs
Practical: 8 hrs

Task No: **12 Perform weed control in old tea areas.**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6. 7. 8. 9.	Receive instructions. Collect tools / materials / equipment needed. Carry out various weed control methods. Perform chemical weed control in tea. Apply herbicides in tea. Follow precautions. Clean / store tools / equipment. Dispose chemicals / herbicides. Keep records.	**Condition (Given):** Sprayer, chemical herbicides etc. **Task (What):** **Perform weed control in old tea areas.** **Standard (How well):** Various weed control methods carried out in old tea areas as per the instruction given following all necessary precautions.	➢ Weed control in old tea area. ➢ Types of weed control methods. ➢ Chemical weed control in tea. ➢ Types of herbicides used in tea. ➢ Common weeds in tea plantations. ➢ Specific doses of herbicides for tea plantations. ➢ Basis of weed control operation. ➢ Spraying equipment for weed control. ➢ Additives for herbicides. ➢ Herbicides mixtures & cocktails. ➢ Efficiency of weed control. ➢ Safety precautions. ➢ Herbicide damage and toxicity.

Required tools/equipment:

Safety:

Task Analysis

Time: 12 hrs
Theory: 7 hrs
Practical: 5 hrs

Task No:**13 Control pests of tea**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6. 7. 8. 9. 10 11 12 13	Receive instructions. Collect tools / materials pesticides / equipment needed. Identify types of pests in tea. Identify damage symptoms of common pests in tea. Identify common pesticides with their doses used in tea. Prepare pest control schedule in tea. Apply pest control techniques in tea. Prepare calendar of pest reoccurrence. Prevent pest reoccurrence. Follow safety precautions. Clean / store tools / equipment. Dispose chemicals safely. Keep records.	**Condition (Given):** • Necessary tools / equipment / materials. • Pesticides • Teaching &learning materials. **Task (What):** **Control pests of tea** **Standard (How well):** • Common pests of tea prevented & controlled as per the instructions given. • Chemicals disposed / stored.	➢ Pest controls. ➢ Basis of pest control techniques. ➢ Types of common pests in tea. ➢ Damage symptoms of common pests in tea & their control. ➢ Common pesticides used in tea. ➢ Doses & pest control schedule. ➢ Calendar of pest reoccurrence. ➢ Prevention of pest reoccurrence. ➢ Safely precautions. ➢ Disposal of chemicals safely.

Required tools/equipment:

Safety:

Task Analysis

Time: 13 hrs
Theory: 8 hrs
Practical: 5 hrs

Task No:**14Carry out disease management practices in tea.**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. .	Receive instructions. Identify common tea diseases with their symptoms. Identify common fungicides used in tea with their doses. Develop calendar of disease occurrence. Carry out disease control techniques in tea. Prevent disease recurrence in tea. Identify / manage common physiological disorders in tea. Follow precautions. Clean / store tools / equipment. Store dispose fungicides Keep records.	**Condition (Given):** • Tools / equipment. • Fungicides • Teaching / learning materials. **Task (What):** **Carry out disease management practices in tea.** **Standard (How well):** • Common diseases well managed as per the instruction given. • Fungicides used / handled.	➢ Disease management in tea. ➢ Common tea diseases with their symptoms. ➢ Common fungicides used in tea with their doses. ➢ Calendar of disease occurrence. ➢ Basis of disease control techniques in tea. ➢ Prevention of disease recurrence. ➢ Common physiological disorders in tea. ➢ Precautions. ➢ Storage / disposal of fungicides ➢ Handling fungicides. ➢ Safe application of fungicides. ➢ Record keeping.

Required tools/equipment:

Safety:

Task Analysis

Time: 7 hrs
Theory: 2 hrs
Practical: 5 hrs

Task No:**15 Handle / maintain spraying equipment**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2 3 4 5 6 7	Receive instructions. Identify spraying equipment. Handle the spraying equipment safely. Collect tools / materials for maintenance of spraying equipment. Carry out simple maintenance techniques of spraying equipment. Follow precautions Keep records.	**Condition (Given):** • Spraying equipment. • Teaching learning materials. **Task (What):** **Handle / maintain spraying equipment** **Standard (How well):** Spraying equipment handled and simple maintenance techniques applied as per the instruction given.	➢ Spraying equipment used in tea. ➢ Basic knowledge of spraying equipment. ➢ Spraying NOZZLES & their importance in efficient & economic output. ➢ Simple maintenance techniques of spraying equipment. ➢ Precautions in handling spraying equipment. ➢ Record keeping.

Required tools/equipment:

Safety:

Task Analysis

Time: 6 hrs
Theory: 2 hrs
Practical: 4 hrs

Task No: **16** **Carryout land extension activities.**

S.N.	Steps	Terminal Performance Objectives	Related Knowledge
1. 2. 3. 4. 5. 6. 7. 8.	Receive instructions. Collect tools / materials / equipment needed. Develop plan for land extension for tea. Execute the plan of land extension for tea. Perform replacing techniques in old tea area. Facilitate rejuvenation of tea. Create awareness regarding the propagation of tea in organic tea cultivation. Keep records.	**Condition (Given):** • Necessary tools / materials / equipment • Teaching / learning materials. **Task (What):** **Carryout land extension activities.** **Standard (How well):** Land extension action plan prepared & implemented as per the instruction given.	➢ Land extension. ➢ Necessary tools / materials / equipment for the task. ➢ Action plan for land extension program for tea. ➢ Replacing techniques in old tea areas. ➢ Rejuvenation. ➢ Basic concepts on organic tea cultivation. ➢ Concept for creating awareness to propagate tea for organic tea cultivation. ➢ Record keeping.

Required tools/equipment:.

Safety:

Appendix-1

Basic concept for budgeting on a tea plantation

Heads Of Operation	Cost (Rs.)
New Cultivation	
Land Purchase Cost	
Other Costs Related To Purchases And Registration	
Making Boundaries Soil Work	
Installing Fencing cost Labour	
Fencing Material Cost	
Gate and Other Materials	
Boards And Other Materials	
Planting Boundary Trees	
Cost Of Boundary Trees	
Labour Cost For Planting Boundary Trees	
Transportation Cost Boundary Trees	
Land Preparation Cost In Total	
Ploughing	
Levelling	
Removing Stubs of Trees	
Using Tractor To winch Out Old Tea And Trees Cost	
Making All Types Of Drains Labour Cost	
Planting Citronella or weeping Love Grass along the drains LC	
Earth Filling In sandy Areas	
Removing Stones and boulders Labour Cost	
Labour Cost for application of Organic Manure and soil amend	
Final Field Levelling and readying for PLANTING labour cost	
New Tea Plants	
Own Nursery	
Costing Per Plant	
Transportation from Nursery to site	
Reconditioning cost before planting watering and arranging	
Out Side Purchase of Plants	
Cost Per Plant	
Transportation Cost for Whole batch till planting is finished	
Loading and unloading Charges for the plants	
Carrying the plants to the site for planting	
Other Misc Expenses in this head	
Staking	
Contract Staking	
Shade Trees purchase	

Heads Of Operation	**Cost (Rs.)**
Labour Cost for planting shade trees	
Carrying to site shade trees	
Labour Cost for planting Tea Plants	
INPUTS FOR PLANTING	
Manure	
SSP	
Rock Phosphate	
Phorate	
De-oiled Cakes	
Others if recommended by a consultant	
Pesticides	
Weedicides	
Growth promoters	
Bio-Pesticides	
Farm Yard Manure	
Young Tea and shade tree maintenance	
Debudding and centre out	
Re-centre out	
Frame formation prune	
Final frame prune	
Cut across operation	
Disengaging	
Lopping side branches	
Skiffing	
Table maintenance	
collar weeding	
Strip Thullying	
Level Cheel	
Removing weeds Manually and Shrubs	
Applying Weedicides	
Applying Insecticides	
Applying General Foliar formulations	
Applying Fungicides	
Restaking and planting new plants (Infilling)	
Termite Control and soil insect control	
Applying Manure monthly	
Repairing new drains	
Repairing old drains in new areas planted	
Planting Guatemala	
Planting Mimosa	
Planting Jiga for fencing	
Any other operation not included in the above	
Tipping Young Tea	

Heads Of Operation	**Cost (Rs.)**
Plucking Young Tea Areas	
Uprooting and removing dead plants	
Shade tree routine maintenance	
Lopping shade Trees	
Irrigation Expenses in young Tea Areas	
Cost of engine and necessary accessories	
Cost Of irrigation equipment	
Cost Of installation in site	
Cost of transportation of oils at site	
Cost Of Irrigation Spares	
Running Costs	
HSD For Engine Cost	
Cost Of Lubes	
Other Spares	
labour hazira for supervision	
Sirdars hazira for supervision	
Other Contract labour	
No of hours running per day	
Total Area Irrigated per day	
Total oil consumed per acre	
Other maintenance costs	
Electrical Energy in units consumed on electrical motors	
Total cost to run Electrical irrigation equipment	
Transportation Cost Of green Leaf to factory Young Tea Areas	
Cost of Fencing materials for young Tea	
Supervising Chowkidars and labours if any for young Tea Areas	
Flood Damage, Hail damage, cattle damage, other damages maintain	
Any other heads not included in the above	
Old Cultivation	
Plucking	
Pruning	
CP	
HRP	
RP	
MP	
LP	
LDS	
DS	
CA	
CP	

Heads Of Operation	Cost (Rs.)
Disengaging	
HB	
MS	
LS	
LO	
TO Touch Off	
Hand Levelling	
Cost Of Manure	
Cost Of Weedicides	
Cost Of Fungicides	
Cost Of Insecticides	
Cost Of Growth Promoters	
Cost Of General Foliar	
Cost of all Foliar applications labour cost	
Labour cost for manurial applications	
Cost Of Oil Cakes Cost Of FYM	
Cost Of Bio-Pesticides	
Cost Of Soil Amendments	
Chowkidars for sections	
Kamdaris and chaprasis	
Garden Bamboo	
Munshi	
Garden Executive staff	
Labour cost for foliar applications	
Pay of posts	
High rated	
Creche and creche maintenance	
Paniwallas	
Fencing walas	
Maintaining Old Shade Trees labour cost	
Manure for Shade Trees	
Lopping shade Trees	
Removing Dead Wood	
Removing Big Shrubs and buttas	
Weeding	
Level Cheel	
Collar cheel	
Collar thully	
Levelling mud around collar	
Maintaining Drains	
Repairing Old Drains	
Installation of Culverts and Hume pipes in Tea Areas	
Making Pathways in Tea Areas	
Lopping Side branches of Tea Plants	

Heads Of Operation	Cost (Rs.)
Top Dressing (Table Top)	
Removing Pruning Litter	
Burying Pruning Litter	
Chopping Pruning Litter	
Light Hoeing	
Deep Hoeing	
Maintain Infills in old Tea areas	
Infilling In Old Tea areas	
Uprooting Old Tea areas	
Flood,Hail,Lightning Damage management	
Weighment shed maintenance	
Roads and bridges	
Cost of repairing materials for Sheds Roads and bridges	
labour cost for infiling tea plants	
Making Compost pits	
Input Cost for compost pits	