

4.C1. Results of Technologies Assessed

Results of On Farm Trial -1

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
1	2	3	4	5	6	7	8	9	10
Paddy	Rainfed	Low productivity due to moisture stress during early stages	Use of designer seed in upland paddy cultivation	5	TO1: The seeds are sown directly with out any treatment. Sowing taken up as dry sowing prior to monsoon.	Germination %, Population, Yield q/ha and BCR	84 28 52.8t 2.0		
					TO2: Seed hardening with 1% KCl for 10 hrs + seed treatment with Bavistin @ 2 g + Azospirillum @ 20 g/ kg of seed	Germination %, Population, Yieldq/ha and BCR	90 30 55.5 2.1	4 % increased yield over TO1 but 9.3% lesser over TO3	
					TO3: Designer seed techniques : Seeds hardened with 1% KCl followed by coated with polymer @ 3g + Imidachloprid @1 ml + Carbendazim @ 2g + pseudomonas @10g + Azophos @ 40g + micronutrient mixture @ 20g + DAP @ 30g / kg of seed.	Germination %, Population, Yieldt/ha and BCR	90 32 60.0 2.3	Recorded 13.6%, 9.3% higher yield over TO1, TO2	Satisfied with technology but the inputs should be available as kit in markets

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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. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	No seed treatment	52.80	q/ha	27849.5	2.0
Technology option 2	TNAU, Coimbatore	54.90	q/ha	30033.5	2.1
Technology option 3	TNAU, Coimbatore	60.00	q/ha	35337.5	2.3

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

1.	Title of Technology Assessed	Use of designer seed in upland paddy cultivation
2.	Problem Definition	Low productivity due to moisture stress during early stages
3.	Details of technologies selected for assessment	TO1: The seeds are sown directly with out any treatment. Sowing taken up as dry sowing prior to monsoon. TO2: Seed hardening with 1% KCl for 10 hrs + seed treatment with Bavistin @ 2 g + Azospirillum @ 20 g/ kg of seed TO3: Designer seed techniques : Seeds hardened with 1% KCl followed by coating with polykote @ 3g + Imidachloprid @1 ml + Carbendazim @ 2g + <i>Pseudomonas</i> @ 10g + Azophos @ 40g + micronutrient mixture @ 20g + DAP @ 30g / kg of seed.
4.	Source of technology	TNAU, Coimbatore
5.	Production system and thematic area	Upland, Rainfed and drought mitigation
6.	Performance of the Technology with performance indicators	TO3 performed well and yielded high by recording higher germination (90%), plant population (32/sqmt) and yield (6.0t/ha)
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation	Difficult to get inputs required for seed treatment in time. Hence ,the farmers felt that designer seed should be prepared and sold in the market or the chemicals required should be given as a kit for the recommended seed rate.
8.	Final recommendation for micro level situation	Designer seed technology increased the yield in paddy under upland cultivation by giving tolerance to drought and nutrient deficiency. So it is recommended for upland paddy cultivation.
9.	Constraints identified and feedback for research	Nil

10.	Process of farmers participation and their reaction	Being a new technology, farmers involved well and practiced this technology. They satisfied because of cost effectiveness and higher productivity
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Results of On Farm Trial -2

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
1	2	3	4	5	6	7	8	9	10
Paddy	Wet land	Non availability of hybrid seeds	Farmers Participatory hybrid seed production	2	Conventional paddy seed production	Yield/ha	71q/ha		
					Hybrid seed production	Yield/ha	2.75q/ha	Very low seed yield	Difficult to take up sequential sowing and planting, rope pulling, GA3 application. Very poor seed set and splitting of grains

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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. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	TNAU, Coimbatore	71.30	q/ha	35687	1.92
Technology option 2	TNAU, Coimbatore	2.75	q/ha	-4090	0.89
Technology option 3	-	-	-	-	-

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

11.	Title of Technology Assessed	Farmers participatory hybrid seed production
12.	Problem Definition	Non availability of hybrid seeds
13.	Details of technologies selected for assessment	TO1: Conventional paddy seed production TO2: Hybrid seed production
14.	Source of technology	TNAU
15.	Production system and thematic area	Wet land, Farmers Participatory hybrid seed production
16.	Performance of the Technology with performance indicators	Very poor seed setting percentage and seed yield
17.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Hybrid seed production by farmers is non remunerative
18.	Final recommendation for micro level situation	Weather parameters in this districts is not suitable for paddy hybrid seed production
19.	Constraints identified and feedback for research	Not willing to go for hybrid seed production because of difficulties like sequential planting, pollination, application of GA3, synchronization and rope pulling.
20.	Process of farmers participation and their reaction	-

Results of On Farm Trial -3

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
1	2	3	4	5	6	7	8	9	10
Paddy	Wet land	Drudgery in adoption of SRI weeder	Assessing the efficacy of refined weeder	5	Rotary weeder	Weed control Efficiency Yield/ha	57% 73.65q	User friendly Less weight Easy to operate	Easy to operate by women
					Double row TNAU power weeder	Weed control Efficiency Yield/ha	86% 83.27q	Larger area covered per day, WCE is more	Easy to operate and more area covered in short time
					Plastic molded cono weeder	Weed control Efficiency Yield/ha	81% 78.80q	Less adoption rate due to to more weight	Getting shoulder pain if they work for large area.

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Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	TNAU	73.65	q/ha	40,046	2.10
Technology option 2	TNAU	83.27	q/ha	49,135	2.31
Technology option 3	TNAU	78.80	q/ha	44,882	2.21

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

1.	Title of Technology Assessed	Assessing the efficacy of refined weeder
2.	Problem Definition	Drudgery in adoption of SRI weeder
3.	Details of technologies selected for assessment	TO1: Rotary weeder TO2: Double row TNAU power weeder TO3: Plastic molded cono weeder
4.	Source of technology	TNAU
5.	Production system and thematic area	Wetland, Drudgery reduction
6.	Performance of the Technology with performance indicators	Wet land paddy ecosystem and weed management
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	TO2 is very effective to control weeds because of more area coverage in short period and very easy to operate.
8.	Final recommendation for micro level situation	Spacing in SRI method may be enhanced to 30X10 cm for double row power weeder
9.	Constraints identified and feedback for research	Square planting is must for adopting weeder. SRI marker may be modified for easy adoption by farmers
10.	Process of farmers participation and their reaction	Labour saving, high yield

Results of On Farm Trial 4

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
1	2	3	4	5	6	7	8	9	10
Banana	Garden Land	Nematode Infestation	Management of Nematodes	5	TO1: No control measures	Soil Nematode Population Bunch weight(kg) Yield(q/ha)	275.0 20.1 460.0		
					TO2: Application of Carbofuran 40g/sucker+Neem cake 500g on 3, 5 Month +Application of <i>Pseudomonas fluorescense</i> 25g/plant during 1, 3 rd month	Soil Nematode Population Bunch weight(kg) Yield(q/ha)	125.0 22.50 494.0	The bunch weight and yield was higher over TO1	
					TO3: Application of Carbofuran 40g/sucker+Neem cake 500g on 3, 5 Month+ <i>Pseudomonas fluorescense</i> 1. 25kg/ha + <i>Bacillus subtilis</i> 1.25kg/ha during 3 month	Soil Nematode Population Bunch weight(kg) Yield(q/ha)	85.0 23.18 510.0	The bunch weight and yield was higher over TO2	The farmers satisfied with TO3

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Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	No control measures	460	q/ha	127776	2.21
Technology option 2	NRC banana	494	q/ha	183700	2.63
Technology option 3	TNAU, Coimbatore	510	q/ha	193200	2.71

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

1.	Title of Technology Assessed	Management of nematode in banana
2.	Problem Definition	Nematode Infestation
3.	Details of technologies selected for assessment	TO1: No control measures TO2: Application of Carbofuran 40g/sucker at planting +Neem cake 500g at planting and 3 rd Month +Application of <i>Pseudomonas fluorescence</i> 25g/plant during 1, 3 rd month TO3: Application of Carbofuran 40g/sucker+Neem cake 500g/plant on 3, 5 Month+ <i>Pseudomonas fluorescence</i> 1.25kg/ha + <i>Bacillus subtilis</i> 1.25kg/ha during 1 st and 3 rd month
4.	Source of technology	TO2: NRC banana, TO3: TNAU, Coimbatore
5.	Production system and thematic area	Garden land, IPM
6.	Performance of the Technology with performance indicators	The root damage has been reduced and bunch weight increased
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	The Carbofuran and neem cake costs were higher
8.	Final recommendation for micro level situation	Application of Carbofuran 40g/sucker at planting +Neem cake 500g/plant at planting 3 Month + <i>Pseudomonas fluorescence</i> 1.25kg+ <i>Bacillus subtilis</i> 1.25kg/ha during 1, 3 rd month
9.	Constraints identified and feedback for research	Nil
10.	Process of farmers participation and their reaction	The farmers showed interest in adapting the technology

Results of On Farm Trial -5

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
1	2	3	4	5	6	7	8	9	10
Poultry	Back yard	Incidence of ranikhet disease	Control of ranikhet disease in desi chicken	50	1. No Vaccination	Mortality (%) 7 th day 14 th day	17 14		
					2. RDVF vaccine – Eye drops -7 th and 14 th day 3. RDVK – Subcutaneous 8 th and 16 th week	Mortality (%) 7 th day 14 th day 8 th week 16 th week	5 5 2 2	Mortality pattern was less in TO2	
					1. Oral Pellet Ranikhet Vaccine on the 7 th to 14 th day 2. RDVK – subcutaneous 8 th and 16 th week	Mortality (%) 7 th day 14 th day 8 th week 16 th week	5 5 2 2	Mortality pattern was less in TO2 and TO3	Farmers accepted the TO3 because of easy administration of vaccination by oral pellets form.

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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. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	70	Eggs/bird/year	210	1.80
Technology option 2	TANUVAS	85	Eggs/bird/year	230	2.30
Technology option 3	TANUVAS	85	Eggs/bird/year	230	2.30

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

1.	Title of Technology Assessed	Control of ranikhet disease in desi chicken
2.	Problem Definition	Incidence of ranikhet disease
3.	Details of technologies selected for assessment	TO2 : RDVF vaccine – Eye drops -7 th and 14 th day RDVK – Subcutaneous 8 th and 16 th week
4.		TO3 : Oral Pellet Ranikhet Vaccine on the 7 th to 14 th day RDVK – subcutaneous 8 th and 16 th week
5.	Source of technology	TANUVAS
6.	Production system and thematic area	Back yard poultry, Disease Management
7.	Performance of the Technology with performance indicators	Mortality pattern was reduced from 17% to 5 % in the early stage
8.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Farmers accepted TO3 even though TO2 and TO3 gave same results. Administration of vaccine in pellet form is more convenient farmers.
9.	Final recommendation for micro level situation	Oral pellet vaccine on 7 th and 14 th day and 8 th and 16 th week
10.	Constraints identified and feedback for research	Availability of pellet form of vaccine
11.	Process of farmers participation and their reaction	Farmers especially farm womens showed interest to adopt this technology to prevent the desi chicken from Raniket disease.

Results of On Farm Trial -6

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
1	2	3	4	5	6	7	8	9	10
Cattle	Cattle rearing	Long post calving period	Assessment of area specific mineral mixture	10	No mineral mixture	Milk yield On set of first estrum No of insemination required	6L/day 6month 5		
					Mineral Mixture 30- 50 g /day continuously for one year from the first day after calving	Milk yield On set of first estrum No of insemination required	7 4 3		
					Area specific mineral mixture 30 to 50 g/day continuously for one year from the first day after calving	Milk yield On set of first estrum No of insemination required	8 3 2	Supplementation of area specific mineral mixture increased milk yield and conception rate % increased	Satisfied with TO3

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Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)		6	Litre/animal/day	24	2.10
Technology option 2	TANUVAS	7	Litre/animal/day	38	2.70
Technology option 3	TANUVAS	8	Litre/animal/day	43	3.00

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

1.	Title of Technology Assessed	Assessment of Area specific mineral mixture for dairy cows
2.	Problem Definition	Long post calving period
3.	Details of technologies selected for assessment	TO1: Farmers Practice TO2: Mineral mixture: 30- 50 g /day continuously for one year from first day after calving TO3: Area specific mineral mixture: 30 - 50 g/day continuously for one year from first day after calving
4.	Source of technology	TANUVAS
5.	Production system and thematic area	Dairy-Cross breeds
6.	Performance of the Technology with performance indicators	Milk yield was high in TO3and require less no. of insemination for conception. Quicker onset of estrum after calving.
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Farmers prefers TO3 since it produce higher milk yield and it is effective in success rate of insemination
8.	Final recommendation for micro level situation	Supplementation of area specific mineral mixture 30-50gm/day
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	Farmers are ready to adopt the technology because of more milk yield and effective in success rate of insemination

