

On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Tea	Rainfed	Knife harvesting injured the plucking points and causes low yield and poor quality	Different Plucking method in tea – Knife Vs shear	2	T ₀ - Hand Plucking T ₁ - Integrated Shear T ₂ - Knife harvesting	Yield per acre, Quality of leaf, plucking average.	Green leaf yield for 0.2 Acre T ₀ - 3110 Kg T ₁ - 2648 Kg T ₂ - 2890 Kg	Knife harvesting method is better than Compared to all treatments T ₀ and T ₁ are T ₂	Farmers are satisfied with the technology	-	-
Tea	Rainfed	No income in young tea upto 3 rd year, soil erosion, weed growth.	Intercrop with Rosemary & Thyme in new tea clearing	2	T ₀ - No intercrop T ₁ - Intercrop with Thyme T ₂ - Intercrop with Rosemary T ₃ - Intercrop with Geranium	Thyme yield, Rosemary yield, Soil conserved and water conserved	Yield/ha Thyme–3625 kg Rosemary – 925 kg Geranium – 8750 kg	Compared to all treatments T ₁ followed by T ₂ is better than all treatments	Farmers are satisfied with Thyme and Rosemary as intercrop	-	-

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Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
T ₀ - Hand Plucking T ₁ - Integrated Shear T ₂ - Knife harvesting	UPASI – Tea Research Foundation	Green leaf yield for 0.2 Acre T ₀ - 3110 Kg T ₁ - 2648 Kg T ₂ - 2890 Kg	Green leaf yield for 1 ha T ₀ - 38875 Kg T ₁ - 33100 Kg T ₂ - 36125Kg	T ₀ - Rs.308373/ha T ₁ - Rs.169275/ha T ₂ - Rs.36125/ha	T ₀ - 1:2.5 T ₁ - 1:2.3 T ₂ - 1:1.6
T ₀ - No intercrop T ₁ - Intercrop with Thyme T ₂ - Intercrop with Rosemary T ₃ - Intercrop with Geranium	CSWCRTI, Ooty	Green leaf yield for 0.2 Acre T ₁ - 290 Kg T ₂ - 74 Kg T ₃ - 708 Kg	Green leaf yield for 1 ha T ₁ -3625 Kg T ₂ -925 Kg T ₃ -8850 Kg	T ₁ - Rs.59380/ha T ₂ - Rs.7315/ha T ₃ - Rs.-7875/ha	T ₁ -1:2.9 T ₂ -1:1.25 T ₃ -1:0.7

4.C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

I.

1 **Title of Technology Assessed:**

Different plucking methods in tea- Knife Vs Shear.

2 **Problem Definition:**

Knife harvesting injured the plucking points and causes low yield and poor quality.

3 **Details of technologies selected for assessment:**

T₀- Hand Plucking

T₁- Integrated Shear

T₂- Knife harvesting

4 **Source of technology:**

UPASI- Tea Research Foundation, Coonoor

5 **Production system and thematic area**

Farm machineries

- 6 **Performance of the Technology with performance indicators**
Handplucking and integrated shear harvesting is observed to be good. Yield and quality of the harvested tea leaves are the performance indicators.
7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other**
scoring techniques
Farmers accepted the technology. Yield and cost of the harvested tea leaves are recorded.
- 8 **Final recommendation for micro level situation**
Integrated shear harvesting is to be adopted considering cost economics
- 9 **Constraints identified and feedback for research**
Nil
- 10 **Process of farmers participation and their reaction**
Farmers satisfied.

II.

- 1 **Title of Technology Assessed:**
Intercrop with Rosemary and Thyme in new tea clearing.
- 2 **Problem Definition:**
No income in young tea up to 3rd year, Soil erosion and weed growth.
- 3 **Details of technologies selected for assessment:**
T₀- No intercrop
T₁- Intercrop with Thyme
T₂- Intercrop with Rosemary
T₃- Intercrop with Geranium.
- 4 **Source of technology:**
Central soil and water conservation and research institute, Ooty
- 5 **Production system and thematic area:**
Weed management
- 6 **Performance of the Technology with performance indicators**
Growth of thyme and Rosemary are observed to be good. Establishment and yield were the performance indicators.
7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other**
scoring techniques
The leaf yield of these crops were recorded for scoring.
8. **Final recommendation for micro level situation**

Intercropping with thyme can be recommended followed by rosemary.

9. Constraints identified and feedback for research

Marketing of medicinal plant is a constraint. Tea growing was suppressed due to fast growth rate of geranium.

10. Process of farmers participation and their reaction

Farmers are satisfied with thyme and rosemary.

III.

1. Title of Technology Assessed:

Introduction of Drip and Fertigation system to improve the yield and quality of exotic vegetables.

2. Problem Definition:

Yield & quality of exotic vegetable cultivation, Brussels sprouts is low.

3. Details of technologies selected for assessment:

T₀- Conventional method

T₁- Only drip

T₂- Drip and fertigation

4. Source of technology:

Department of Horticulture, Ooty

5. Production system and thematic area:

Integrated nutrient management

6. Performance of the Technology with performance indicators – Nil

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other

scoring techniques – Nil

8. Final recommendation for micro level situation – Nil

9. Constraints identified and feedback for research- Nil

10. Process of farmers participation and their reaction – Nil

IV.

1. Title of Technology Assessed:

Mite control in tea using Neem seed kernel extract.

2. Problem Definition:

High infestation of Red spider mite and crop loss.

3. Details of technologies selected for assessment:

T₀- Control- No spraying

T₁- Inorganic pesticide (Omite)

T₂- Bio pesticide (Neem seed kernel extract)

- 4 **Source of technology:**
UPASI- Tea Research Foundation, Coonoor
- 5 **Production system and thematic area:**
Integrated pest management
- 6 **Performance of the Technology with performance indicators- Nil**
7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques - Nil**
- 8 **Final recommendation for micro level situation- Nil**
- 9 **Constraints identified and feedback for research - Nil**
- 10 **Process of farmers participation and their reaction – Nil**

The trial was started during January 2011.

V.

- 1 **Title of Technology Assessed:**
Organic cultivation of Rosemary in hilly terrains.
- 2 **Problem Definition:**
Reduction in yield and quality of Rosemary due to insufficient organic inputs.
3. **Details of technologies selected for assessment:**
T₀- Control applying only FYM at the time of planting.
T₁- Application of vermicompost + biofertilizer @ 1 t/ha
T₂- Application of Neem cake @ 1t/ha
T₃- Application of vermicompost ¹/₂ t/ha + Neem cake ¹/₂ t/ha
4. **Source of technology:**
Medicinal Plant Development Authority, Doddabetta, Ooty.
- 5 **Production system and thematic area:**
Integrated Nutrient Management.
- 6 **Performance of the Technology with performance indicators – Nil**
7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques – Nil**
- 8 **Final recommendation for micro level situation- Nil**
- 9 **Constraints identified and feedback for research- Nil**
- 10 **Process of farmers participation and their reaction – Nil**

The trial was started during April 2011.

VI.

- 1 **Title of Technology Assessed:**
Introduction of open cultivated flowers.
- 2 **Problem Definition:**
Reduction in yield and quality of Rosemary due to insufficient organic inputs.
- 3 **Details of technologies selected for assessment:**
- 4 **Source of technology:**
Horticulture Research Station, Ooty.
- 5 **Production system and thematic area:**
Varietal Evaluation
- 6 **Performance of the Technology with performance indicators: Nil**
7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : Nil**
- 8 **Final recommendation for micro level situation: Nil**
- 9 **Constraints identified and feedback for research: Nil**
- 10 **Process of farmers participation and their reaction: Nil**

VII.

- 1 **Title of Technology Assessed:**
Introduction of high yielding variety TRF-1 tea clone.
- 2 **Problem Definition:**
Low yield in the existing variety.
- 3 **Details of technologies selected for assessment:**
T₀- Seedling
T₁- Conventional clonal tea B/6/61
T₂- Newly released TRF-1 clone
- 4 **Source of technology:**
UPASI- Tea Research Foundation, Coonoor
- 5 **Production system and thematic area:**
Integrated Crop Management
- 6 **Performance of the Technology with performance indicators: Nil**
7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Nil**
- 8 **Final recommendation for micro level situation: Nil**
- 9 **Constraints identified and feedback for research: Nil**

10 **Process of farmers participation and their reaction: Nil**

The trial is in progress.

VIII.

1 **Title of Technology Assessed:**

Post harvest management of Garlic.

2 **Problem Definition:**

Low market value for smaller size during season

3 **Details of technologies selected for assessment:**

- T₀ – Not preserving
- T₁ – Storing in oil
- T₂ – Preparation of garlic powder
- T₃ – Preparation of flakes

4 **Source of technology:**

TNAU, Coimbatore

5 **Production system and thematic area:**

Storage technique

6 **Performance of the Technology with performance indicators: Nil**

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other**

scoring techniques : Nil

8 **Final recommendation for micro level situation:Nil**

9 **Constraints identified and feedback for research: Nil**

10 **Process of farmers participation and their reaction: Nil**

The trial will be initiated during May 2011.

4.D1. Results of Technologies Refined : Nil

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology refined	Parameters of refined t	Data on the parameter	Results of refinement	Feedback from the farmer	Details of refinement done
1	2	3	4	5	6	7	8	9	10	11
-	-	-	-	-	-	-	-	-	-	-

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Technology Refined	Source of	Production	Please give the unit (kg/ha, t/ha, lit/animal,	Net Return (Profit) in Rs. / unit	BC Ratio
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	Technology for Technology Option1 / Justification for modification of assessed Technology Option 1		nuts/palm, nuts/palm/year)		
12	13	14	15	16	17
Technology Option 1 (best performing Technology Option in assessment)	-	-	-	-	-
Technology Option 2 (Modification over Technology Option 1)	-	-	-	-	-
Technology Option 3 (Another Modification over Technology Option 1)	-	-	-	-	-

4.D.2. Details of each On Farm Trial for refinement to be furnished in the following format separately as per the proforma below

1. Title of Technology refined
2. Problem Definition
3. Details of technologies selected for refinement
4. Source of technology
5. Production system and thematic area
6. Performance of the Technology with performance indicators
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
8. Final recommendation for micro level situation
9. Constraints identified and feedback for research
10. Process of farmers participation and their reaction