ANNUAL REPORT 2010-11

(FOR THE PERIOD APRIL 2010 TO MARCH 2011)

KRISHI VIGYAN KENDRA (KARUR)

PART I - GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, fax and e-mail

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
Krishi Vigyan Kendra, Pulutheri Village, R.T. Malai (Post), Kulithalai (Taluk), Karur – 621313.	04323 291666 Mob: 09790020666	04323 290040	skvkk@yahoo.co.in	www.skvkk.org

1.2 .Name and address of host organization with phone, fax and e-mail

Address	**Telephone**		**E mail**	**Web Address**
	Office	**Fax**		
Saraswathi Foundation for Rural Development and Training, 12/5, Sandilya Apartments, Jagadambal Colony, II Street, Royapettah, Chennai 600 014 **Camp Office:** B-29, Sastri road, Thillainagar, Tiruchirappalli - 620 018.	0431 - 2765234	0431- 2768283	balajifarms.organic @ gmail.com	www.balajifarms.com

1.3. Name of the Programme Coordinator with phone & mobile No

Name	**Telephone / Contact**		
	Residence	**Mobile**	**Email**
Dr. J. Diraviam	9942198265	9488967675	j_diraviam@rediffmail.com

1.4. Year of sanction: F.No.18-5/96-AE-I,13th April 2005

1.5. Staff Position (as 31st March 2011)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. J. Diraviam	Programme Coordinator	M	Agricultural Entomology	Ph.D.	12000 -18300	12000	03.05.10	Permanent	OBC
2	SMS	P. Tamilselvi	Subject Matter Specialist	F	Agricultural Extension	M. Sc., (Agrl Extn.)	8000 -13500	8275	29.05.09	Permanent	SC
3	SMS	R. Anitha.	Subject Matter Specialist	F	Home Science	M. Sc.,(Food Service Management & Dietetics)	8000 -13500	8825	18.01.07	Permanent	OBC
4	SMS	D. Dhanasekar.	Subject Matter Specialist	M	Horticulture	M.Sc., (Horticulture)	8000 -13500	8275	01.04.09	Permanent	OBC
5	SMS	K. Valliammal	Subject Matter Specialist	F	Soil Science	M.Sc., (Soil Science)	8000-13500	8275	28.10.09	Permanent	SC
6	SMS	S.Vijay	Subject Matter Specialist	M	Plant Protection	M.Sc., (Ag.Entomology)	8000-13500	8275	14.10.09	Permanent	OBC
7	SMS	Dr.M. Veeraselvam.	Subject Matter Specialist	M	Animal Science	M.V.Sc.	8000-13500	8275	01.06.09	Permanent	OBC
8	Programme Assistant	P. Karuppasami	Programme Assistant	M	Lab.Tech	B. Sc(Ag.)	5500-9000	5500	02.12.10	Permanent	SC
9	Programme Assistant	J. Arunkumar	Programme Assistant	M	Computer	MCA	5500-9000	5500	29.03.10	Permanent	OC
10	Programme Assistant	G.Anuradha	Farm Manager	F	Farm Manager	B. Sc(Ag.)	5500-9000	5500	01.04.10	Permanent	OBC
11	Assistant	Bhoopathi. V	Assistant	F	-	-	5500-9000	6200	01.09.06	Permanent	OBC
12	Jr. Stenographer	Latha. S	Jr. Stenographer	F	-	-	4000-6000	4300	03.05.07	Permanent	OBC
13	Driver	Santhosh Kumar. N	Driver(Jeep)	M	-	-	3050-4590	3275	03.09.07	Permanent	OBC
14	Driver	Murugesan. C	Driver (Tractor)	M	-	-	3050-4590	3425	01.08.05	Permanent	OBC
15	Supporting staff	P.Saravanan	Office Attendant	M	-	-	2550-3500	2550	01.06.10	Permanent	OBC
16	Supporting staff	R. Perumal	Field Attendant	M	-	-	2550-3500	2550	01.02.11	Permanent	OBC

1.6. Total land with KVK (in ha) : 21.51 ha

S. No.	Item	Area (ha)
1	Under Buildings	3.2
2.	Under Demonstration Units	1.2
3.	Under Crops	6.0
4.	Orchard/Agro-forestry	6.0
5.	Others	5.11
	Total	**21.51**

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	31.03.07	550	2194000.00	-	-	-
2.	Farmers Hostel	ICAR	31.03.07	305	919825.00	-	-	-
3.	Staff Quarters	ICAR	31.03.07	400	1485000.00	-	-	-
	1			66.6/quarters	-	-	-	-
	2			66.6/quarters	-	-	-	-
	3			66.6/quarters	-	-	-	-
	4			66.6/quarters	-	-	-	-
	5			66.6/quarters	-	-	-	-
	6			66.6/quarters	-	-	-	-
4.	Demonstration Units	ICAR	31.03.07	320	49525.00	-	-	-
	1. Dairy unit	ICAR	31.03.07	80	-	-	-	-
	2. Nursery	ICAR	31.03.07	80	-	-	-	-
	3. Sericulture	ICAR + Host	-	160	551270.00	25.03.11	-	Work in progress
		-	-	-	-	-	-	-
5	Fencing	ICAR	31.03.07	2218 RM	524867.00	-	-	-
6	Rain Water harvesting system	NA	-	-	-	-	-	-
7	Threshing floor	ICAR	-	450 sq. m.	5,22,972	25.03.11	-	Work in progress
8	Farm godown	-	-	-	-	-	-	-
9	Vehicle and Implement shed	ICAR	-	50 sq.m.	2,50,998	25.03.11	-	Work in progress
10	Road formation	ICAR	-	176 RM	3,20,445	25.03.11	-	Work in progress
11	Land leveling	ICAR	-	13 acres	1,99,000	25.03.11	-	Work in progress
12	Irrigation System	ICAR	-	NA	2,98,875	-	-	Work in progress

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero Jeep	2005	500000.00	130338	Good
Honda Activa	2005	40000.00	25112	Good
Hero Honda (Super Splender)	2009	50,000.00	10894	Good

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Tractor with accessories	2005	500000	Good
Camera	2006	20000	Good
Photo copier	2006	75000	Not in working condition
LCD	2006	72000	Good
Computer with accessories	2006	28000	Good
Generator	2010	150000	Good
EPBAX System	2010	50000	Good
Power tiller	2010	150000	Good
Laser guided land leveller	2010	348750	Good
Plant Health Diagnostic facility	2010	1224630	Good

1.8. Details SAC meeting conducted in 2010-11

Sl.No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	-	-	-	-	-
2.	-	-	-	-	-

PART II - DETAILS OF DISTRICT

2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Paddy – pulses Paddy – oil seed Groundnut- Paddy Cumbu – chillies Cholam (Jowar) –Vegetables

2.2 Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	**Agro-climatic Zone**	**Characteristics**
	Sub zone III : Western Zone Sub zone IV : Cauvery delta zone Sub zone V : Southern zone	**Topography** : Flat and gently slope **Major rivers:** Cauvery, Amaravathy and its tributaries **Monsoon** : North East Monsoon **Mean Annual Rainfall** : **615 mm** **Hot months** : April- June Maximum Temperature : **29.2-30.8 ^{0}C** **Cool month** : December–February Minimum Temperature : **17.2-19.3 ^{0}C** **Season wise Rainfall:** **Winter** (January- February): **0 mm** **Summer** (March- May) :**88 mm** **South West monsoon** (June – September) : **246.2 mm** **North East monsoon** (October- December) : **298 mm** **Total : 632.2 mm** **Principle crops** : Rice, banana, sugarcane, millets, oilseeds and pulses **Irrigation sources:** River channels, wells and tanks

S. No	**Agro ecological situation**	**Characteristics**
1	D3.4 Semi arid, hot- Tamil Nadu upland	Growing period of 90- 180 days and little to moderate moisture availability
2	D 4.4 Semi arid, hot central peninsular plateau	Growing period of 120- 170 days and moderate moisture availability

2.3 Soil type/s

S. No	**Soil type**	**Characteristics**	**Area in ha**
1	Irugur	Moderately deep to deep, Fine loamy texture Gently sloping, moderately rapid permeability Neutral reaction, Free from salinity, Non calcareousness	92785
2	Tulukkanur	Deep to very deep, Fine textured, gently sloping Moderately rapid permeability, High WHC, Medium CEC, High OC, Neutral reaction, Free from salinity	90248

2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
1	Paddy	13746	36028	2621
2	Jowar	27583	8302	301
3	Cumbu	4365	1113	255
4	Redgram	1561	471	302
5	Chillies	9116	572	624
6	Sugarcane	7730	680240	88000
7	Banana	5005	227838	45522
8	Groundnut	3832	8074	2107
9	Gingelly	7612	2063	271
10	Maize	172	189	1096

Source: Directorate of Economics and Statistics, Chennai.

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April	12	38.2	25.4	86
May	66	37.9	26.3	84
June	52.0	38.9	26.6	72
July	34.0	36.31	27.42	74
August	88.0	34.87	27.61	85
September	72.2	35.58	24.13	91
October	93	34.10	23.73	70
November	205	33.05	22.83	90
December	0	32.5	21.79	82
January	0	32.56	16.72	84
February	0	33.13	15.04	89
March	0	30.31	19.95	75

*** Source: Meteorological observatory, SKVK, Karur**

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbred	121248	104755406 litres	4-5 litres/ day
Indigenous	34627	22438296 litres	2-3 litres/ day
Buffalo	64503	126900 litres	2 litres/ day
Sheep			
Crossbred	270600	519863Kg	-
Indigenous	70050	419451 Kg	Male : 35 Kg Female : 22 Kg
Goats	165765	93872Kg	Male : 30 Kg Female : 20 Kg
Pigs	2629	2571 Kg	Male : 30 Kg Female : 22 Kg
Crossbred	1950	170183 Kg	-

Indigenous	679	69308Kg	Male : 300 Kg Female : 200 Kg
Rabbits	340	22124 Kg	Male : 250 Kg Female : 150 Kg
Poultry			
Hens	1263063	105305 Kg	Male : 3.5 Kg Female : 2.0 Kg
Desi	498470		-
Improved	-	34038000 eggs	-
Ducks	296329	15841200 eggs	80 – 100 eggs / annum
Turkey and others	197554	18196800 eggs	200 eggs / annum
	3161 ha	4741 tonnes	1.6 t / ha

Category	**Area**	**Production**	**Productivity**
Fish	-	-	-
Marine	-	-	-
Inland	3161 ha	4741 tonnes	1.6 t / ha
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

Source: District statistical Handbook, 2008-09

2.7 District profile has been prepared and submitted Yes / No: Yes

2.8 Details of Operational area / Villages

S. No.	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Kulithalai	Kulithalai	Poiyamani, Parali,Karungalapalli, Natchalur, Inungur, Nallur, Kalingapatti, Valayapatti, Panickampatti,Purasampatti Chinnapanaiyur,Nangavaram Kumaramangalam,Maruthur Kalingapatti	2 – 3 Years	Rice	Unscientific nutrient management	INM
						Lack of knowledge in the management of problem soil	Scientific management of problem soils
					Maize	Poor grain filling and poor micronutrient management	INM
						Grain loss due to improper post harvest management	Scientific storage practices
					Minor millets	Lack of awareness on nutritional minor millets	Popularization of nutritional minor millets.
					Sugarcane	High cost of sets and more wastage of canes	Scientific cultivation – new method of cultivation
						Low productivity due to micronutrient deficiency	INM
					Red gram	Low yielding varieties under rain fed condition and long duration	Introduction of HYV
					Paddy	Incidence of stem borer, Leaf folder, Brown leaf spot and sheath blight	Introduction of resistant variety and Integrated pest management

2	Thogaimalai	Thogaimalai	Archampatti, Puthur, Naganur, Kazhugur, Pillur, Pathiripatti, Keelaveliyur, R.T.malai, Kallai, vadaseri, Neithalur Kalladai Melaveliyur Perur Chinnapanaiyur Alathur Kavalkaranpatti		Paddy	Pest attack in storage grains	Post Harvest Management
						Labour scarcity	Weed management
					Tapioca	Mealy bug incidence	Integrated pest management
					Black gram	Low yielding varieties under rice fallow situation and susceptibility to mosaic	Popularization of High yielding and mosaic resistant variety
					Gingelly	Low productivity and poor population maintenance	Introduction of high yielding variety
					Sunflower	Low yield and high cost of production	Introduction of HYV
3	Kadavur	Kadavur	D.seethapatti Tharagampatti Palaviduthi Veeranampatti Mayilampatti Kurunikulathupatti Manjanayakanpatti Athikulathupatti Devarmalai Reddiyarpatti Nalluranpatti		Paddy	Low remunerative price in individual marketing of the agricultural produce	Strengthening the group approach (Farmers club) by means of collective marketing approaches
					Dairy	Poor growth performance of dairy calves, Calf mortality	Scientific nutritive management
						Infertility due to anoestrus and repeat breeder	Scientific breeding management
						Mastitis due to poor management	Scientific disease management

					Goat	Endoparasitic infestation	Scientific disease management
					sheep	Endoparasitic infection	Scientific disease management
						Sheep pox	Scientific disease management
						Enterotoxaemia	Scientific disease management
					Turkey	Poor growth	Scientific feeding management
					Piggery	Poor growth performance and piglet mortality	Scientific health management
						Piglet anaemia	Scientific health management
					Desi bird	Fowl pox	Scientific disease management
						Ranikhet disease	Scientific disease management
					Watermelon	Direct sowing- high seed rate results in high cost of cultivation and non uniformity	Improved technology in production of seedling
					Banana	High cost involved in per kg production of Banana	Introduction of new method cultivation
						Low yield in Banana variety Nendran	INM

					Snake gourd	Local variety with low yield	Introduction of high yielding variety
4	Krishnarapuram	Krishnarapuram	Kossur, Lalapettai, Mahadhanapuram, shivayam, Panjapatti, Punavasipatti, Thaliyampatti, Thirukampuliyur Mahilampatti Pillapalayam Alampatti Irumboothipatti Sengal M.Pudhupatti		Goat	Enterotoxaemia	Scientific disease management
					Fodder	Lack of green fodder	Mixed fodder cultivation
					Fodder sorghum	Lack of fodder availability	Assessment of fodder sorghum
					China Aster	All farmers growing chrysanthem in inter leads to market glut	Alternating flower crop to chrysanthemum China Aster
					Banana	Banana pseudostem waste	Women empowerment in banana fibre making.
					Integrated farm development/Organic farming	Lack of awareness on farm resources management	Integrated farm development/Integrated farming system

2.9 Priority thrust areas

S. No	Thrust area
1	Introduction of high yielding variety, New method of cultivation and mechanization
2	Integrated Nutrient Management, Integrated Pest Management and Integrated farming system
3	Quality seeds & seedling production and supply
4	Organic farming& Problem soil management
5	Scientific nutritive and disease Management
6	Breed improvement
7	Increase in additional income in Post Harvest Technology & Value addition of agricultural crops
8	Value addition on Dairy products
9	Farm mechanization & introduction of improved farm tools for labor scarcity
10	Drudgery reduction and Women empowerment
11	Clean development mechanism (CDM) through training programmes.
12	ICT initiation through farmers club
13	Strengthening of farmer's club/women's club through various economic activities in farm and non farm sector.

PART III - TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities

OFT				**FLD**			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
7	7	40	40	17	17	350	350

Training				**Extension Programmes**			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
136	101	3425	2353	3684	828		15101

Seed Production (Qtl.)		**Planting materials (Nos.)**	
5		6	
Target	Achievement	Target	Achievement
87 Qtl.	1777 Nos.	1,00,000 Seedlings	48031

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
60		5000	3582

3.B1. Abstract of interventions undertaken based on thrust areas identified for the district as given in Sl.No.2.7

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products	
1	Seed / Plant production	China aster	Market glut due to mono crop	Comparison of variety in china aster for suitability in open area	-	2	-	-	3	-	-	-	No.	Kg
2	Integrated Crop Management	Sugarcane	High cost involved in the planting materials	Assessment of suitable planting material in sugarcane for better crop establishment	-	2	-	-	2	-	-	-	Sugar Cane seedlings -12500	
3	Weed Management	Implements	Labour scarcity for weeding	Assessment of multi row power weeder and battery operated power weeder in paddy	-	1	-	-	2	-	-	-		
4	Integrated Disease Management	Betelvine	low yield due to disease incidence	Foot Rot Management in betelvine	-	1	-	-	2	-	-	-		

5	Disease Management	Desi chicken	Increased mortality of chicks and adults due to Ranikhet disease	Control of Ranikhet isease in desi chicken	-	1	-	-	3	-	-	-		
6	Drudgery Reduction	Drudgery	Drudgery in fibre extraction	Drudgery reduction and quality improvement of banana fiber	-	4	-	-	1	-	-	-		
7	Integrated Crop Management	Banana	High cost in production with low yield	High density planting in Banana	-		-	-	1	-	-	-		
8	Varietal introduction	Sesame	Poor population maintenance and low yield	-	Introduction of high yielding sesame variety	-	-	-	1	-	-	-		
9	Varietal introduction	Sunflower	Low production	-	Introduction of high yielding sunflower variety	-	-	-	1	-	-			
10	Varietal introduction	Sesame	Low yield	-	Introduction of high yielding sesame variety	-	-	-	2	-	-			
11	Varietal introduction	Sunflower	Low production	-	Introduction of high yielding sunflower hybrid	-	-	-	1	-	-			

12	Integrated Disease Management	Sunflower	Charcoal rot	-	Charcoal root rot management in sunflower	1	-	-	2	-	-	-		
13	Varietal introduction	Redgram	Lack of availability of good quality seeds	-	Introduction of high yielding redgram variety	-	-	-	3	-	-			
14	Varietal introduction	Blackgram	Low yielding varieties	-	Introduction of high yielding blackgram variety	-	-	-	2	-	-			
15	Variety popularization	Paddy	Low yield	-	Popularization of Rice hybrid CORH-3 through SRI method	1	-	-	3	-	-			
16	Productivity improvement	Maize	Poor seed filling and low yield	-	INM in maize	1	-	-	2	-	-			
17	Integrated Crop Management	Paddy	Low yield	-	Integrated crop management on paddy	2	-	-	2	-	-			

18	Varietal introduction	Snake gourd	Local variety with potential	-	Introduction of new variety	1	-	-	3	-	-			
19	Integrated Pest Management	Brinjal	Mealybug	-	Mealy bug management in brinjal	1	-	-	2	-	-	-		
20	Popularization of egg incubator	Poultry	Poor hatchability	-	Popularization of egg incubator	2	-	-	2	-	-	-		
21	Productivity improvement	Sugarcane	Low yield	-	Popularization of TNAU sugarcane booster	-	-	-	3	-	-	-		
22	Fodder development	Fodder	Lack of green fodder	-	Popularization of fodder bank at Village level	-	-	-	2	-	-		CO-4-34500	

23	Increasing conception rate through Oestrus synchronization	Dairy	Infertility due to anoestrus and repeat breader	-	Oestrus synchronization in dairy cows through Ovsynch technology	2	-	-	2	-	-	-		
24	Popularization of turkey species	Turkey	Low income	-	Introduction and Popularization of Nandhanam Turkey	2	-	-	3	-	-	-		

3.B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/enterprise	No.of programmes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1	To-1: Direct planting using two budded setts To-2: Direct planting single budded setts To-3: Transplanting of portray seedlings	TNAU, IISR	Sugarcane	1	-	2	-

2	To-1: Cono weeder To-2: TNAU power weeder To-3: Single row power weeder designed by KVK,Madurai	TNAU	Paddy	1	-	1	-
3	Comparison of variety in china aster for suitability in open area	IIHR	China aster	1	-	2	-
4	To1- Spraying Mancozeb 2g/lit T02- Premonsoon soil drenching 0.25% of Bordeaux mixture @ 1lit+ 0.5 g Streptocycline – Soil application of *Trichoderma viride* 1 kg + 100 kg FYM + 10 Kg neem cake (once in three months) T03- Pre Monsoon soil drenching 0.25% Bordeaux mixture @ 1 lit + 0.5 g streptocycline – Soil application of *Pseudomonas fluorescens* 1 kg + 100 kg FYM + 10 Kg neem cake (once in three months)	TNAU	Betelvine	1	-	1	-

5	**Technology option 1:** No Vaccination/ Vaccination at 8th week to 10th week at veterinary dispensaries **Technology option 2:** Lasotta vaccine 7th to 10th day RDVK vaccine 8th and 16th week **Technology option 3:** Oral pellet vaccine 7th to 10th day Oral pellet vaccine at 8th week	TANUVAS	Poultry	1	-	1	-
6	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)	NRCB Trichy	Banana	1	-	-	-
7	Hand stripping Retting by means of chemical – NaOH @10% at 60 ^{0} C water for two days. Retting by means of microbial organism (CAP culture @ 250 gm under 1:10:1 (1 kg fibre with 10 lit water with 1 kg jaggery) 40º C for 2 days.	NRCB, ITK	Banana	4	-	-	-
8	Introduction of high yielding sesame variety	TNAU	Sesame	-	1	-	-
9	Introduction of high yielding sunflower variety	TNAU	Sunflower	-	1	-	-
10	Introduction of high yielding sesame variety	TNAU	Sesame	-	1	-	-

11	Introduction of high yielding sunflower hybrid	TNAU	Sunflower	-	1	-	-
12	Charcoal root rot management in sunflower	TNAU	Sunflower	-	1	1	-
13	Introduction of high yielding redgram variety	TNAU	Red gram	-	1	-	-
14	Introduction of high yielding blackgram variety	TNAU	Black gram	-	1	-	-
15	Popularization of Rice hybrid CORH-3 through SRI method	TNAU	Paddy	-	1	1	-
16	INM in maize	TNAU	Maize	-	1	1	-
17	Integrated crop management on paddy	TNAU	Paddy	-	1	2	-
18	Introduction of new variety	TNAU	Snake gourd	-	1	1	-
19	Mealybug management in brinjal	TNAU	Brinjal	-	1	1	-
20	Popularization of egg incubator	TNAU	Egg incubator	-	1	2	-
21	Popularization of TNAU sugarcane booster	TNAU	Sugarcane	-	1	-	-
22	Popularization of fodder bank at Village level	TANUVAS	Fodder	-	1	-	-
23	Oestrus synchronization in dairy cows through Ovsynch technology	TANUVAS	Cow	-	1	2	-
24	Introduction and Popularization of Nandhanam Turkey	TANUVAS	Turkey	-	1	2	-

3.B2 contd..

No. of farmers covered															
OFT				**FLD**				**Training**				**Others (Specify) Extension Activity**			
General		**SC/ST**		**General**		**SC/ST**		**General**		**SC/ST**		**General**		**SC/ST**	
M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
9	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
28	7	3	2	278	33	31	8	1614	576	98	22	11003	4098	-	-

PART IV - On Farm Trial

4.A1. Abstract on the number of technologies assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation							1			1
Integrated Pest Management										
Integrated Crop Management										
Integrated Disease Management				1						1
Small Scale Income Generation Enterprises										
Weed Management	1									1
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production				1						1
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation										
Total	1						1			4

4.A2. Abstract on the number of technologies refined in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation										
Integrated Pest										

Management										
Integrated Crop Management						1				1
Integrated Disease Management										
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction						1				1
Storage Technique										
Mushroom cultivation										
Total						**2**				**2**

4.A3. Abstract on the number of technologies assessed in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management						
Disease of Management		1				1
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL		1				1

4.A4. Abstract on the number of technologies refined in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management						
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL						

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management					
Varietal Evaluation					
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management	Betelvine	Foot rot management in betelvine	5	5	2
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					

Farm Machineries	Paddy	Assessment of multi row power weeder and battery operated power weeder in paddy	5	5	2
Integrated Farming System					
Seed / Plant production	Sugarcane	Assessment of suitable planting material in sugarcane for better crop establishment	5	5	1
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total			15	15	5

4.B.2. Technologies Refined under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management					
Varietal Evaluation					
Integrated Pest Management					
Integrated Crop Management	Banana	High density planting in Banana	5	5	1 ha
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction	Banana	Refinement on approaches for drudgery reduction and quality improvement of banana fibre	5	25	

Storage Technique					
Mushroom cultivation					
Total			**10**	**30**	**1**

4.B.3. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management				
Disease management	1	Control of ranikhet disease in desi chicken	500 birds	10
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total			500	10

4.B.4. Technologies Refined under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

4.C1. Results of Technologies Assessed

1. Results of 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
Sugarcane	Irrigated	High cost involved in the planting materials	Assessment of suitable planting material in sugarcane for better crop establishment	5	To-1: Direct planting using two budded setts To-2: Direct planting single budded setts To-3: Transplanting of portray seedlings		Trial in progress				

Contd..

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
Technology option 1 (Farmer's practice)	-	Trial is ongoing			
Technology option 2	TNAU	Trial is ongoing			
Technology option 3	IISR	Trial is ongoing			

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 suitable planting material in sugarcane for better crop establishment
2 Problem Definition : High cost involved in the planting materials

3 Details of technologies selected for assessment:

Technology option	Technology details
Technology option - 1	Direct planting using two budded setts
Technology option - 2	Direct planting single budded setts
Technology option - 3	Transplanting of portray seedlings

4 Source of technology: IISR

5 Production system and thematic area: Rice- Sugarcane, Productivity improvement

6 Performance of the Technology with performance indicators: Trial in progress

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

2. Results of 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
Paddy	Irrigated	Labour scarcity for weeding	Assessment of multi row power weeder and battery	5	To-1: Cono weeder To-2: TNAU power weeder	Weed control (%)	To1	To2	To3	To1: We can get higher yield due to better weeding	1. Power weeder could not be operated by age old	In Power weeder adjustment	Beyond 40 DAP the
							83.20	73.48	This Option could not be tested due to non-availability				
						Labour cost saving(Rs.ha)	1050	1300					

			operated power weeder in paddy		To-3: Single row power weeder designed by KVK,Madurai	Yield kg/ha	4822	4410	of that model		persons 2. Power weeder doesn't suit for weeding after 40 days of planting, because it would damage the tillers by bending it.	of the weeder height and blade width	wee der dam ages the tiller by bend ing it.

Contd..

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
Technology option 1 (Farmer's practice)	TNAU	4822	kg/ha	12339	1.31
Technology option 2	TNAU	4410	kg/ha	12050	1.34
Technology option 3	TNAU	-		-	-

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 multi row power weeder and battery operated power weeder in paddy
2 Problem Definition: Labour scarcity for weeding
3 Details of technologies selected for assessment:

Technology option	Technology Details
Technology option - 1	Cono weeder
Technology option – 2	TNAU power weeder

Technology option - 3	Single row power weeder designed by KVK, Madurai

4 Source of technology: TNAU

5 Production system and thematic area: Rice - Pulse, Productivity improvement

6 Performance of the Technology with performance indicators:

Name of the farmer	Name of the village	To-1			To-2			To-3		
		Weed control (%)	Labour cost saving for weeding (Rs./ha)	Yield kg/ha	Weed control (%)	Labour cost saving for weeding (Rs./ha)	Yield kg/ha	Weed control (%)	Labour cost saving	Yield kg/ha
R.Perumal	Seethapatti	83.62	350	5150	73.65	1100	4725	NA		
R.Balu	Seethapatti	82.45	550	5920	75.42	1300	5425			
P.Ramalingam	Pulutheri	85.26	650	5775	70.63	1400	5250			
R.Pitchai	D.Seethapatti	81.15	350	2118	74.45	1100	1925			
P.Loganathan	D.Seethapatti	83.53	350	5150	73.25	1100	4725			
Total		416.01	2250	24113	367.4	6000	22050			
Average		83.20	450	4822	73.48	1200	4410			

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

Technology Parameters	To1: Cono weeder	T o 2: TNAU power weeder
Weed control (%)	*****	****
Labour cost saving for weeding(Rs./ha)	****	*****
Yield kg/ha	****	***
Total	**13**	**12**

8 Final recommendation for micro level situation: Regular weeding (3-4 times) using conoweeder along with other management practices would result in higher yield. Adoption of square planting with uniform spacing is essential for the usage of conoweeder for weeding.

9 Constraints identified and feedback for research: Weeding can be done by the machine upto 40 days age of crop, after that the tillers are damaged while weeding.

10 Process of farmer's participation and their reaction: Eagerly participated and made the question about the area coverage per hour for weeding, type of fuel used, cost of the machine and source to purchase.

3. **Results of 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**
China aster	Irrigated system	Market glut due to mono crop	Comparison of variety in china aster for suitability in open area	5	Varietal assessment	Yield Stalk length BCR	Trial in progress				

Contd..

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
Technology option 1 (Farmer's practice)					
Technology option 2					
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

1	Title of Technology Assessed	Assessment of China aster varieties for suitability in open field of Karur district
2	Problem Definition:	Alternate crop
3	Details of technologies selected for assessment: New Varieties	
4	Source of technology:	IIHR
5	Production system and thematic area: Irrigated	
6	Performance of the Technology with performance indicators: Trial in progress	
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	
8	Final recommendation for micro level situation In progress	
9	Constraints identified and feedback for research	
10	Process of farmers participation and their reaction very low	

4. **Results of 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	T01	T02	T03	9	10	11	12
Betelvine	Irrigated	low yield due to disease incidence	Foot Rot Mangement in betelvine	Betelvine	To1- Spraying Mancozeb 2g/lit T02- Premonsoon soil drenching 0.25% of Bordeaux mixture @ 1lit+ 0.5 g Streptocycline – Soil application of *Trichoderma viride* 1 kg + 100 kg FYM + 10 Kg neem cake (once in three months) T03- Pre Monsoon soil drenching 0.25% Bordeaux mixture @ 1 lit + 0.5 g streptocycline – Soil application of *Pseudomonas fluorescens* 1 kg + 100 kg FYM + 10 Kg neem cake (once in 3 months)	% of disease reduction Yield/vine BCR	49.78 14.4 3.24	75.23 17.0 3.88	85.53 18.8 4.22	To3- Pre Monsoon soil drenching 0.25% Bordeaux mixture @ 1 lit + 0.5 g streptocycline – Soil application of *Pseudomonas fluorescens* 1 kg + 100 kg FYM + 10 Kg neem cake (once in three months) results in good control of the disease	Farmers are more interested to adopt the To3 as this option effectively controls the disease incidence at all stages of the crop	Nil	

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Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) Rs. lakh/ unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	27648	Bundles/Ha	829.44	3.24
Technology option 2	TNAU	32640	Bundles/Ha	979.20	3.88
Technology option 3	TNAU	36096	Bundles/Ha	1064.83	4.22

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: Foot Rot Management in Betel vine

2 Problem Definition: Low yield due to higher incidence of the disease

3 Details of technologies selected for assessment

Technological option	Details of technology
Technological option To1	Spraying Mancozeb 2g/lit
Technological optionTo2	Premonsoon soil drenching 0.25% of Bordeaux mixture @ 1lit + 0.5 g Streptocycline – Soil application of *Trichoderma viride* 1 kg + 100 kg FYM + 10 Kg neem cake (once in three months)
Technological optionTo3	Pre Monsoon soil drenching 0.25% Bordeaux mixture @ 1 lit + 0.5 g streptocycline – Soil application of *Pseudomonas fluorescens* 1 kg + 100 kg FYM + 10 Kg neem cake (once in three months)

4 Source of technology: T01- Farmers Practice, T02- TNAU, T03- TNAU

5 Production system and thematic area: Irrigated and disease management

6 Performance of the Technology with performance indicators

S.no	Name of the Farmers	Village Name	Technology Option 1			Technology Option 2			Technology Option 3		
			Percentage of Disease Reduction	Leaf yield/vine/ Harvest	BCR	Percentage of Disease Reduction	Leaf yield/vine/ Harvest	BCR	Percentage of Disease Reduction	Leaf yield/vine/ harvest	BCR
1	P. Gnanavel	Mahilipatti	54.21	15	3.32	75.73	17	3.82	86.79	19	4.26
2	P.Sundararaju	Mahilipatti	45.34	14	3.30	76.47	18	3.90	82.61	18	4.12
3	G.Murugesan	Mahilipatti	47.46	14	2.98	72.94	16	3.85	84.99	19	4.27
4	S. Rengasamy	Mahilipatti	53.59	15	3.32	76.29	18	3.89	86.87	19	4.27
5	K.Selvam	Mahilipatti	48.28	14	3.30	74.73	16	3.92	86.37	19	4.20
Total			248.88	72	16.22	376.15	85	19.38	427.63	94	21.12
Average			**49.78**	**14.4**	**3.24**	**75.23**	**17**	**3.88**	**85.53**	**18.8**	**4.22**

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

Technology Parameters	Technological option 1	Technological option 2	Technological option 3
% of Disease Reduction	***	****	*****
Yield / Vine	***	***	*****
BCR	**	****	****
Total	8	11	14

8. Final recommendation for micro level situation: Can be popularized through FLD on recommended practices to create the importance among farming community

9. Constraints identified and feedback for research: Preparation of correct formulation of chemicals in small quantity is difficult. Timely availability of Quality biocontrol agents is also a major constraint.

10. Process of farmers participation and their reaction: The training was organized to the farmers on 09.11.10. Among the farmers, interested persons were selected and interviewed for the adoption of new technology. Farmers are more interested to apply biocontorl agents *viz.*, *Pseudomonas fluorescens* and *Trichoderma viride* for maintaining crop hygienic condition

5. Results of 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
Poultry	Backyard	Increased mortality of chicks and adults due to Ranikhet disease	Control of Ranikhet disease in desi chicken	500 birds	Technology option 1: No Vaccination/ Vaccination at 8th week to 10th week at veterinary dispensaries Technology option 2: Lasotta vaccine 7th to 10th day RDVK vaccine 8th and 16th week Technology option 3: Oral pellet vaccine 7th to 10th day Oral pellet vaccine at 8th week	HI titre value Disease occurrence BCR	Trial in progress				

Contd..

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
Technology option 1 (Farmer's practice) No Vaccination/ Vaccination at 8th week to 10th week at veterinary dispensaries	-	Trial in progress			
Technology option 2 Lasotta vaccine 7th to 10th day RDVK vaccine 8th and 16th week	TANUVAS				
Technology option 3 Oral pellet vaccine 7th to 10th day Oral pellet vaccine at 8th week	TANUVAS				

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 isease in desi chicken

2 Problem Definition : Increased mortality of chicks and adults due to Ranikhet disease

3 Details of technologies selected for assessment:

Category	Technology details
Technology option 1 (Farmer's practice)	No Vaccination/ Vaccination at 8th week to 10th week at veterinary dispensaries
Technology option 2	Lasotta vaccine 7th to 10th day RDVK vaccine 8th and 16th week
Technology option 3	Oral pellet vaccine 7th to 10th day Oral pellet vaccine at 8th week

4 Source of technology : TANUVAS

5 Production system and thematic area: Scientific Disease Management

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

6. Results of Technologies Refined

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology refined	Parameters of refined Technology	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
							T0	T1	T2			
Banana	Wetland condition	High cost in production with low yield	High density planting in Banana (var. Neypoovan)	5	High density planting	Bunch weight (kg) % of bunch harvested, No. of hands/bunch No. of fingers/bunch Yield kg/ha	12.3 90 10.5 196.4 27000	10.7 85 9.75 187.8 34500	11.29 90 10.25 190.5 34000	Two sucker per hill at 2m x 3m found to be the best for adoption in micro level for High density planting in banana	Farmers are satisfied with 2 sucker per hill with 2m x 3m spacing	In paired row instead of 1.2 m x 1.2 m x 2 m, the spacing was changed to 1.5 m x 1.5m x 2 m Instead of 3 sucker per hill with spacing of 1.8 m x 3.6 m, the spacing was changed to 2 sucker per hill at 2 m x 3 m

Contd..

Technology Refined	Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1	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
Technology Option 1 (best performing Technology Option in assessment)	2mx2m one sucker per hill	27000	Kg/ha	120000	1:1.8
Technology Option 2 (Modification over Technology Option 1)	1.5x1.5mx2m paired row system of planting	34500	Kg/ha	142750	1:1.74
Technology Option 3 (Another Modification over Technology Option 1)	2mx3m with two sucker per hill	34000	Kg/ha	165000	1:1.94

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 — High density planting in banana
2. Problem Definition — High cost involved in production with low yield.
3. Details of technologies selected for refinement — Spacing and no. of sucker per hill

Category	Technology details
Technology 1	2mx2m single sucker per hill conventional planting
Technology 2	1.2mx1.2mx2m paired row system
Technology 3	2mx3m Two sucker per hill

4 Source of technology NRCB Trichy

5 Production system and thematic area wet land system of cultivation and new method of planting

6 Performance of the Technology with performance indicators

S.no	Name of the farmer	Village name	Technology option 1					Technology option 2					Technology option 3				
			Bunch wt	% of bunch harvested	No of hands per bunch	No of fingers per bunch	Yield per ha	Bunch wt	% of bunch harvested	No of hands per bunch	No of fingers per bunch	Yield per hectare	Bunch wt	% of bunch harvested	No of hands per bunch	No of fingers per bunch	Yield per hectare
1	A.Selvam	Bareli	12.5	90	10	195	26	10.7	85	9.7	187	34	11.5	90	10.2	190	36
2	Senthil kumar	Bareli	12	90	11	200	27	10.5	85	9.5	190	33	11	90	10.3	188	33
3	Kannadhasan	Bareli	12.2	90	10	198	27.5	10.6	85	9.5	192	35	11	90	10.3	193	33
4	Ethiraj	Lalapet	11.8	90	11	194	27.5	10.9	85	10	180	35	11.5	90	10.4	187	34
5	Jegadesan	Bareli	13	90	11	195	27	10.8	85	10	190	35.5	11.5	90	10.1	194.5	34
Total			61.5	450	53	982	135	53.5	425	48.7	939	172.5	56.5	450	51.3	952.5	170
Average			12.3	90	10.6	196.4	27	10.7	85	9.74	187.8	34.5	11.3	90	10.26	190.5	34

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

Technology Parameters	**Conventional planting**	**Paired row system**	**Two suckers per hill**
Bunch weight (kg)	*****	***	****
% of bunch harvested,	*****	****	*****
No. of hands/bunch	***	***	***
No. of fingers/bunch	***	***	***
Yield kg/ha	**	****	*****
Total	18	17	20

8 Final recommendation for micro level situation Two sucker per hill with 2mx3m spacing

9 Constraints identified and feedback for research :The paired row system of planting accommodates more number of plants per hectare, whereas the height of the plant is increased to 30% more compared to conventional planting leads to risk in lodging and difficult in propping in Neypoovan variety. Hence researcher has to identify suitable method of high density planting for different varieties.

10 Process of farmers participation and their reaction: Initial group meeting was conducted to farmers and they were trained on high density planting. Participation of farmers were good and now they started adoption on their own.

7. Results of Technologies Refined

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter			Results of refinement	Feedback from the farmer
1	2	3	4	5	6	7	8			9	10
							T1	T2	T3		
Banana	irrigated	Drudgery in fibre extraction	Approaches to overcome drudgery reduction and quality improvement of banana fiber	**5**	**Technological option:T1** Hand stripping. **Technological option: T2** Retting by means of chemical – NaOH @10% at 60^0 C water for two days. **Technological option: T3** Retting by means of microbial organism (CAP culture @ 250 gm under 1:10:1 (1 kg fibre with 10 lit water with 1 kg jaggery) 40º C for 2 days.	Drudgery reduction : Heart beat :bpm Outcome: kg/hr	 124.75 0.433	 119.6 0.617	 108.1 0.798	Low drudgery and high quality fibre in microbial retting (CAP cultue)	Easy extraction of fibre by means of microbial retting and less drudgery with higher outcome when compared to hand stripping.

						Fibre quality: Thickness (mm) Tensile Strength (breaking extension %)	 **0.117** **1.874**	 **0.201** **3.018**	 **0.107** **1.994**		

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: Approaches for drudgery reduction and quality improvement of banana fiber by refinement

2 Problem Definition: Drudgery in extraction and lack of enzyme availability for retting process.

S. No	Name of the farm women	Name of the village	Technology-1				Technology-2				Technology-3			
			Working heart rate (HR), bpm	Fibre Outcome (kg/hr)	Fiber Thickness(mm)	Elongation/Tensile strength (%)	Working heart rate (HR), bpm	Fibre Outcome (kg/hr)	Fibre thickness (mm)	Elongation/Tensile strength (%)	Working heart rate (HR), bpm	Fibre Outcome (kg/hr)	Fibre thickness (mm)	Elongation/Tensile strength (%)
1	Group-1 (Average of 5 farmwomen)	Magilipatti	123.2	0.451	0.116	1.912	118.9	0.549	0.215	2.994	110.6	0.793	0.11	1.998
2	Group-2 (Average of 5 farmwomen)	Magilipatti	125.5	0.448	0.118	1.952	119.5	0.645	0.191	3.115	109.6	0.798	0.108	1.992
3	Group-3 (Average of 5 farmwomen)	Magilipatti	126.1	0.352	0.115	1.754	120.5	0.687	0.185	2.992	106.4	0.812	0.101	1.995
4	Group-4 (Average of 5 farmwomen)	Mahathana puram	125.8	0.468	0.12	1.935	117.9	0.592	0.195	2.996	105.7	0.792	0.112	1.992
5	Group-5 (Average of 5 farmwomen)	Mahathana puram	123.2	0.449	0.117	1.821	121.3	0.612	0.223	2.993	108.3	0.795	0.105	1.996
	Total Average		**124.76**	**0.433**	**0.117**	**1.874**	**119.6**	**0.617**	**0.201**	**3.018**	**108.1**	**0.798**	**0.107**	**1.994**

3. Details of technologies selected for refinement

Technological option	Details of technology
Technological option T0	Hand stripping
Technological optionT1	Retting by means of chemical – NaOH @10% at 60 ^{0} C water for two days.
Technological optionT3	Retting by means of microbial organism (CAP culture @ 250 gm under 1:10:1 (1 kg fibre with 10 lit water with 1 kg jaggery) 40º C for 2 days.

4 Source of technology: NRCB, ITK

5 Production system and thematic area: Irrigated and drudgery reduction

6 Performance of the Technology with performance indicators

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

Technology Parameters	**To1: Hand stripping**	**To2:Retting by means of chemical**	**To3: Retting by means of microbial organism (CAP culture)**
Working heart rate (HR), bpm	**	****	*****
Fibre Outcome (kg/hr)	**	***	****
Fibre thickness (mm)	***	***	****
Tensile strength (%)	****	***	****
Colour & Appearance	***	***	****
Total	**14**	**16**	**21**

8 **Final recommendation for micro level situation:** The refined technology will be popularized through organizing FLD, training programme and CAP culture is planned to produced at KVK.

9 **Constraints identified and feedback for research:** Retting is a process by which fibers get loosened and separated from the woody stalk due to removal of pectinals and other mucilaginous substances. This is usually affected by the combined action of water and micro-organisms. This is more applicable in extracting the banana fibre than hand stripping. Based on the last year assessment, in place of Xylanase and CAP enzyme, microbial culture is replaced due to unavailability of the inputs and the quality is more or less same as enzymetical retting process. While retting in microbial culture, drudgery in extraction has been reduced, the quality scores were high especially colour and appearance of the fibre, which is highly helpful for better marketing for craft making.

10 **Process of farmer's participation and their reaction:** Conducted awareness, training programme, demonstration of the process techniques to adopt this recent technology and the farmwomen gave better feedback about this technology through matrix scoring techniques.

PART V - FRONTLINE DEMONSTRATIONS

5.A. Summary of FLDs implemented during 2010-11

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
1	Oilseeds	Irrigated	Kharif 10	Sesame	TMV(SV)7	-	Varietal introduction	Introduction of high yielding sesame variety	10	10	1	24	25	-
2		Irrigated	Kharif 10	Sunflower	CO(SFV)5	-	Varietal introduction	Introduction of high yielding sunflower variety	10	10	-	25	25	-
3		Irrigated	Kharif 10	Sesame	VRI(SV)2	-	Varietal introduction	Introduction of high yielding sesame variety	10	10	-	25	25	-
4		Irrigated	Kharif 10	Sunflower	-	DRSH-1	Varietal introduction	Introduction of high yielding sunflower hybrid	10	10	5	20	25	-
5		Irrigated	Rabi-2010-11	Sunflower	SP-24		Integrated Disease Management	Charcoal root rot management in sunflower	20	20	5	20	25	
6	Pulses	Irrigated	Kharif 2010	Red gram	VBN(Rg)3	-	Varietal introduction	Introduction of high yielding redgram variety	10	10	5	20	25	-
7		Irrigated	Rabi-2010-11	Black gram	VBN(Bg)5	-	Varietal introduction	Introduction of high yielding blackgram variety	10	10	2	23	25	-
8	Cereals	Irrigated	Kharif 2010	Paddy	-	CORH-3	Variety popularization	Popularization of Rice hybrid CORH-3 through SRI method	5	5	2	8	10	-
9		Irrigated	Kharif 2010	Maize	-	Pre released CMH 08-282	Productivity improvement	INM in maize	2	2	2	8	10	-
10		Irrigated	Kharif 2010	Paddy	BPT-5204		Integrated Crop management	Integrated crop management on paddy	10	10	4	24	28	
11	Millets													

12	Vegetables	Irrigated	July – August 2010	Snake gourd	PLR SG 2 variety		Varietal introduction	Introduction of new variety	20	20		20	20	
13		Irrigated	Kharif2010	Brinjal	Manapparai local		Integrated Crop management	Mealybug management in brinjal	20	20	3	20	23	
14	Flowers													
15														
16	Ornamental													
17														
18	Fruit													
19														
20	Spices and condiments													
21														
22	Commercial	Irrigated	Kharif 2010	Sugarcane	COC 86032	-	Productivity improvement	Popularization of TNAU sugarcane booster	2	2	1	9	10	-
23														
24	Medicinal and aromatic													
25														
26	Fodder	Irrigated	Kharif 2010	Fodder	Mixed fodder		Fodder development	Popularization of fodder bank at Village level	2 ha	2 ha	3	7	10	
27														
28	Plantation													
29														
30	Fibre													
31														
32	Dairy	Semi intensive	Kharif 2010	Cow	HF X		Increasing conception rate through Oestrus synchronization	Oestrus synchronization in dairy cows through Ovsynch technology	20 cows	20 cows	4	6	10	
33														

34	Poultry	Backyard	Kharif 2010	Turkey	Nandhanam Turkey-1		Popularization of turkey species	Introdution and Popularization of Nandhanam Turkey	50 Chicks	50 Chicks	3	7	10	
35														
36	Rabbitry													
37														
38	Pigerry													
39														
40	Sheep and goat													
41														
42	Duckery													
43														
44	Common carps													
45														
46	Mussels													
47														
48	Ornamental fishes													
49														
50	Oyster mushroom													
51														
52	Button mushroom													
53														
54	Vermicompost													
55														
56	Sericulture													
57														

58	Apiculture													
59														
60	Implements			Egg incubator	Egg Incubator (240 egg capacity)		Popularization of egg incubator	Popularization of egg incubator	1	1	3	17	20	
61														
62	Others (specify)													
63														

5.A. 1. Soil fertility status of FLDs plots during 2010-11:

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil (Kg/ha)			Previous crop grown
										N	P	K	
1	Oilseeds	Irrigated	Kharif 10	Sesame	TMV(SV)7	-	Varietal introduction	Introduction of high yielding sesame variety	Kharif 10	112.9	62.944	460.32	Groundnut
2		Irrigated	Kharif 10	Sunflower	CO(SFV)5	-	Varietal introduction	Introduction of high yielding sunflower variety	Kharif 10	100.35	39.312	470.4	Green gram
3		Irrigated	Rabi 2010-11	Sesame	VRI(SV)2	-	Varietal introduction	Introduction of high yielding sesame variety	Rabi 2010-11	112.9	33.04	127.68	Sorghum
4		Irrigated	Rabi 2010-11	Sunflower	-	DRSH-1	Varietal introduction	Introduction of high yielding sunflower hybrid	Rabi 2010-11	125.44	90.048	469.28	Sesame
5		Irrigated	Rabi 2011	Sunflower	SP-24		IDM	Charcoal root rot management in sunflower	Rabi 2011	252.5	155	815	Tapioca Current fallow Sweet potato Sorghum
6	Pulses	Irrigated	Kharif 10	Red gram	VBN(Rg)3	-	Varietal introduction	Introduction of high yielding redgram variety	Kharif 10	137.98	52.948	528.64	Fallow
7		Irrigated	Rabi 2010-11	Black gram	VBN(Bg)5	-	Varietal introduction	Introduction of high yielding blackgram variety	Rabi 2010-11	Demonstration in progress			Paddy

8	Cereals	Irrigated	Kharif 10	Paddy	-	CORH-3	Variety popularization	Popularization of Rice hybrid CORH-3 through SRI method	Kharif 10	163.07	54.544	127.68	Fallow
9		Irrigated	Kharif 10	Maize	-	Pre released CMH 08-282	Productivity improvement	INM in maize	Kharif 10	125.44	91.84	278.88	Tomato
10		Irrigated	Kharif 2010	Paddy	BPT-5204		ICM	Integrated Crop Management on paddy	Kharif 2010	270.5	22.5	450.0	Banana
11	Millets												
12	Vegetables	Irrigated	July 2010	snakegourd	PLR SG 2		Variety introduction	Variety introduction	July 2010	225	80	450	Bittergourd
13		Irrigated	Kharif-2010	Brinjal	Manapparai Local		IPM	Mealybug management in brinjal	Kharif-2010	262	96	652	sunflower
14	Flowers												
15													
16	Ornamental												
17													
18	Fruit												
19													
20	Spices and condiments												
21													
22	Commercial	Irrigated	Kharif 10	Sugarcane	COC 86032	-	Productivity improvement	Popularization of TNAU sugarcane booster	Kharif 10	137.98	82.656	452.48	Tapioca
23													
24	Medicinal and aromatic												
25													
26	Fodder	Irrigated	Karif 2010	Mixed fodder	Co4,COFS29, Subabul,Gunea grass, Desmanthus		Fodder development	Popularization of fodder bank at village level	Karif 2010	284.5	26.2	480.5	

27													
28	Plantation												
29													
30	Fibre												

5.B. Results of Frontline Demonstrations

5.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Oilseeds	Introduction of high yielding sesame variety	TMV(SV)-7	-	Irrigated	25	10	6.25	3.31	4.78	3.57	33.89	6500	15705	9205	2.42	6750	11730	4980	1.73
	Introduction of high yielding sunflower variety	CO(SFV)-5	-	Irrigated	25	10	8.50	2.20	5.35	4.25	25.88	7300	16050	9750	2.20	6550	12750	6200	1.94
	Introduction of high yielding sesame variety	VRI(SV)-2	-	Irrigated	25	10	Demonstration is ongoing												
	Introduction of high yielding sunflower hybrid	-	DRSH-1	Irrigated	25	10	12.52	5.65	9.09	6.65	36.69	11250	27270	16020	2.42	10550	19950	9400	1.89
	IDM Sunflower		SP-24	Irrigated	20	5 Ha	16.20	15.20	15.95	13.5	18.15	28500	76564.80	48064.80	2.69	29132	56610	27478	1.94
Paddy	Integrated Crop Management on paddy	BPT 5204		Irrigated	10	2 Ha	55.4	49.2	52.34	43.2	21.16	20450	54255	33805	2.65	23650	38680	15030	1.63

Pulses	Introduction of high yielding redgram variety	VBN(Rg)-3	-	Irrigated	25	10	7.50	2.35	4.93	3.50	40.86	11775	27115	15340	2.30	12050	19250	7200	1.59
	Introduction of high yielding blackgram variety	VBN(Bg)-5	-	Irrigated	25	10	Demonstration is ongoing												
Cereals	Popularization of Rice hybrid CORH-3 through SRI method	-	CORH-3	Irrigated	10	5	63.25	43.75	53.50	41.50	28.92	16250	32100	15850	1.98	17560	29050	11490	1.65
Millets	INM in maize	-	Pre released hybrid CMH 08-282	Irrigated	10	4	45.25	26.50	35.88	25.50	40.71	14350	43056	28706	3.00	15560	30600	15040	1.96
Vegetables	Introduction of new variety	PLR SG 2		Irrigated	20	2ha	200	180	190	150	26.67	42000	100000	58000	2.38	41500	75000	33500	1.81
	Weed management in Tapioca	In progress																	
	Mealy bug management in Brinjal	Manapparai Local		Irrigated	20	5Ha	287	272	278	225	23.56	77500	222200	144700	2.87	79550	157500	77950	1.97
Flowers																			
Ornamental																			
Fruit	SOP spray in banana	In progress																	
Spices and condiments																			

Commercial	Popularization of TNAU sugarcane booster	-	COC - 96017	Irrigated	10	2	1475	1325	1400	1080	29.63	111600	266140	154540	2.38	111600	205308	93708	1.83
Medicinal and aromatic																			
Fodder	Popularization of fodder bank at village level	Mixed fodder		Irrigated	10	2	5050	4045	4550	2830	60.78	12197	45500	33303	3.7	12800	28300	15500	2.2
Plantation																			
Fibre																			
Others (pl.specify)																			

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

H – Highest Yield, L – Lowest Yield A – Average Yield

Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/ diseases etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Weight of fruit (gm)	310.25	250.64
Percentage of disease and pest incidence	10	11
High yielding variety in sesame TMV(SV)7		
No.of capsules/plant	170	157
Susceptible to phyllody (%)	25	15
Popularization of CORH-3		
No.of productive tillers/plant	55	32
No.of grains/ panicle	142	249
Establishment (%)	85	95
INM on maize		
No.of grains/cob	470	235
Grain filling (%)	98	89
Popularization of TNAU sugarcane booster		
Inter node length of cane (cm)	12	9.5
Girth of the cane (cm)	10.8	9.9
Introduction of sunflower variety CO(SFV)5		
No.of seeds/head	719	523
Introduction of red gram VBN(Rg)3		
No.of pods/plant	926	253
Pest and disease incidence (%)		
Charcoal root rot management in sunflower		
Percentage of disease reduction	88.38	65.4
Integrated Pest Management on paddy		
Number of productive tillers/m^2	46.5	36.2
Number of panicles/plant	42.7	28.7
% of pest and disease reduction	89.99	68.78
Mealybug management in brinjal		
Percentage of pest reduction	91.68	74.64
Popularization of fodder bank at village level		
Establishment percentage (%)	78	84
Green fodder yield (q/ha)	4550	2830

5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (q/ha)				% Increase	*Economics of demonstration Rs./unit)				*Economics of check (Rs./unit)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Dairy	Oestrus Synchronization in dairy cows through Ovsync technology	HF X	10	20	4900	1900	2650	2000	32.5	11000	30000	19000	2.7	10000	15000	5000	1.5
Poultry	Introduction and Popularization of Nandhanam Turkey	Nandhanam Turkey -1	10	50 chicks	6.2	4.9	5.4	4.0	35	345	768.6	423.6	2.2	391.5	620.5	229	1.59
Rabbitry																	
Pigerry																	
Sheep and goat																	

Duckery																		
Others (pl.specify)																		

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Data on additional parameters other than yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check if any**

5.B.3. Fisheries

Type of Breed	**Name of the technology demonstrated**	**Breed**	**No. of Demo**	**Units/ Area (m^2)**	**Yield (q/ha)**				**% Increase**	***Economics of demonstration Rs./unit) or (Rs./m2)**				***Economics of check Rs./unit) or (Rs./m2)**			
					Demo			**Check if any**		**Gross Cost**	**Gross Return**	**Net Return**	**** BCR**	**Gross Cost**	**Gross Return**	**Net Return**	**** BCR**
					H	**L**	**A**										
Common carps																	
Mussels																	
Ornamental fishes																	

Others (pl.specify)																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST
H-High L-Low, A-Average

Data on additional parameters other than yield (viz., reduction of percentage diseases, effective use of land etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check if any**

5.B.4. Other enterprises

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area {m^2}	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./unit) or (Rs./m2)				*Economics of check (Rs./unit) or (Rs./m2)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Oyster mushroom																	
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
Others (pl.specify)																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST
H-High L-Low, A-Average

Data on additional parameters other than yield (viz., additional income realized, employment generation, quantum of farm resources recycled etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**

5.B.5. Farm implements and machinery

Name of the implement	Cost of the implement in Rs.	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha / unit	Hatchability percentage (%)		% increase	*Economics of demonstration (Rs./unit)				*Economics of check (Rs./ha)			
					Demo	Check		Gross cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Egg incubator	25000	Popularization of egg incubator	20	1	84.1	44.2	90.7	27221	64640	37419	2.4	22800	25440	2640	1.2

Name of the implement	Cost of the implement (for 2 unit) in Rs.	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha/ unit	MSLP in %		% Increase in self life period	*Economics of demonstration (Rs./unit)		
					Demo	Check		Demo	Check	BCR
CRIDA Preservator	4000	Introduction of low cost fruit and vegetable preservator	20	1	38.02	25.14	51.23	53.5	47.5	2.6

*Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Data on additional parameters other than labour saved (viz., reduction in drudgery, time etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Popularization of egg incubator		
Hatching percentage	84.1	44.2
CRIDA Preservator		
Maximum shelf life period for acceptability (MSLP) %**	38.02	25.14
% Spoilage**	19	27
Sensory evaluation index % (SEI)**	5.28	4.86
Economics (Cost of unit)in Rs/-	53.5	47.5

*** Parameter work out of average of five perishable fruit and vegetable (Green chilli, Tomato, Ladies finger, Coriander, Carrot)**

****Calculated using formulae stated below**

$$\text{MSLP} = \frac{\text{Total scores obtained for Acceptance} \times \text{Maximum shelf life Period}}{\text{N} \times 9 \text{ (highest score of Hedonic scale)} \times \text{Max. No. of observations}} \times 100$$

$$\% \text{ Spoilage} = \frac{\text{Weight of vegetables spoiled}}{\text{Total weight of the vegetable}} \times 100$$

$$\text{SEI} = \frac{\text{Total scores obtained for acceptance}}{\text{N} \times 9 \text{ (highest score of Hedonic scale)} \times \text{Max. No. of observation}} \times 100$$

5.B.6. Cotton

5.B.6.1.Summary of demonstrations conducted under FLD cotton

Sl. No.	Category	Technology Demonstrated	Variety	Hybrid	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
						Proposed	Actual	SC/ST	Others	Total	
1	Production Technology										
2	IPM										
3	Farm Implements										

5.B.6.2 Production technology demonstrations

Performance of demonstrations

Farming situation	Technology Demonstrated	Area (ha)	No.of demo.	Variety	Hybrid	Yield (q/ha)		% Increase	Economics of demonstration (Rs./ha)				Economics of local check (Rs./ha)			
						Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR

Performance of Bt hybrids, Desi hybrids, non-Bt hybrids and Varieties in Front Line Demonstrations in cotton during 2010-11

Category	Farming situation	Technology Demonstrated	Area (ha)	No.of demo.	Variety	Hybrid	Yield (q/ha)		% Increase	Economics of demonstration (Rs./ha)				Economics of local check (Rs./ha)			
							Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Bt hybrids																	
Desi hybrids (AXA)																	

HXB Hybrids																	
HXH Hybrids																	
Herbacium Varieties																	
Hirsutum Varieties																	
Arboreum Varieties																	

5.B.6.3 Integrated pest management demonstrations

Farming situation	Variety	Hybrid	No. of blocks	Total No. of Demo.	Area (ha)	Incidence of pest and diseases (%)			Seed Cotton Yield (q/ha)			Economics of demonstration (Rs./ha)				Economics of local check (Rs./ha)			
						IPM	Non IPM	% Change	IPM	Non IPM	% Change	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR

5.B.6.4 Demonstrations on farm implements

Name of the implement	Area (Ha)	No. of Demo.	Name of the technology demonstrated	Labour requirement for operation (Rs./ha)		
				Demo	Local check	% change
Total						

5.B.6.5 Extension Programmes organized in Cotton Demonstration Plots

Extension activity	No. of Programmes	Participants			SC/ST		
		Male	Female	Total	Male	Female	Total
Consultancy							
Conventions							
Demonstrations							
Diagnostic surveys							
Exhibition							
Farmer study tours							
Farmers Field school							
Field Days							
Field visits							
Gram sabha							
Group discussions							
Kisan Gosthi							
Kisan Mela							
Training for Extension Functionaries							
Training for farmers							
Viedo show							
Newspaper coverage							
Popular articles							
Publication							
Radio talks							
T.V. Programme							
Others (Pl.specify)							
TOTAL							

5.B.6.6Technical Feedback on the demonstrated technologies on all crops / enterprise

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Paddy	Integrated Crop Management on paddy	BPT 5204 is highly susceptible to pests and diseases and in order to achieve higher productivity in Karur district, resistant varieties against pests and diseases has to be popularized.
2	Brinjal	Mealybug management in sunflower	Being systemic nature of neonicotinyl compounds (Thiamethoxam and Imidacloprid), the control of the mealybug population was very effective.
3	Sunflower	Charcoal root rot management in sunflower	Application of two pathogenic biopesticides against rootrot diseases enabled good control of the disease.
4	Fruits and Vegetables	CRIDA Preservator	The performance was evaluated and was found to be good even in summer season. The pine grass covered in the basket chamber seems have less storage life. Suitable alternative insulating material would enhance the life of the preservator.
5	Paddy	Popularization of rice hybrid CORH-3 through SRI method	Comparatively resistant to pest and diseases attack than BPT 5204.
6	Sugarcane	Popularization of TNAU sugarcane booster	Crop growth shows better performance even in those fields having poor establishment in the initial stage. Booster helps in reducing sucking pest population.
7	Maize	INM in maize	Grain filling percentage was higher and yield was higher. Magnesium deficiency was corrected.
8	Sesame	Introduction of new high yielding sesame variety TMV(SV) -7	Moderately susceptible to phyllody
9	Red gram	Introduction of new high yielding red gram variety VBN(Rg)-3	Initial establishment was poor, moderately resistant to pod borer complex attack.
10	Sunflower	Introduction of new high yielding sunflower variety CO(SFV)5	Moderately resistant to head rot disease attack.
11	Snake gourd	Popularization of new variety – PLR(SG) 2	The snake gourd PLR SG 2 fruits are qualitatively better than other commercial hybrid due to higher individual fruit weight, compactness of the fruit leading to less damage during transport.
12	Mixed fodder	Popularization of fodder bank at village level	Mixed fodder cultivation provided more green fodder yield than locally available fodder cholam. By mixed fodder application livestock got more nutrients.
13	Dairy	Oestrus synchronization in dairy cows through Ovsynch technology	OVsynch protocol reduced the inter calving period and culling of animals because of reproductive problems
14	Turkey	Introduction and popularization of Nandhanam Turkey	Turkey rearing is more adaptable to this area. Farmers got more additional income and additional employment
15	Egg incubator	Popularization of egg incubator	Farmers can hatch more number of eggs at a single time. Through this they can gain more income.

5.B.6.7 Farmers' reactions on specific technologies

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Paddy	Integrated Crop Management on paddy	Farmers are interested to adopt the ICM technologies in paddy
2	Brinjal	Mealybug management in sunflower	Alternate spraying of imidacloprid and thiamethoxam controls the mealybug population effectively
3	Sunflower	Charcoal root rot management in sunflower	Farmers are interested to adopt the biopesticides against diseases.
4	Fruits and Vegetables	CRIDA Preservator	Rural household women and vegetable grower farmers were satisfied with the CRIDA preservator at household level (15 kg) and at market level (50 kg capacity) and the keeping quality of vegetables was good upto 8 days. Women members expressed that rat causes damage to the insulation material – pine grass in the CRIDA preservator and protection is needed to avoid rat damage.
5	Paddy	Popularization of rice hybrid CORH-3 through SRI method	The harvested paddy grains fetches comparatively lower market price than BPT 5204.
6	Sugarcane	Popularization of TNAU sugarcane booster	Better crop growth observed.
7	Maize	INM in maize	Higher yield was noticed with bigger cob size.
8	Sesame	Introduction of High yielding sesame variety TMV(SV) -7	Farmers informed that the pod setting was very high in wider planted fields. They are interested to grow the variety early to avoid coincidence of rain during harvest.
9	Red gram	Introduction of new high yielding red gram variety VBN(Rg)-3	The pod setting was very high and pollinators activity was also observed to be high.
10	Sunflower	Introduction of new high yielding sunflower variety CO(SFV)5	Yield was better than SP 24 hybrid.
11	Snake gourd	Popularization of new variety – PLR(SG) 2	Farmer who has raised PLR SG 2 snake gourd informed that the setting of fruits is high per vine, as it was noticed that there were fruit set for every 2 nodes as compared with other cultivars where fruit set was present for every 10 nodes. The market preference for this variety was high. Hence the farmers are interested to go for the same variety for next year planting.
12	Mixed fodder	Popularization of fodder bank at village level	Overall responses were high with farmers for mixed fodder cultivation. They were satisfied with the animal's intake and yield.
13	Dairy	Oestrus synchronization in dairy cows through Ovsynch technology	Farmers felt happy with fixed time insemination. They had got confident to treat anoestrus animals by ovsynch technology.
14	Turkey	Introduction and popularization of Nandhanam Turkey	Farmers feel that turkeys are easy to raise, giving additional employment to them.
15	Desi chicken	Popularization of egg incubator	Farmers feel that the initial investment for purchasing the incubator is very high.

5.B.6.8 Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	6	151	
2	Farmers Training	18	411	
3	Media coverage	4		
4	Training for extension functionaries			

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Cereals																	
Bajra																	
Maize	Demonstration of pre-released hybrid CMH 08-282	CMH 08-282	10	4	45.25	26.50	35.88	25.50	28.92	14350	43056	28706	3.00	15560	30600	15040	1.96
Paddy	Popularization of Rice hybrid CORH-3 through SRI method	CORH-3	10	5	63.25	43.75	53.50	41.50	22.43	16250	32100	15850	1.98	17560	29050	11790	1.65
Sorghum																	
Wheat																	
Total																	
Oilseeds																	
Castor																	
Mustard																	
Safflower																	
Sesame																	
Sunflower	Introduction of high yielding sunflower hybrid	DRSH-1	25	10	12.52	5.65	9.09	6.65	37.84	11250	27270	16020	2.42	10550	19950	6400	1.89
Groundnut																	
Soybean																	
Total																	
Pulses																	
Greengram																	
Blackgram																	
Bengalgram																	
Redgram																	

Total																	
Vegetable crops																	
Bottle gourd																	
Capsicum																	
Total																	
Cucumber																	
Tomato																	
Brinjal																	
Okra																	
Onion																	
Potato																	
Field bean																	
Total																	
Commercial crops																	
Sugarcane																	
Coconut																	
Total																	
Fodder crops																	
Maize (Fodder)																	
Sorghum (Fodder)																	
Total	**45**	**19**	**121.02**	**75.9**	**98.47**	**73.65**	**89.19**	**41850**	**102426**	**60576**	**7.4**	**43670**	**79600**	**33230**	**5.5**	**45**	**19**

H-High L-Low, A-Average

*Please ensure that the name of the hybrid is correct pertaining to the crop specified

PART VII. TRAINING

7.A.. Farmers' Training including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	3	59	3	62	12	5	17	71	8	79
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	5	49	25	74	3	6	9	52	31	83
Soil and Water Conservation										
Integrated Nutrient Management	1	10	-	10	-	-	-	10	-	10
Production of organic inputs	1	10	20	30	-	-	-	10	20	30
Others (pl.specify										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising	1	19	-	19	-	-	-	19	-	19
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl.specify) Improved production Technology for gourds in pandal	1	19	-	19	1	-	1	19	1	20
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards	1	3	17	20	-	-	-	3	17	20
Plant propagation techniques										

Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify) advance production technologies in loose flower cultivation	1		27	27	-	-	-	-	27	27
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management	1	15	-	15	-	-	-	15	-	15
Integrated water management										
Integrated nutrient management	2	64	-	64	3	-	3	64	3	67
Production and use of organic inputs	1	22	-	22	-	-	-	22	-	22
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										

Livestock Production and Management										
Dairy Management	2	24	16	40	4	3	7	28	19	47
Poultry Management	1	-	20	20	-	-	-	-	20	20
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management	1	16	2	18	5	-	5	21	2	23
Feed and Fodder technology	1	16	3	19	4	2	6	20	5	25
Production of quality animal products										
Others (pl.specify) Turkey rearing, Goat rearing	2	29	2	31	2	-	2	31	2	33
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment	2	-	46	46					46	46
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify) Quality fiber extraction, Entrepreneurial opportunities in banana fibre enterprises, Optimization of process parameters for self life enhancement in foods and vegetables, Marketing Information for Banana fibre products.	4	61	39	100	-	1	1	61	40	101
Agril. Engineering										
Farm machinery and its maintenance	1	17	3	20	-	-	-	17	3	20
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										

Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology	1	22	-	22	-	-	-	22	-	22
Others (pl.specify) Mechanisation in horticulture crop production, Different models of sprayers and spray solution preparation	2	40	-	40	-	-	-	40	-	40
Plant Protection										
Integrated Pest Management	2	39	3	42	-	-	-	39	3	42
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	1	30	-	30	-	-	-	30	-	30
Organic manures production										
Production of fry and fingerlings										

Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder	1	17	3	20	-	-	-	17	3	20
Production of Fish feed										
Mushroom production	1	-	23	23	-	-	-	-	23	23
Apiculture										
Others (pl.specify))Sericulture rearing technologies.	1		20	20	-	-	-	-	20	20
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**40**	**581**	**272**	**853**	**34**	**17**	**51**	**611**	**293**	**904**

7.B.. Farmers' Training including sponsored training programmes (Off campus)

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Crop Production										
Weed Management	1	16	1	17	-	-	-	16	1	17
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production	1	8	5	13	-	-	-	8	5	13
Nursery management										
Integrated Crop Management	8	170	22	192	4	-	4	174	22	196
Soil and Water Conservation										
Integrated Nutrient	2	38	5	43	2	-	2	40	5	45

Management										
Production of organic inputs										
Others (pl.specify) Importance of Seed germination and seed treatment in groundnut	1	16	4	20	-	-	-	16	4	20
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl.specify)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify) Post harvest management techniques in banana, High density planting methods in banana	4	69	14	83	12	-	12	81	14	95
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify) Improved production technology of china aster, Advance production technology in tube rose cultivation	2	39	-	39	-	-	-	39	-	39

d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management	1	24		24	1		1	24	1	25
Integrated water management										
Integrated crop management	1	26	15	41	-	-	-	26	15	41
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	2	28	8	36	3	3	6	31	11	42
Poultry Management	2	33	6	39	2	2	4	35	8	43
Piggery Management										

Rabbit Management										
Goat rearing	5	94	26	120	9	-	9	103	26	129
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify) .Integrated farming system	1	14	7	21	-	-	-	14	7	21
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	1	13	3	16	-	-	-	13	3	16
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology	3	51	10	61	16	-	16	67	10	77

Others (pl.specify)										
Plant Protection										
Integrated Pest Management	2	52	1	53	-	-	-	52	1	53
Integrated Disease Management	2	38	1	39	15	-	15	53	1	54
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										

Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										

Mushroom production										
Apiculture										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**39**	**729**	**128**	**857**	**64**	**5**	**69**	**792**	**134**	**926**

7.C. Training for Rural Youths including sponsored training programmes (on campus)

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming	2	24	22	46	3	0	3	27	22	49
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	1	22	-	22	-	-	-	22	-	22
Bee-keeping	1	4	12	16	-	-	-	4	12	16
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										

Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**4**	**50**	**34**	**84**	**3**		**3**	53	34	87

7.D. Training for Rural Youths including sponsored training programmes (off campus)

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming	1	19	3	22	-	-	-	19	3	**22**
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	2	44	6	50	-	-	-	44	6	**50**
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing										

technology										
Fry and fingerling rearing										
TOTAL	**3**	**63**	**9**	**72**				**63**	**9**	**72**

7.E. Training programmes for Extension Personnel including sponsored training programmes (on campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1	25	5	30	-	-	-	25	5	30
Integrated Pest Management	1	9	1	10	-	-	-	9	1	10
Integrated Nutrient management	4	59	46	105	-	-	-	59	46	105
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Total	**6**	**93**	**52**	**145**				**93**	**52**	**145**

7.F. Training programmes for Extension Personnel including sponsored training programmes (off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	1	11	2	13	-	-	-	11	2	13
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Total	**1**	**11**	**2**	**13**	**-**	**-**	**-**	**11**	**2**	**13**

7.G. Sponsored training programmes

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Increasing production and productivity of crops	1	16	6	22	-	-	-	16	6	22
1.b.	Commercial production of vegetables										
2	Production and value addition	1	22	3	25	-	-	-	22	3	25
2.a.	uit Plants										
2.b.	rnamental plants										
2.c.	pices crops										
3.	Soil health and fertility management										
4	Production of Inputs at site										
5	Methods of protective cultivation										
6	Others (pl.specify)										
7	Post harvest technology and value addition	1	19	5	24		1	1	19	6	25
7.a.	Processing and value addition										
7.b.	Others (pl.specify)										
8	Farm machinery										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	Livestock and fisheries	1	13	19	31	-	-	-	13	19	31
10	Livestock production and management										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c	Fisheries Nutrition										
10.d	Fisheries Management										
10.e.	Others (pl.specify)										
11.	Home Science										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	Agricultural Extension	1	16	15	31	-	-	-	16	15	31
12.a.	Capacity Building and Group Dynamics										
	Total	**5**	**86**	**48**	**133**		**1**	**1**	**86**	**49**	**134**

Details of sponsoring agencies involved

1. ATMA
2. NABARD
3. TNAU - Clima Rice

7.H. Details of vocational training programmes carried out by KVKs for rural youth

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production										
1.c.	Commercial vegetable production										
1.d.	Integrated crop management										
1.e.	Organic farming	1	8	16	24	-	-	-	8	16	24
1.f.	Others (pl.specify)										
2	**Post harvest technology and value addition**										
2.a.	Value addition										
2.b.	Others (pl.specify)										
3.	**Livestock and fisheries**										
3.a.	Dairy farming										
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing										
3.d.	Piggery										
3.e.	Poultry farming										
3.f.	Others (pl.specify)										
4.	**Income generation activities**										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery and implements										
4.d.	Rural Crafts										
4.e.	Seed production										
4.f.	Sericulture										
4.g.	Mushroom cultivation										
4.h.	Nursery, grafting etc.	2	27	21	48	-	-	-	27	21	48
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	Others (pl.specify)	1	8	16	24	-	-	-	8	16	24
5	**Agricultural**										

	Extension										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	Grand Total	**3**	**35**	**37**	**72**				**35**	**37**	**72**

PART VIII – EXTENSION ACTIVITIES

Extension Programmes (including activities of FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	8	152	48	200				4		4
Kisan Mela										
Kisan Ghosthi										
Exhibition	10	6575	2731	9306				47	23	70
Film Show										
Method Demonstrations	5	191	7	198						
Farmers Seminar										
Workshop										
Group meetings										
Lectures delivered as resource persons	67	2323	901	3224				69	17	86
Newspaper coverage	26									
Radio talks &Announcements	24									
TV talks & Programmes	2									
Popular articles	5									
Extension Literature										
Advisory Services	305	464	21	485				14		14
Scientific visit to farmers field										
Farmers visit to KVK	76	130		130						
Diagnostic visits	53	76	16	92						
Exposure visits	7	194	23	217				3	3	6
Ex-trainees Sammelan										
Soil health Camp										
Animal Health Camp	5	271	147	418						
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet	15	330	49	379						
Self Help Group Conveners meetings	2		36	36						
Mahila Mandals Conveners meetings										
Celebration of important days (specify)										
1. Environment day	2	119	51	170				6		6
2.Scientist – farmer interaction	5									
3.Parthenium awareness programme	1	35	25	60						
Any Other (Specify)										
Total	**828**	**10860**	**4055**	**14915**				**143**	**43**	**186**

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9.A. Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)						
	Paddy	CR1009		102	127500	
	Paddy	BPT 5204		56.4	84600	
	Paddy	TRY-3		4.8	7200	
	Paddy	ADT-39		7.2	10800	
Oilseeds						
Pulses						
Commercial crops						
Vegetables	Ashgourd	Palur -2		444 Nos	200	1
	Bitter gourd		US Seeds	1300 Nos	650	2
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Total				170.4 Qtl /1777 Nos	230950	

9.B. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial	Sugarcane seedlings	Co-86032		52500	52500	2
Vegetable seedlings	Brinjal	Manapparai Local		11800	2750	3
	Tomato		Namadari Seeds	14800	3410	3
	Bitter Gourd		US agri seeds	1500	1500	1
	Moringa seedlings		PKM-1	7431	2812	2
	Bitter Guard seedlings			20000	10000	
	Tomato			1519	18223	
	Tomato Seedlings			25000	5000	
	Brinjal Seedlings			30000	15000	
Fruits	Sapota	-		1000	10000	
	Amla			2000	30000	
	Watermelon			10000	40000	
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices	Chilli Seedlings			10000	5000	
Tuber						
Fodder crop saplings	Cumbu Napier Grass		CO-4	34500	8625	3
Forest Species						
Others(specify)						
Total				**222050**	**204820**	**14**

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others (specify)	Vermicompost	10575	49994	4
	Panchakavya	5	360	1
	Insect Repellent	2	120	1
	Earthworms	5	1750	
Total		**10587**	**52224**	**6**

9.D. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

PART X – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND DROUGHT MITIGATION

10. A. Literature Developed/Published (with full title, author & reference)

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)

a. Name of the News letter : Organic Renaissance

b. Date of Start : January 2007

c. Periodicity : Quarterly

d. Number of copies distributed : 2000 copies (500 copies/ Issue)

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	-	-	-
Technical reports	-	-	-
News letters	Organic renaissance	Dr.J.Diraviam P.Tamil Selvi K.Valliammal	2000
Technical bulletins	-		
Popular articles	*Semmai karumbu sagupadiyil ura nirvagam*	K.Valliammal	
	Etram pera erumai madu valarppu	Dr.M.Veeraselvam	
	Vivasaya paiyirkaluku mavupoochi oru saval	S.Vijay Dr.M.Veeraselvam G.Anu radha	
	Vankozhi thevai miga adhigam	Dr.M.Veeraselvam	
	Ner pairil uiriyal muraiel pair pathukappu	S.Vijay Dr.M.Veeraselvam G.Anu radha	
	Kuraintha mudhaletil adhiga labam tharum Ven pandrigal enaperuka melanmai	Dr.M.Veeraselvam	
Extension literature	Rajarajan 1000 Paddy Cultivation Techniques	Dr.J.Diraviam P.Tamil Selvi	300
	Mealy bug management	Dr.J.Diraviam S.Vijay	500
	SSI in Sugarcane	Dr.J.Diraviam K.Valliammal	300
	Pulses Cultivation Techniques	Dr.J.Diraviam K.Valliammal	300
	Oil seeds Cultivation Techniques	Dr.J.Diraviam K.Valliammal	300
		TOTAL	**3700**

10.B. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
-	-	-	-

10.C. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period).

Goat rearing – Success story

Introduction

Goat is a multi functional animal and plays a significant role in the economy and nutrition of landless, small and marginal farmers in the country. Goat rearing is an enterprise which has been practiced by a large section of population in rural areas. Economically goat is ideally suited for poor rural folk especially for marginal and landless laborers due to low maintenance cost, short term return on capital with low risk on capital investment. Goats thrive and add to the rural economy even in areas where it is difficult to raise cows and buffaloes. The multivarious methods of utility of goat render the animal to be labeled as a "poor man's cow". Perhaps it is the only farm livestock which fits well for effective utilization in the diverse socio-economic situations of the rural India.

Background

Goat shows a very efficient reproductive performance and resistance against diseases not only in well managed semi stall feeding system but also in severe drought conditions. Goat farming will generate petty cash for house hold requirement in addition to providing balanced food with minimum inputs available in the rural areas. Hence, goat rearing will certainly improve the economic status of majority of rural family from lower socio-economic groups. However, before starting the goat farming it is very essential to acquire knowledge on goat management skills. This will help the farmers in knowing the advantages of goat farming, different types of goat breeds in India, suitability to different climate, types of farming, feeding schedule, breeding methods, types of diseases like PPR, ET, Goat Pox and their effect on goats, labour and fodder management and many more management Styles. Keeping in view, realizing the scope of income that the farmers can generate through goat farming, our Kendra has conducted training programme on "Goat rearing for sustainable livelihood" with the goal of women empowerment in agri-based enterprises and self employment opportunities in animal husbandry.

Objective

1. To improve the socio-economic status of the rural people
2. Self employment for rural youth.
3. Enhancement of livestock & crop productivity through goat based integrated farming

Intervention: Process and Technology

Mr.Arasan,S/o. Mr.Duraisamy residing at Ramanadhapuram Village, Pappakapatti Post, Krishnarayapuram Taluk, Karur District. He worked in Army, after his retirement, he tried to start his own business in his own land. He approached KVK during July 2009 with a request to help him in establishing a subsidiary occupation to supplement his income. Considering the land availability and the potentiality of goat farming in his area, he was advised to establish a goat farm. He also attended the training programme conducted by the Kendra During the training programme, selection, housing, feeding, disease management and breeding management of goats were taught.

Through training, by knowing the importance of fodder for goats, he approached the Kendra for the supply of Cumbu Napier grass (CO-4) cuttings, good quality seeds of CO (FS) 29, Desmanthus and Subabul for fodder development. He was also provided guidance on fodder cultivation and also feed ration for concentrate feed preparation which would minimize the feed cost under stall fed condition. He initially started the unit with 40 doe and 2 buck of Tellichey breed. At present the stock position is 3 males and 70 females. He sold 54 goats at the age of 4-6 months for breeding purpose in and around the villages. Direct marketing contacts were developed with KVK support.

He is following the scientific method of management as per the training programme and goats are being vaccinated regularly against Peste des petits ruminants (PPR), Foot and Mouth Disease, Haemorrahagic septicaemia and Enterotoxaemia and dewormed periodically. He is in regular touch with our KVK for timely veterinary service. He is visiting our centre or calling by telephone for clarification on practical management problems, as and when required.

Impact

Economic gain

He started to sell the goats at the age of 4-6 months for breeding purpose at the rate of Rs. 210/kg of live weight. The sale price is Rs.3000 to Rs.3200 per goat and besides, he could sell the manure at the rate of Rs.2000/ton and earning was to the turn of Rs.80000 to 120000 per year. This improved his economic status.

Employment generation

It has generated employment of approximately 22.5 man day per month. He is utilizing his family members too.

Horizontal spread

The success story of Mr.D.Arasan impressed other farmers, who have planned to start goat farming unit. He is also motivating others and neighbours to take up this enterprise for supplementary income. Farmers from various parts of this district visit his farm for suitable guidance. The following farmers have started the goat farming enterprise seeing the success of Mr.Arasan and also with the technical guidance of KVK.

Sl.No.	Farmer's Name and Address	System of farming	Flock size
1	Mr.C.Sugumar S/o.Chinnasamy Sivakattupatti, Alampatti Post, Srirangam Taluk, Trichy Dist.	Intensive system (Slatted floor housing)	15+2
2	Mr.P.Karuppasamy S/o.K.Periyasamy, Kalathu veedu, Thirumanikkampatti, Thogamalai Post, Karur Dist.	Grazing	10+2
3	P.Vinoth Kulithalai Post,	Semi-intensive	

	Karur Dist.		
4	**Mr.Periyannan Samathuvapuram, Inamkulathur Post, Trichy Dist.**	**Grazing**	**20+ 2**
5	**Mr.Mohamed Raheem Arafa Goat farm, Inamkulathur Post, Trichy Dist.**	**Intensive system (Slatted floor housing)**	**30+2**
6	**Mrs.Ponnuthayi, Samathuvapuram, Inamkulathur Post, Trichy Dist.**	**Grazing**	**20+2**

Case Study

IMPACT OF TRAINING ON DESIBIRD REARING

Introduction

Our country has vast resource of livestock and poultry, which play a vital role in improving the socio-economic conditions of the rural masses. Moreover, growing human population, rapid urbanization, increasing domestic income and changing lifestyles of the people have led to high demand for livestock products. With a vision of meeting out the increased demand of livestock products like meat, egg, milk and sustaining human health, our Kendra has chalked out many training programmes to increase livestock and its products.

Among the livestock sector, backyard poultry rearing continues to be one of the important livelihood option of several poor farmers in rural areas. In backyard poultry, desibirds exhibit superior adaptability in their habitat and possess the ability to survive, produce and reproduce on low plane of nutritious and optimal management. It has distinct advantages over other vocations, as the land requirement is small; returns are faster with little initial capital investment. The inputs requirements are low and are raised with little veterinary care. The egg and meat of desi chicken fetch double the price than the eggs and meat of exotic breed, thereby leading to higher income (about 10-40%) to the rural people. Also, desibird rearing serves as an excellent mode for employment generation for farmers and farm women.

Participatory Rural Appraisal (PRA) survey was conducted in Thogamalai block of Karur District, to understand the constraints faced by the poultry farmers, viz. sudden outbreak of diseases, increase in mortality of chicks, death due to predation, poor hatchability and non availability of suitable breed of poultry for backyard etc. Krishi Vigyan Kendra (KVK) of Karur district started to conduct the training programme since 2005 to upgrade the knowledge of poultry farmers on backyard poultry farming and to motivate the farmers to adopt poultry farming with improved varieties of bird to increase the income through more production of egg and meat in those rural areas.

Methodology

Training programme conducted to the farmers

KVK made an intervention to improve this enterprise by conducting short duration training programmes on desibird farming to farmers and farm women. A total number of 522 farmers and farm women participated in the training from Thogaimalai block of Karur district. The need based training programmes were conducted by the Kendra. The training was imparted on skill development regarding backyard desibird poultry production, housing, feeding management, selection of eggs for better hatchability, hatching management, brooding management for care of the newly hatched chicks, control of internal and external parasites and

diseases, vaccination methods and marketing linkages etc. For better understanding of the farmers, field visits were made to study the feasibility of the desibird rearing in their own land.

General profile of the farmers

The general profile of the farmers was collected by using the proforma prepared by the Kendra during each training period. The trained farmers were categorized into three categories on the basis of age: (a) Age of 20 to 35, classified as young (b) Age of 36 to 50, classified as middle (c) Age of 51 and above, classified as old. The educational status of the farmers was classified gender wise as literate and illiterate. Occupations of the responded farmers were classified into agriculturists and others. The other occupation status included business, Government service and labour.

Data collection

A detailed survey was conducted through face to face interview among randomly selected 100 trained farmers. Selection of the farmers was conducted by using a stratified random sampling technique. The respondents were interviewed in depth regarding their desibird rearing practices viz. housing, feeding, hatchability, problems and constraints faced in the farming condition after attending the training programme and their suggestions were carefully recorded to enable KVK in drawing out a curriculum for the special training program.

Results and Discussion

Level of adoption

A total of 522 farmers and farm women participated in the training for poultry farming practices in the year 2005-06 to 2010-11. Out of 522 farmers and farm women, only 293 farmers adopted desibird farming practices (Table 1). The average rate of adoption from the year of 2005-06 to 2010-11 was 56.1%. The highest rate of adoption was noticed in the year of 2010-11 (67.8%), where as the lowest rate of adoption was noticed in the year of 2005-06 (45.8%) (Fig.1). The low adoption of desibird farming in the year of 2005-06 may be due to hesitation on adoption of new technology as the desibird in farming level and lack of availability of improved varieties of birds. In consequent years, the adoption level increased on seeing of neighbour farms of benefited farmers.

Table1. Impact of training programme of desibird farming

Year	Number of training	Number of participants of training	Number of participants adopting desibird farming	Percent adoption
2005-06	1	24	11	45.8
2006-07	3	94	57	60.6
2007-08	2	60	32	53.3
2008-09	3	84	39	46.4
2009-10	7	148	78	52.7
2010-11	4	112	76	67.8
Total/	**20**	**522**	**293**	**56.1**

average

General profile of the farmers

The respondent's age were categorized into three groups, i.e., young, middle and old. The survey revealed that, majority of the respondents (52%) belonged to middle age group, while 35per cent were from old age group and 13 per cent were from the young age group. This implies that the young age farmers were less involved in this occupation. The educational level of the respondents showed that 29 % of them were illiterate. Out of the remaining 71%, 24% had primary level of education, 20% had high school standard, 22% had higher secondary level and 5% had a degree. The results revealed that education is not a factor to take up of poultry farming practices. Agriculture was the main occupation among 61% of the farmers, they were involved in both crop and livestock production. In rest of 39%, only 5% of farmers had service and business occupation and other 35% were labourers. The survey revealed that all the respondents were keeping their desibird farming as a subsidiary occupation. (Table 2)

Table 2: General profile of trainee's

	Male	**Female**
Age		
20-35(Young)	7	6
36-50(Middle)	18	34
50 and above (old)	23	12
Educational status		
No formal education	13	16
Primary level	7	17
SSLC	10	10
Higher secondary	13	9
Degree holder	5	0
Caste		
Scheduled caste/ Scheduled tribe	18	24
Ohters	30	28
Occupation		
Agriculturist	32	29
Service	1	0
Business	4	0
Labour	12	23

Desibird rearing practices

Housing and feeding

Most of the farmers (97%) provided night shelter to their birds, whereas 12 % constructed separate house for birds, keeping a commercial desibird farm under semi-intensive and intensive system with flock size of 500 to 1000 birds. They provided commercial poultry feeds to the birds at least twice a day, in the morning and in the evening. The remaining 88% kept their birds near their houses; birds were kept in bamboo basket made up of bamboo sticks called as "*Moongil koodai*" in local language, or in cages made with wire net or small mud house etc. with flock size of 15 to 150 birds. The birds received housing only in the form of night shelter and they were allowed to scavenge by themselves in the surroundings of the household during day time and the farmers provided locally available feeds (broken rice, rice bran, crushed maize, sorghum etc.) after the birds return to the shelter. Some farmers (3%) even did not even provide any

house and the birds used to take shelter in the bushes or trees for shelter at night and the feeding practices are very casual with no separate feeding for chicks and adults. The respondents expressed that the income from poultry was meager and that they were afraid to rear poultry in larger numbers for the fear of an outbreak of an epidemic that would kill the entire poultry population.

Hatching and brooding management

Only 5.68 % of the respondents used improved backyard poultry breeds (i e Vanaraja, Giriraja, Rhode Island Red) for breeding. All the respondents reported that natural hatching was the main source of chicks with brooding hen. Eighty eight percent of farmers allowed laying eggs by provision of laying box with dry bedding materials like paddy straw or ground nut husk in shallow bamboo basket or plastic ponds kept in the corner of house to avoid any disturbance. Generally 8-12 eggs were set under each broody hen and after 21 days, chicks were hatched out. After hatching, the chicks were generally removed on the second or third day from the broody hens and allowed to scavenge with their mother. Eleven percent of farmers, who maintaining commercial farms, purchased chicks from hatcheries. Remaining one percent of farmer had the incubator for hatching. Respondents said that their birds lay between 8-60 eggs/hen/ year and hatched between 1-30 chicks per year. The respondents said that they generally do not sell the eggs and chick, but rather they hatch them and rear the chicks, as this is more profitable. Among the respondents, women tend to have a primary responsibility for the duties such as caring of broody hens by providing them nesting place, food and water till hatching.

Health care

Majority of the respondents in this study vaccinated the birds against Ranikhet disease regularly. This could be the intensive efforts of training provided by the Kendra. For the veterinary care 25% of respondents were involved in self medication to the birds and 12% were approached local veterinary doctors for treatment. Others were not much bothered about disease aspect of the birds.

Marketing

Desi bird's meat fetches more price as compared to broiler's meat. The average selling price of desibird was Rs.120 per kilogram of live weight whereas in the case of eggs, the average selling price was Rs.3.00 per egg. The respondents reported that, the price of birds and eggs varied according to season and festivals. The study revealed that the entire respondent sold the birds and did not sell the eggs, but used it for hatching purpose.

Most of the respondents (65%) marketed their birds to middleman; they used to collect the live birds at owner's house itself. In 35% of the remaining respondents, 25% marketed the birds to shopkeepers and 10 to village market respectively (Table 3).

Table 3: Marketing channel of the respondents

Marketing channel	Number of respondents	Percentage
Middleman	65	65%
Shopkeepers	25	25%
Village market	10	10%

Income

The desibird farming units were having an average of 80 birds. Out of hundred, 48% of the respondents had an annual earning of up to Rs. 2500, 24% of respondent had up to Rs. 5000/- and 28% had Rs.7000 and above. The average cost benefit ratio of one unit was 1:3.4. The respondents indicated that majority of them earned reasonably well from desibirds as a supplementary income and most of them sell the birds only if there is an urgent necessity of cash. The findings revealed that desibird rearing has a strong potential as an income-generating activity in the rural areas.

Constraints in desibird farming

The constraints as perceived by the rural poultry owners were recorded in the schedule prepared for the purpose of the study. The important constraints perceived by the respondents was death of birds due to predators attack, disease, theft by strangers, road accident (Table 3) and they were not getting the right price for birds due to exploitation by brokers and middlemen.

Table 3: Causes of death of desibirds

Sl.No.	Causes of death	% of respondent
1	Predators attack	48
2	Disease	40
3	Theft by strangers	8
4	Road accident	4

Conclusion

- The study has shown that the average percent of adoption of backyard poultry farming was 56.1% from the trained farmers. In the year 2010-11, the percent adoption was highest.
- Desibird farming plays an important role as a secondary occupation for the adopted farmers. Empowerment through training in the areas of feeding, housing, hatching and brooding management would go a long way to sustain desibird farming under backyard system.
- The study showed that the respondents had more involvement in improving health care of birds through vaccination and using veterinary experts for treatment.
- Desibird farming had increased socio-economic status of rural community and employment in these areas.
- Further, popularising the successful cases of desibird farmers in various media like print and electronic media would motivate other farmers to adopt this enterprise.

10.D. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

10.E. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK

10.F. Indicate the specific training need analysis tools/methodology followed for

Identification of courses for farmers/farm women

- Need assessment through Participatory Rural Appraisal
- Interaction with farmers club members
- Joint diagnostic survey with line department officials
- Group Meetings

Rural Youth

- Personal Interview
- Group Meetings
- Direct Observation

Inservice personnel

- Group Discussion
- Workshop
- SAC meeting
- Zonal meeting
- Meeting
- Questionnaire

10.G. Field activities

- Number of villages adopted : 12
- No. of farm families selected : 27
- No. of survey/PRA conducted : 6

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab

1. Year of establishment : 2010-11
2. List of equipments purchased with amount :

Sl. No.	Name of the Equipment	Qty.	Cost (Rs.)
1	Electronic top loading balance Model: BL 220H, 220g	1	22000.00
2	Electronic top loading balance Model: BL 620S, 620g	1	25000.00
3	Digital pH meter	1	5910.00
4	Conductivity meter	1	11209.00
5	Kelplus Automatic Nitrogen Analyser	1	236735.00
6	Flame photometer	1	44837.00
7	UV-Visible Spectrophotometer	1	99000.00
8	Water still	1	11900.00
9	Hot plate NSW-255	1	26900.00
10	Water bath NSW-128	1	14800.00
11	Micro magnetic stirrer	1	2200.00
12	Reciprocating shaker	1	10500.00
13	Muffle furnace	1	21800.00
14	Khan shaker	1	16449.00
15	Willey mill	1	21000.00
	Total	**15**	**5,70,240.00**

Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	49	12	5	-
Water Samples				
Plant samples				
Manure samples				
Others (specify)				
Total	**49**	**12**	**5**	**-**

Details of samples analyzed during the 2010-11 :

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	49	12	5	-
Water Samples				
Plant samples				
Manure samples				
Others (specify)				
Total	**49**	**12**	**5**	-

10.I. Technology Week celebration : -

Period of observing Technology Week: From to
Total number of farmers visited :
Total number of agencies involved :
Number of demonstrations visited by the farmers within KVK campus :

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized			
Exhibition			
Film show			
Fair			
Farm Visit			
Diagnostic Practicals			
Supply of Literature (No.)			
Supply of Seed (q)			
Supply of Planting materials (No.)			
Bio Product supply (Kg)			
Bio Fertilizers (q)			
Supply of fingerlings			
Supply of Livestock specimen (No.)			
Total number of farmers visited the technology week			

10. J. Interventions on drought mitigation (if the KVK included in this special programme)

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		
Cereals		
Vegetable crops		
Tuber crops		
Total		

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No.of participants
Total			

D. Animal health camps organized

State	Number of camps	No.of animals	No.of farmers
Total			

E. Seed distribution in drought hit states

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
Total				

F. Large scale adoption of resource conservation technologies

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
Total			

G. Awareness campaign

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers
Total												

PART XI. IMPACT

11.A. Impact of KVK activities (Not to be restricted for reporting period).

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

11.B. Cases of large scale adoption
(Please furnish detailed information for each case)

11.C. Details of impact analysis of KVK activities carried out during the reporting period

PART XII – LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
Agricultural department	Joint implementation and conducting training programmes
Horticulture department	Joint implementation and conducting training programmes
Agricultural Engineering department	Joint implementation and conducting training programmes
Fisheries department	Joint implementation and conducting training programmes
Sericulture department	Joint implementation and conducting training programmes
Animal Husbandry department	Joint implementation and conducting training programmes
Forestry department	Joint implementation and conducting training programmes
Krishi Vigyan Kendra, Trichy	Joint Diagnostic Survey
National Research Centre for Banana, Trichy	Joint Diagnostic Survey and Technical support
Anbil Dharmalingam Agricultural College and Research Institute, Trichy	Joint Diagnostic Survey and Technical support
National Bank for Agriculture and Rural Development	Joint implementation for training programmes and village adoption
District Rural Development Agency	Joint implementation for training
Indian Overseas Bank (LEAD Bank)	Contribution for training
Women Development Corporation	Contribution for training programmes
National Fisheries Development Board	Contribution for training and demonstration
Non Governmental Organization : Gramiyam, Sepad, LEAD, Arrest, Gramodaya, Sippy trust, Coodu trust	Participation in meetings
All India Radio	Publicity
Doordharshan Kendra	Publicity
Central Integrated Pest Management, Trichy	Joint implementation for FFS

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

12.B. List special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount in lakhs (Rs.)
Sustaining Rice production in a changing Climate: Testing Climate uncertainties and validating selected adaptation techniques on farmers fields (ClimaRice)	14.05.10	Norway & TNAU	6.5
MAHIMA	27.07.09	NABARD	2.5
VDP	14.10.10	NABARD	1.5
Pilot Project	Feb-2011	NABARD	9.95

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/ No : Yes

If yes, role of KVK in preparation of SREP of the district? : Prepared the SREP report for Karur District

Coordination activities between KVK and ATMA during 2010-11

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	GB Meeting MC Meeting	3 3	-	-
02	Research projects	Mealy bug management	-	1	On going
03	Training programmes	-	-	-	-
04	Demonstrations	Mealy bug management		1	-
05	Extension Programmes				
	Kisan Mela	-			
	Technology Week				
	Exposure visit	Mechanization in Paddy SSI in Sugarcane	-	2	-
	Exhibition	District level	2	-	-
	Soil health camps	-	-	-	-
	Animal Health Campaigns	-	-	-	-
	Others (Pl. specify) Scientist & Farmer interaction	Rajarajan 1000 paddy cultivation methods IPM in Agricultural crops	2	-	-
06	Publications				
	Video Films				
	Books	Rajarajan 1000 paddy cultivation methods	-	1	
	Extension Literature				
	Pamphlets				
	Others (Pl. specify) Folder	Mealy bug management	-	1	
07	Other Activities (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development				

12.D. Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any

12.E. Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks

12.F. Details of linkage with RKVY

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks

12. G Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
May - 2010	4	207	Farmers & Extension officials were appreciated
June	11	207	
July	15	288	
August	4	626	
September	1	626	
October	5	577	
November	6	577	
December	2	577	
January - 2011	3	577	
February	2	577	
March	1	577	

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

13.A. Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Plant propagation unit	2006-2007	80m^2	-	-	-	-	-	-
2	Cattle shed	2006-2007	80 m^2	HF - X	Milk	11100 lit	225017	235696	-

13.B. Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables									
Others (specify)									

13.C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Vermicompost	3575 kg	1100	14994	20 Q available in stock
2	Panchakavya	5lit	50	360	50 lit available in stock
3	Insect Repellent	2lit	20	120	50 lit available in stock

13.D. Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Cow	HF - X	Milk	10153	175701.80	216576.00	
			Dung	36 ton			

13.E. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2009	95	1	
May 2009	40	15	
June 2009	65	1	
July 2009	-	-	
August 2009	32	1	
September 2009	-	-	
October 2009	72	1	
November 2009	-	-	
December 2009	65	1	
January 2010	35	1	
February 2010	-	-	
March 2010	50	3	

13.F. Database management

S. No	Database target	Database created
1	OFT	Created
2	FLD (Oilseeds & Pulses)	Created
3	FLD (Other than oilseeds & pulses)	Created
4	Training	Created
5	Extension Activity	Created
6	Literatures	Created
7	Impact	Created
8	Farmers profile	Created
9	Training framers database	Created
10	block details	Created
11	Weather data	Created

13.G. Details on Rain Water Harvesting structure and micro-irrigation system

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		

PART XIV - FINANCIAL PERFORMANCE

14.A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	Indian Overseas Bank	Thillai Nagar, Trichy	090	Current	17262	-	-
With KVK	Punjab National Bank	Industrial Area, Trichy	3313	Savings	3313000100120327	00002400	PUNB 03313000
KVK (Revolving Fund)	Punjab National Bank	Industrial Area, Trichy	3313	Savings	3313000100121511	00002400	PUNB 03313000

14.B. Utilization of funds under FLD on Cotton (Rs. in Lakh)

S. No	Items / Head	Opening balance if any	Remittance by ZPD VIII Bangalore	Actual expenditure dubitable to Council A/C	Closing balance if any	Remarks
1	Production Technology – 50 ha					
	a. Essential inputs	-0.35000	0.0	0.0	0.0	
	b. POL, hiring vehicle, Kisan melas, printed materials, reports, demonstration boards	-0.15000	0.0	0.0	0.0	
	Total	-0.50000	0.0	0.0	0.0	
2.	Farm Implements – 75 ha					
	a. New equipments					
	b. Contingencies					
	Total					

14.C. Utilization of KVK funds during the year 2010-11 (Rs. in lakh)

S.no.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	40.00000	40.00000	38.30766
	Pay & allowance (6th CPC Arrears from 1.1.2006 31.3.2011)	53.74766	53.74766	53.74766
2	**Traveling allowances**	1.25000	1.25000	1.25000
3	**Contingencies**			
a	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.20000	2.20000	2.20000
B	POL, repair of vehicles, tractor and equipments	2.00000	2.00000	2.00000
c	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	0.90000	0.90000	0.90000
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.65000	0.65000	0.65000
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	2.05000	2.05000	2.05000

F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.70000	0.70000	0.70000
G	Training of extension functionaries	0.50000	0.50000	0.50000
H	Maintenance of buildings	0.40000	0.40000	0.40000
I	Extension Activities	0.30000	0.30000	0.30000
J	Farmers Field School	0.25000	0.25000	0.25000
K	Chemical & Glass wears for Soil & Water Testing lab	2.50000	2.50000	2.50000
L	Petty Items – such as pestle and mortar, cloth bag, plastic jar, tray, gas connection for flame photometer and other use test tube holder, soil sampling auger etc., for soil and water testing lab	1.00000	1.00000	1.00000
m	Soil and plant sample processing and storage facility	0.50000	0.50000	0.50000
n	Library (purchase of journal, periodicals, News paper & Magazine)	0.05000	0.05000	0.05000
TOTAL (A)		**108.99766**	**108.99766**	**107.30532**
B. Non-Recurring Contingencies				
1	**Works**			
A	**Irrigation System**	3.00000	3.00000	2.98875
B	**Demo Unit (Sericulture)**	3.00000	3.00000	3.00000
C	**Vehicle and implement Shed**	3.00000	3.00000	2.50998
D	**Road Formation**	2.00000	2.00000	2.51127
E	**Threshing and Drying yard**	3.00000	3.00000	3.00000
F	**Land leveling**	2.00000	2.00000	1.99000
2	**Equipments including SWTL & Furniture**			
a	**Laser Guided Land Leveler**	5.00000	5.00000	3.48750
b	**SWTL**	10.00000	10.00000	8.76620
C	**EPABX system**	0.50000	0.50000	0.50000
d	**Generator**	1.00000	1.00000	1.50000
e	**Power Tiller**	1.50000	1.50000	1.50000
f	**Plant Health Diagnostic Facility**	10.00000	10.00000	12.24630
g	**Furniture and Furnishing**	2.00000	2.00000	2.00000
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	0	0	0
4	**Library** (Purchase of assets like books & journals back volume)	0.10000	0.10000	0.10000
TOTAL (B)		**46.10000**	**46.10000**	**46.10000**
C. REVOLVING FUND		**0**	**0**	**0**
GRAND TOTAL (A+B+C)		**155.09766**	**155.09766**	**153.40532**

14.D. Status of revolving fund (Rs. in lakh) for the three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2008 to March 2009	181429	1157145	1102852	235722
April 2009 to March 2010	235722	1572479	1423973	384228
April 2010 to March 2011	384228	2349774	1959021	774981

15. Details of HRD activities attended by KVK staff during 2010-11

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
P.Tamil Selvi	SMS – Agrl.Extension	Workshop on Rescheduling and Planning ATMA activities for Karur District	KVK, Namakkal	20.06.11
R. Anitha	SMS – Home Science	Training on Banana fibre extraction and Production of handi crafts	NRCB, Trichy	12.07.10
Dr.J.Diraviam P.Tamil Selvi	Programme Coordinator SMS – Agrl.Extension	Workshop on Awareness about GM crops	KVK, Trichy	24.08.10
S.Vijay	SMS – Plant Protection	National seminar on bio diversity & mitigating factors	Madurai Kamaraj university	24.08.10
R. Anitha	SMS – Home Science	Advances in Post harvest handling & Production of value added products for export	NRCB, Trichy	21.10.10
S.Vijay	SMS – Plant Protection	National consultation workshop on mass multiplication of mealybug parasitioids and releasing techniques	NBAII, Bangalore	29.10.10
Dr.M.Veeraselvam	SMS – Animal Science	Integrated Farming System	KVK, Namakkal	24.11.10
R. Anitha	SMS – Home Science	Workshop on value addition on noval foods	IICPT, Thanjavur	13.12.10
K.Valliammal	SMS – Soil Science	Training on “Advances in soil health & fertility Management” at TNAU, Coimbatore.	TNAU , Coimbatore	20.03.11
S.Vijay	SMS – Plant Protection	Training on IPM Technologies in Hi-Value Crops.	TNAU , Coimbatore	23.03.11
R. Anitha	SMS – Home Science	Training on “ Recent trends in crop processing technology” at IICPT	TNAU , Coimbatore	23.03.11
D. Dhanasekar-	SMS – Horticulture	Training on Protected cultivation of horticulture crops.	TNAU , Coimbatore	28.03.11
J. Arunkumar	Programme Assistant (Computer)	Training on Data base management, web content and web hosting development at TNAU, Coimbatore	TNAU , Coimbatore	28.03.11

16. Please include any other important and relevant information which has not been reflected above (write in detail).

Nil

SUMMARY FOR 2010-11

I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management			
Varietal Evaluation	China aster	Comparision of variety in chinaaster for suitability in open area	5
Integrated Pest Management	Betelvine	Foot rot management in betelvine	5
Integrated Crop Management			
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries	Paddy	Assessment of multi row power weeder and battery operated power weeder in paddy	5
Integrated Farming System			
Seed / Plant production	Sugarcane	Assessment of suitable planting material in sugarcane for better crop establishment	5
Value addition			
Drudgery Reduction			
Storage Technique			
		Total	**20**

Summary of technologies assessed under livestock

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Disease Management	1	Control of raniket disease in desi chicken	500 birds
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management			
Production and Management			
Total			500

Summary of technologies assessed under various enterprises

Thematic areas	Enterprise	Name of the technology assessed	No. of trials
Integrated Crop Management			

Summary of technologies assessed under home science

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops

Thematic areas	Crop	Name of the technology refined	No. of trials
Integrated Nutrient Management			
Varietal Evaluation			
Integrated Pest Management			
Integrated Crop Management	Banana	High density planting in banana	5
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Others (Pl. specify)			
Total			**5**

Summary of technologies assessed under refinement of various livestock

Thematic areas	Name of the livestock enterprise	Name of the technology refined	No. of trials
Disease Management			
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management			
Production and Management			
Others (Pl. specify)			
		Total	

Summary of technologies refined under various enterprises

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

Summary of technologies refined under home science

Thematic areas	Enterprise	Name of the technology assessed	No. of trials
Drudgery Reduction	Banana	Approaches for Drudgery reduction and quality improvement of banana fiber	5

III. FRONTLINE DEMONSTRATION

Cotton

Frontline demonstration on cotton

Crop	Thematic Area	Name of the technology demonstrated	No. of KVKs	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demonstration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)	*Economics of check (Rs./ha)						
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals	Varietal popularization	Popularization of rice hybrid CORH-3 through SRI method		10	5	53.50	41.50	28.92			16250	32100	15850	1.98	17560	29050	11490	1.65
	ICM	ICM on paddy		10	2	52.34	43.2	21.16			20450	54255	33805	2.65	23650	38680	15030	1.63
Millets																		
	Productivity improvement	INM in maize		10	4	35.88	25.50	40.71			14350	43056	28706	3.00	15560	30600	15040	1.96
Oil SEEDS TMV(SV)7	Varietal introduction	Introduction of high yielding sesame variety		25	10	4.78	3.57	33.89			6500	15705	9205	2.42	6750	11730	4980	1.73
CO(SFV)5	Varietal introduction	Introduction of high yielding sunflower variety		25	10	5.35	4.25	25.88			7300	16050	9750	2.20	6550	12750	6200	1.94
VRI(SV)2	Varietal introduction	Introduction of high yielding sesame variety		25	10	Demonstration is ongoing												
DRSH-1	Varietal introduction	Introduction of high yielding sunflower variety		25	10	9.09	6.65	36.69			11250	27270	16020	2.42	10550	19950	9400	1.89
sunflower	IDM	Charcoal root rot management in sunflowe		25	5	15.95	13.5	18.15			28500	76564.80	48064.80	2.69	29132	56610	27478	1.94

Pulses VBN(Rg)3	Varietal introduction	Introduction of high yielding red gram variety		25	10	4.93	3.50	40.86			11775	27115	15340	2.30	12050	19250	7200	1.59
VBN(Bg)5	Varietal introduction	Introduction of high yielding black gram variety		25	10	Demonstration is ongoing												
Vegetables Snake gourd	Varietal introduction	Introduction of new variety		20	2	190	150	26.67			42000	100000	58000	2.38	41500	75000	33500	1.81
bRINJAL	**IPM**	Mealy bug management in brinjal		23	5	278	225	23.56			77500	222200	144700	2.87	79550	157500	77950	1.97
Flowers																		
Ornamental																		
Fruit																		
Spices and condiments																		
Commercial																		
Sugarcane	Productivity improvement	Popularization of TNAU sugarcane booster		10	2	1400	1080	29.63			1,11,600	2,66,140	1,54,540	2.38	1,11,600	2,05,308	93,708	1.83
Medicinal and aromatic																		
Fodder																		

Fodder	Fodder development	PPopularization of fodder bank at village level		10	2	4550	2830	60.78			12197	45500	33303	3.7	12800	28300	15500	2.2
Plantation																		
Fibre																		
Others (pl.specify)																		
Sugarcane																		
	Total																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Livestock

Category	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																		
Dairy	Increasing conception rate through oestrus synchronization	oestrus synchronization in dairy cows through ovsynch technology		10	20	2650	2000	32.5			11000	30000	19000	2.7	10000	15000	5000	1.5
Poultry																		
Implements	Popularization of egg incubator	Popularization of egg incubator		20		94	49	91			25000	142000	111000	4.5	12000	29000	17000	2.4
		Introduction and Popularization of Nandhanam Turkey		10	50	5.4	4.0	35			345	768.6	423.6	2.2	391.5	620.5	229	1.59
Rabbitry																		
Pigerry																		
Sheep and goat																		
Duckery																		
	Total																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps																		
Mussels																		
Ornamental fishes																		
Others (pl.specify)																		
	Total																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other enterprises

Category	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Oyster mushroom																	
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
Others (pl.specify)																	
Total																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Women empowerment

Category	Name of technology	No. of KVKs	No. of demonstrations	Name of observations	Demonstration	Check
Women						
Pregnant women						
Adolescent Girl						
Other women						
Children						
Neonats						
Infants						
Children						

Farm implements and machinery

Name of the implement	Cost of the implement in Rs.	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha / unit	Hatchability percentage (%)		% increase	*Economics of demonstration (Rs./unit)				*Economics of check (Rs./ha)			
					Demo	Check		Gross cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Egg incubator	25000	Popularization of egg incubator	20	1	84.1	44.2	90.7	27221	64640	37419	2.4	22800	25440	2640	1.2

Name of the implement	Cost of the implement (for 2 unit) in Rs.	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha/ unit	MSLP in %		% Increase in self life period	*Economics of demonstration (Rs./unit)		
					Demo	Check		Demo	Check	BCR
CRIDA Preservator	4000	Introduction of low cost fruit and vegetable preservator	20	1	38.02	25.14	51.23	53.5	47.5	2.6

*Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other enterprises

Demonstration details on crop hybrids

Crop	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
				Demonst-ration	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Cereals Paddy	CORH-3	10	5	53.50	41.50	22.43	21350	49678	28328	2.32
Bajra										
Maize	CMH 08-282	10	4	35.88	25.50	28.92	14350	43056	28706	3.00

Rice										
Sorghum										
Wheat										
Others (pl.specify)										
Total										
Oilseeds										
Castor										
Mustard										
Safflower										
Sesame										
Sunflower	DRSH-1	25	10	9.09	6.65	37.84	11250	27270	16020	2.42
Groundnut										
Soybean										
Others (pl.specify)										
Total										
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										
Others (pl.specify)										
Total										
Vegetable crops										
Bottle gourd										
Capsicum										
Others (pl.specify)										
Total										
Cucumber										
Tomato										
Brinjal										

Okra										
Onion										
Potato										
Field bean										
Others (pl.specify)										
Total										
Commercial crops										
Sugarcane										
Coconut										
Others (pl.specify)										
Total										
Fodder crops										
Maize (Fodder)										
Sorghum (Fodder)										
Others (pl.specify)										
Total		**45**	**19**	**98.47**	**73.65**	**89.19**	**46950**	**120004**	**73054**	**7.74**

IV. Training Programme

Farmers' Training including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	3	59	3	62	12	5	17	71	8	79
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	5	49	25	74	3	6	9	52	31	83
Soil and Water Conservation										
Integrated Nutrient Management	1	10	-	10	-	-	-	10	-	10
Production of organic inputs	1	10	20	30	-	-	-	10	20	30
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising	1	19	-	19	-	-	-	19	-	19
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										

Others (pl.specify)	1	19	-	19	1	-	1	19	1	20
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards	1	3	17	20	-	-	-	3	17	20
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)	1		27	27	-	-	-	-	27	27
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										

g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management	1	15	-	15	-	-	-	15	-	15
Integrated water management										
Integrated nutrient management	2	64	-	64	3	-	3	64	3	67
Production and use of organic inputs	1	22	-	22	-	-	-	22	-	22
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	2	24	16	40	4	3	7	28	19	47
Poultry Management	1	-	20	20	-	-	-	-	20	20
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management	1	16	2	18	5	-	5	21	2	23
Feed and Fodder technology	1	16	3	19	4	2	6	20	5	25
Production of quality animal products										
Others (pl.specify)	2	29	2	31	2	-	2	31	2	33
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										

Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment	2	-	46	46					46	46
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)	4	61	39	100	-	1	1	61	40	101
Agril. Engineering										
Farm machinery and its maintenance	1	17	3	20	-	-	-	17	3	20
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology	1	22	-	22	-	-	-	22	-	22
Others (pl.specify)	2	40	-	40	-	-	-	40	-	40
Plant Protection										
Integrated Pest Management	2	39	3	42	-	-	-	39	3	42
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										

Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	1	30	-	30	-	-	-	30	-	30
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder	1	17	3	20	-	-	-	17	3	20
Production of Fish feed										

Mushroom production	1	-	23	23	-	-	-	-	23	23
Apiculture										
Others (pl.specify)	1		20	20	-	-	-	-	20	20
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**40**	**581**	**272**	**853**	**34**	**17**	**51**	**611**	**293**	**904**

Farmers' Training including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management	1	16	1	17	-	-	-	16	1	17
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production	1	8	5	13	-	-	-	8	5	13
Nursery management										
Integrated Crop Management	8	170	22	192	4	-	4	174	22	196
Soil and Water Conservation										
Integrated Nutrient Management	2	38	5	43	2	-	2	40	5	45
Production of organic inputs										
Others (pl.specify)	1	16	4	20	-	-	-	16	4	20
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl.specify)										
b) Fruits										

Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)	4	69	14	83	12	-	12	81	14	95
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)	2	39	-	39	-	-	-	39	-	39
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										

Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management	1	24		24	1		1	24	1	25
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify) INM	1	26	15	41	-	-	-	26	15	41
Livestock Production and Management										
Dairy Management	2	28	8	36	3	3	6	31	11	42
Poultry Management	2	33	6	39	2	2	4	35	8	43
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify) Goat rearing	5	94	26	120	9	-	9	103	26	129
IFS	1	14	7	21	-	-	-	14	7	21
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										

Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	1	13	3	16	-	-	-	13	3	16
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology	3	51	10	61	16	-	16	67	10	77
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	2	52	1	53	-	-	-	52	1	53
Integrated Disease Management	2	38	1	39	15	-	15	53	1	54
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										

Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										

Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	39	729	128	857	64	5	69	792	134	926

Training for Rural Youths including sponsored training programmes (on campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming	2	24	22	46	3	0	3	27	22	49
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	1	22	-	22	-	-	-	22	-	22
Bee-keeping	1	4	12	16	-	-	-	4	12	16
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										

Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**4**	**50**	**34**	**84**	**3**		**3**	53	34	87

Training for Rural Youths including sponsored training programmes (off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming	1	19	3	22	-	-	-	19	3	
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	2	44	6	50	-	-	-	44	6	
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										

Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**3**	**63**	**9**	**72**				**63**	**9**	

Training programmes for Extension Personnel including sponsored training programmes (on campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1	25	5	30	-	-	-	25	5	30
Integrated Pest Management	1	9	1	10	-	-	-	9	1	10
Integrated Nutrient management	4	59	46	105	-	-	-	59	46	105
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total	**6**	**93**	**52**	**145**				**93**	**52**	**145**

Training programmes for Extension Personnel including sponsored training programmes (off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	1	11	2	13	-	-	-	11	2	13
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total	**1**	**11**	**2**	**13**	**-**	**-**	**-**	**11**	**2**	**13**

Sponsored training programmes

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Increasing production and productivity of crops	1	16	6	22	-	-	-	16	6	22
1.b.	Commercial production of vegetables										
2	**Production and value addition**	1	22	3	25	-	-	-	22	3	25
2.a.	Fruit Plants										
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	**Soil health and fertility management**										
4	**Production of Inputs at site**										
5	**Methods of protective cultivation**										
6	**Others (pl.specify)**										
7	**Post harvest technology and value addition**	1	19	5	24		1	1	19	6	25
7.a.	Processing and value addition										
7.b.	Others (pl.specify)	1	13	19	31	-	-	-	13	19	31
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	**Livestock and fisheries**										
10	**Livestock production and management**										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c	Fisheries Nutrition										
10.d	Fisheries Management										
10.e.	Others (pl.specify)										
11.	**Home Science**										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	**Agricultural Extension**	1	16	15	31	-	-	-	16	15	31
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl.specify)										
	Total	5	86	48	133		1	1	86	49	134

Details of vocational training programmes carried out for rural youth

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production										
1.c.	Commercial vegetable production										
1.d.	Integrated crop management										
1.e.	Organic farming	2	27	21	48	-	-	-	27	21	48
1.f.	Others (pl.specify)										
2	**Post harvest technology and value addition**										
2.a.	Value addition										
2.b.	Others (pl.specify)										
3.	**Livestock and fisheries**										
3.a.	Dairy farming										
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing										
3.d.	Piggery										
3.e.	Poultry farming										
3.f.	Others (pl.specify)										
4.	**Income generation activities**										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery and implements										
4.d.	Rural Crafts										
4.e.	Seed production										
4.f.	Sericulture										
4.g.	Mushroom cultivation										
4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
5	**Agricultural Extension**	1	8	16	24	-	-	-	8	16	24
5.a.	Capacity building and group dynamics										
	Grand Total	**3**	**35**	**37**	**72**				**35**	**37**	**72**

V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	305	485	14	
Diagnostic visits	53	92		
Field Day	8	200	4	204
Group discussions				
Kisan Ghosthi				
Film Show				
Self -help groups	2	36		
Kisan Mela				
Exhibition	10	9306	70	
Scientists' visit to farmers field				
Plant/animal health camps				
Farm Science Club	15	379		
Ex-trainees Sammelan				
Farmers' seminar/workshop				
Method Demonstrations	5	198		
Celebration of important days Environment day	2	170	6	
Special day celebration				
Exposure visits	7	217	6	
Others (pl.specify)				
Lectures delivered as resource persons	67	3224	86	
Field Day	8	200	4	
Farmers visit to KVK	76	130		
Scientist – farmer interaction	5			
Parthenium awareness programme	1	60		
Total	**564**	**14697**	**190**	**204**

Details of other extension programmes

Particulars	Number
Electronic Media	
Extension Literature	5
News Letter	2000

News paper coverage	26
Technical Articles	
Technical Bulletins	
Technical Reports	
Radio Talks & Announcements	24
TV Talks	2
Animal health amps (Number of animals treated) 418-5	
Others (pl.specify)	
Popular articles	6
Total	**2063**

VI. PRODUCTION OF SEED/PLANTING MATERIAL

Production of seeds by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Paddy	CR1009	102	127500	
	Paddy	BPT 5204	56.4	84600	
	Paddy	TRY-3	4.8	7200	
	Paddy	ADT-39	7.2	10800	
Oilseeds					
Pulses					
Commercial crops					
Vegetables	Ashgourd	Palur -2	444 Nos	200	1
	Bitter gourd	US Seeds	1300 Nos	650	2
Flower crops					
Spices					
Fodder crop seeds					
Fiber crops					
Forest Species					
Others					
Fruits					
Total			**170.4 Qtl /1777 Nos**	**230950**	

Production of planting materials by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals					
Oilseeds					
Pulses					
Commercial crops	Sugarcane seedlings		52500	52500	2
Vegetables	Brinjal	Manapparai Local	11800	2750	3
	Tomato	Namadari Seeds	14800	3410	3

	Bitter Gourd	US agri seeds	1500	1500	1
	Moringa seedlings	PKM-1	7431	2812	2
	Bitter Guard seedlings		20000	10000	
	Tomato		1519	18223	
	Tomato Seedlings		25000	5000	
	Brinjal Seedlings		30000	15000	
Flower crops					
Spices	Chilli Seedlings		10000	5000	
Fodder crop seeds	Cumbu Napier Grass	CO-4	34500	8625	3
Fiber crops					
Forest Species					
Others					
Fruits	Sapota		1000	10000	
	Amla		2000	30000	
	Watermelon		10000	40000	
		Total	**222050**	**204820**	**14**

Production of Bio-Products

Bio Products	**Name of the bio-product**	**Quantity Kg**	**Value (Rs.)**	**No. of Farmers**
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others (specify)	Vermicompost	10575	49994	4
	Panchakavya	5	360	1
	Insect Repellent	2	120	1
Total		**10587**	**52224**	**6**

Production of livestock and related enterprise materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2010-11

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	**47**	**10**	**5**	**-**
Water				
Plant				
Manure				
Others (pl.specify)				
Total				

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted - Nil

IX. NEWSLETTER

Number of issues of newsletter published - 4

X. RESEARCH PAPER PUBLISHED

Number of research paper published - Nil

XI. DETAILS ON RAIN WATER HARVESTING STRUCTURE AND MICRO-IRRIGATION SYSTEM

Activities conducted				
No. of Training programmes	**No. of Demonstration s**	**No. of plant materials produced**	**Visit by farmers (No.)**	**Visit by officials (No.)**
-	-	-	-	-

----------XXXXXXX----------