PROFORMA FOR ANNUAL REPORT 2010-11

(FOR THE PERIOD APRIL 2010 TO MARCH 2011)

KRISHI VIGYAN KENDRA (THENI)

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		
CENDECT Krishi Vigyan Kendra, West Street, Kamatchipuram (S.O) Theni District - 625 520 Tamil Nadu	04546-247564	04546-247564	cendectkvk@ rediffmail.com	www.cendectkvk.org

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

Address	**Telephone**		**E mail**	**Web Address**
	Office	**Fax**		
Centre for Development and Communication Trust (CENDECT) Kamatchipuram (S.O), Theni District - 625 520 Tamil Nadu	04546-247245	04546-247245	cendect@gmail.com	www.cendect.org.in

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

Name	**Telephone / Contact**		
	Residence	**Mobile**	**Email**
Dr. P. Marimuthu, Programme Coordinator, CENDECT KVK, Kamatchipuram (S.O), Theni District - 625 520 Tamil Nadu	04546-247990	09442025109	cendectmari@rediffmail.com

1.4. Year of sanction:

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.P.Marimuthu	Programme Coordinator	M	Agrl.Extension	Ph.D	12,000-18,300	12,980	1/31/2001	Permanent	OBC
2	SMS	Mr.M.Lord Savariraj	Subject Matter Specialist	M	Plant Protection	M.Sc (Agri.)	8,000-13,500	8,275	1/1/2009	Permanent	OBC
3	SMS	Mrs.S.Karpagavalli	Subject Matter Specialist	F	Home Science	M.Phil (Home Science)	8,000-13,500	8,550	2/28/2001	Permanent	SC
4	SMS	Vacant	Subject Matter Specialist	-	Horticulture	M.Sc.(Horti)	-	-	-	-	-
5	SMS	Mrs.K.Veerasiakkamal	Subject Matter Specialist	F	Agronomy	M.Sc(Agri)	8,000-13,500	8,000	12/2/2009	Temporary	OBC
6	SMS	Vacant	Subject Matter Specialist	-	Agricultural engineering	ME(Agri)	-	-	-	-	-
7	SMS	Vacant	Subject Matter Specialist	--	Soil Science	M.Sc(Agri.)	-	-	-	-	-
8	Programme Assistant(Lab Tech.)/T-4	Vacant	Programme Assistant	--	Animal Husbandry	B.V.Sc	-	-	-	-	-
9	Programme Assistant (Computer)/ T-4	Mr.S.Suruli Andavar	Computer Programmer	M	Computer Programmer	MCA	5,500-9000	5,500	8/20/2009	Permanent	OBC

10	Programme Assistant/ Farm Manager	Mr.N.Raja	Farm Manager	M	Horticulture	B.Sc(Horti)	5,500-9,000	7,075	9/14/2000	Permanent	OBC
11	Assistant	Mr.R.Patchaikannan	Accountant	M	-	-	5,500-9,000	7,600	3/1/1995	Permanent	OBC
12	Jr. Stenographer	Mrs.S.Murugeswari	Jr. Stenographer	F	-	-	4000-6000	4,100	1/9/2008	Permanent	OBC
13	Driver	Mr.M.Patchaikannan	Driver	M	-	-	3,050-4,590	3,050	1/1/2010	Permanent	OBC
14	Driver	Mr.M.Murugan	Driver	M	-	-	3,050-4,590	3,575	8/1/1995	Permanent	OBC
15	Supporting staff	Mr.S.Murugan	Supporting staff	M	-	-	2,550-3,200	2,940	2/1/1997	Permanent	OBC
16	Supporting staff	Mr.R.Ganesan	Supporting staff	M	-	-	2,550 - 3,200	2,940	5/1/2006	Permanent	OBC

1.6. Total land with KVK (in ha) : 30.0 ha

S. No.	Item	Area (ha)
1	Under Buildings	0.2 ha
2.	Under Demonstration Units	0.2 ha
3.	Under Crops	27.6 ha
4.	Orchard/Agro-forestry	2.0 ha
5.	Others	**30.0 ha**

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	1996	483.5	27,56,902.00	-	-	-
2.	Farmers Hostel	ICAR	2002	312.0	17,49,590.00	-	-	-
3.	Staff Quarters							
	1	ICAR	1997	32.5	1,55,206			
	2	ICAR	1997	32.5	1,55,206			
	3	ICAR	1997	32.5	1,55,206			
	4	ICAR	1997	32.5	1,55,206			
	5	ICAR	1997	32.5	1,55,206			
	6	ICAR	1997	32.5	1,55,206			
	7	ICAR	1997	32.5	1,55,206			
	8	ICAR	1997	32.5	1,55,206			
4.	Demonstration Units							
	Dairy	ICAR	1999	157	1,60,446			
	Goatery	ICAR	1999	139	1,41,919			
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Scooter M80	1995	20,727	95470 Km	Need replacement
Honda Activa	2009	50,800	8889 Km	Good
Bolero	2010	6,06,153	30,100 Km	Good
Tractor	2010	5,16,000	278 Hrs	Good

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Over Head Projector	1995	11,160	Good
Electronic Typewriter	1995	21,035	Need replacement
Mixie	1996	2,175	Need replacement
Onida Colour TV	1996	18,600	Good
English T/W Machine	1996	9,852	Good
Tape Recorder	1995	3,925	Good
Weighing Scale	1996	2643	Good
Amplifier & Mike Unit	1996	4,600	Good
Duplicating Machine	1995	17,500	Good
VCR	1996	14,990	Good
Slide Projector	1996	12,855	Good
Fax Machine	2009	15,150	Good
Xerox Machine	2010	75,400	Good
Digital Camera	2010	25,000	Good

1.8. Details SAC meeting conducted in 2010-11

Sl. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	18.08.2010			Dr.S. Prabhu Kumar, Zonal Project Director, Zone VIII, ICAR, Bangalore • Organize Grape growers Association& prepare ten farmers to find export marketing, and to develop a value added product from grapes like raisin through cottage industries.	We have organized a Farm Science Club for Grape Growers and linked farmers to Thomson reuters for marketing of quality produces and organized 3 trainings on downy mildew management for 35 farmers and we have motivated a Self Help Group at Odaipatti for production of raisin.
				• Organize coconut growers for value addition & marketing.	We have submitted a project proposal under Rural Innovation Fund for organizing Coconut growers for marketing.
				• Strengthening the linkage with NYK (Nehru Yuva Kendra) and develop 300 rural youths as technocrats.	We have established linkage with NYK and about 11 training courses have been organized for rural youths and about 50 rural youths were NYK volunteers.
				• The popularization of Mealybug Management technologies through adoption of IPM practices and production and release of cryptolemus beetle	We have implemented FLD on Mealybug Management in Cotton involving 9 farmers. We have conducted a session on management of Papaya Mealybug for 100 farmers during seminar organized by KVK.
				• Create a soil health profile of the district in the KVK.	We have started soil samples collected from various places in Theni district and discussed with Soil Testing Laboratory, Theni for jointly preparing District Soil Health Profile.
2.				Mr.R.Murugaprabhu, Lead District Manager, Theni • Popularization of technologies to improve the grapes quality with higher TSS suitable for wine industries.	We have established linkage with Grapes Commodity Group, Odaipatti and disseminated technologies related to quality Grapes with higher TSS.
				• Popularization of technologies for the management of Banana wilt and Leaf spot disease.	We have organized a FLD on Sigatoka Leaf Spot Management with the participation of 12 farmers in an area of 5 ha and organized 6 Training programmes on IPM with participation of 100 farmers.
				• Organizing training on value added products and linking the bank assistance for establishment of small-scale industries.	We have organized 16 training programmes on value addition and processing for 397 farm women and organized 3 training courses for 120 rural youths and helped 5 farm women to set up small processing units.
				• Popularization of technologies through farmers clubs and SHG women.	We have linkage with 30 farmers clubs and 25 SHGs in Theni district and we are regularly disseminating the technologies to them and they have been involved in all KVK activities.
3.				Mr.V.Mani, DDM, NABARD, Theni. • Revival of non-functioning farmers clubs	We have discussed with NGOs and Bankers maintaining farmers club for revival.
				• Transfer of technologies through Demonstrations and Training	We have organized 19 FLDs and 174 trainings for popularization of technologies.
				• Providing ideas to the people to develop rural industries and implementation of NABARD agricultural oriented schemes through KVK like Rural Innovation	We are helping NGOs to develop project related to RIF and various agricultural programmes. The training for watershed dependent landless and women have been organized at CENDECT KVK and disseminated various agricultural options for

Sl. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
				Fund, Farm Promotion Fund, Cluster programme & Seminars..	NGOs and farmers.
4.				Mr.M.Pandian, President, Theni District Farmers Association • Introduction of suitable sugarcane varieties for Theni district	We have popularized CO 86032 variety along with FLD on popularization of ICM with Sugarcane Booster among farmers of Theni district. We have organized two sessions on Sugarcane Cultivation during the seminar organized by CENDECT KVK with participation of 100 farmers.
				• Popularization of Drip Fertigation schedule for Banana, Maize and Coconut.	We have organized one week training on Selection Operation and Maintenance of Sprinkler and Drip Irrigation System and water saving devices for 20 farmers with the collaboration of Agricultural Engineering Department.
				• Creating awareness on cattle farming, feed ands fodder for increasing fat content.	We have organized an OFT on Assessment of Mineral Mixture and organized a FLD on Popularisation of Mixed Fodder among 10 farmers and organsied 2 trainings with 43 farmers participation.
5.				Dr.V.Ponnusamy, Dean, Horticultural College & Research Institute, Periyakulam • Create awareness on Global warming and climate change.	We have organized a session on Impact of Forest Climate Change and Migration during regional conference on the Impact of Climate Change on Sustainable development and means of mitigation organized by NGO Network at KVK, Dindugal with participation of 212 farmers, NGO leaders and Extension workers Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the National Workshop on search of Alternative Paradigm in the Context of Climate dissortion organised by Citizens Global Platform at GB Plant Institute of Himalayan Environment and Development, Almora.
				• Form scientists group to assess the quality of planting materials and for certification.	We have established support with plant breeders of ARS, vaigaidam and HC & RI, Periyakulam for certification of palnning materials.
				• Promote Annual Moringa PKM 1,2 varieties through contract farming.	We have promoted PKM 1,2 varieties among Govindanagaram and Rajendra Nagar farmers and linked them with Hosur Contractor for export and higher return.
				• Provide market information and revival of coconut industry.	We are regularly sending SMS messages for revival of Coconut Industry.
6.				Mr.V.Gnanaprakasam, Executive Engineer Dept. of Agricultural Engineering, Theni • Provide total farm mechanization technologies to farmers.	We have organized a OFT on Assessment of Performance and Suitability of various Weeders in Paddy Cultivation involving 5 farmers and organized. FLD on Mechanised Paddy farming among 10 farmers and organized. FLD on Drudgery reduction in Banana fibre extraction among 10 farm women. We have organized 3 weeks long training involving 60 farmers on Farm mechanization.
7.				Mr.Pon Dhanapalan, Programme Executive, All India Radio, Madurai • Form Farmers Group under contract farming to avail fair price.	We have linked medicinal plant growers with constract farming set up.
				• Popularize technical knowledge on export procedure and organic farming practices among farmers.	We have organized 3 training on organic farming for 26 farmers.
8.				Dr.V.Palanichamy, Programme Coordinator, KVK Kundrakudi, Sivagangai • Strengthen marketing through Precision Farming Associations.	We have motivated precision farming associations to utilize marketing demand available at Kerala.
				• Organizing vocational trainings for para veterinarians like farmers/farm women on first aid measures and utilize various NABARD schemes.	We have motivated rural youths to visit FTC, TANUVAS for getting training on first aid measures and to function as paraveterinarian.
9.				Mr.K.N.Selva Kumar, Progressive Banana grower, Erasakkanayakkanur • Popularise advanced technologies to avoid diseases in Grand Naine banana.	We have organized a FLD on Sigatoka Leaf Spot Management with the participation of 12 farmers in an area of 5 ha and organized 6 Training programmes on IPM with participation of 100 farmers.
10.				Mr.K.Kumaran, Deputy Agricultural Officer, Chinnamanur • Create awareness on the importance of application of micronutrients.	We have organized FLD on TNAU Maize Maxim, Sugarcane Booster, Pulse Wonder, IIHR Vegetable Special, Banana Special, Mango Special for creating awareness on micronutrients.
				• Conserving ground water under	We have orgainsed a week long training for 20

Sl. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
				changing agro climatic conditions.	farmers on water management through sprinkler and drip irrigation and water saving devices.
11.				Dr.S.Sakthivel, Associate Professor, Agricultural Research Station, Vaigaidam • Create awareness on suitable varieties and use of quality seeds.	We are popularizing various latest varieties and quality seeds among farmers through FLD Programmes.
				• Organize training on seed production and involving farmers in seed production and developing farmers as seed growers.	We have organized a training on seed production in pulses with participation of 50 farmers and linked farmers with Sri Hari Seeds for quality seed production.
12.				Dr.Perinbam, Deputy Director, Spices Board, Kumuli • Promote technologies on cardamom cultivation.	We have developed unemployed graduate as agri business consultant and popularised cardamom production technologies.
13.				Dr.Murali Krishnasamy, Programme Coordinator, KVK, Virudhunagar • Promoting Guinea Grass cultivation.	We have conducted FLD on Mixed fodder and popularized various fodder crops.
				• Organise OFT involving Co 23, Co 24 sugarcane varieties.	We have conducted FLD on Sugarcane. We have popularized CO 86032 variety along with FLD on popularization of ICM with Sugarcane Booster among farmers of Theni district. The OFT involving varieties Co 23, Co 24 will be organized in the next year.
				• Organise vegetable seed production with the tie up arrangement with National Seeds Corporation	We have established rapport with NHRDF for seed production of French Beans by farmers.
14.				Dr.S.K.Gopal, Programme Coordinator, KVK Gandhigram • Create awareness on calf rearing, global warming.	We have motivated the farmers to go for calf rearing for getting higher price. Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the preparatory meeting for holding a State Level Conference on Climate Change organized by Citizen Global Platform at Denobili, Madurai, National Workshop on search of Alternative Paradigm in the Context of Climate dissortion organised by Citizens Global Platform at GB Plant Institute of Himalayan Environment and Development, Almora, and Regional Conference on the impact of Climate Change on Sustainable development and means of mitigation" organized by NGO Networks at KVK, Dindugal.
				• Utilize Central Fodder Crops Research Institute for fodder demonstration.	We have conducted FLD on Mixed fodder and popularized various fodder crops. We will establish rapport with CFCRI for conducting demonstration.

PART II - DETAILS OF DISTRICT

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

S. No | **Farming system/enterprise**

The total geographical area of the district is 288923Ha.Forest occupies 35.9%of total area. Net area cultivated occupies 40.7%.The nine fold land classification of Theni district is as follows:

Sl.No	Classification	Area (Ha)	% to Total
1.	Forests	103718	35.9
2.	Barren & Uncultivable land	10768	3.7
3.	Land put to Non - Agrl.Use	21940	7.6
4.	Cultivable waste	4438	1.5
5.	Permanent Pasture	314	0.1
6.	Misc.Tree crops	998	0.3
7.	Current fallows	21601	7.5
8.	Others fallows	11908	4.1
9.	Net area cultivated	113238	39.3
TOTAL		**288923**	**100.0**

Sl.No.	Crop	Extent Cultivated (Ha)	% to Total
1.	Paddy	18582	14.4
2.	Millets	21383	16.6
3.	Pulses	10275	7.9
4.	Cotton	7626	5.9
5.	Sugarcane	12688	9.8
6.	Oilseeds	13879	10.7
7.	Coconut	10845	8.4
8.	Spices and condiments	3924	3.0
9.	Fruits	14983	11.5
10.	Vegetables	5163	3.9
11.	Silk cotton	2614	2.0
12.	Coffee	3836	2.9
13.	Tea	1642	1.2
14.	Other medicinal crops	428	0.3
15.	Fodder and forage	533	0.4
16.	Flowers	348	0.3
17.	Other misc. crops	1051	0.8
TOTAL		**129800**	**100.0**

Food crops occupy 38.9% of total gross area cultivated. About 8.4% of area comes under coconut, which is steadily increasing year by year. Horticultural crops occupy 25.1% of area due to favorable agro climatic condition and assured market. Oilseeds, Cotton and Sugarcane occupy 10.7%, 5.9% and 9.8% respectively.

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

S. No	Agro-climatic Zone	Characteristics
1.	Southern Zone. Based on the rainfall distribution, irrigation pattern, soil characteristics, cropping pattern and physical, ecological and social characteristics, 90% of Theni district fit into Southern Zone and the area adjoining to Western ghats fit into Western Zone accounting for 10% of area.	Annual rainfall 857 mm, Annual potential evapo transpiration -1825

S. No	Agro ecological situation	Characteristics
1.	South western portion of VIII Agro ecological Zone of India Tamil Nadu uplands hot semi arid eco region	Eastern Ghats: A north south range of hills part of Western Ghats marks west boundary with Kerala. Palani hills from Northern:Palani hills form northern spur and high wave mountain andipatty and varusanadu forms southern spur. The rest is undulating plain, cumbum valley is noted for thick vegetation. Altitude ranges from 200 to 400 m in the plains. Altitude ranges as high as 2400 m in the hills.

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Red calcareous	Yellowish red to dark red, Medium texture, Neutral to mild alkaline, well drained and moderate permeability	13259
2.	Red non calcareous	Moderate deep red to yellowish medium textured ,slightly acidic to neutral well drained with rapid permeability	23670
3.	Red lateritic calcareous	Dark reddish brown to brown heavy textured slightly acidic to neutral, well drained with moderate permeability	24644
4.	Red lateritic non calcareous	Yellowish red to very deep heavy textured neutral to mild alkaline moderate permeability, moderately drained	41667
5.	Black soil	Dark grey to very dark grey fine textured mild to moderate alkaline slow permeability poorly dried	2727
6	Mixed soil	Dark yellowish grey to dark grey fine textured to moderate, neutral to mild alkaline well drained good permeability	23526
7	Sand dunes	Yellowish red, single grain, loose, very friable, well drained with good permeability.	10900
8.	Hilly soils	Dark yellowish gray to very dark gray, heavy textured, acidic, well drained with good permeability.	147471

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.	Rice	17000	6700000	4033
2.	Sorghum	14200	2200000	1548
3.	Cumbu	5300	800000	1501
4.	Ragi	100	10000	1664
5.	Maize	6200	1240000	2005
6.	Redgram	3000	330000	1095
7.	Blackgram	200	10000	367
8.	Greengram	200	10000	399
9.	Other pulses	5100	90000	173
10.	Groundnut	2600	620000	2389
11.	Sunflower	200	20000	949
12.	Castor	100	183	183
13.	Gingelly	400	10000	356
14.	Coconut	15000	2314.88 lakh nuts	15533 nuts
15.	Sugarcane	5900	72300 t	1225
16.	Mango	8582	600740	70
17.	Banana	3328	2346240	700
18.	Grapes	1937	439700	227
19.	Tomato	2394	229820	96
20.	Brinjal	372	24920	67
21.	Bhendi	137	11650	85
22.	Onion	478	46840	98
23.	Cabbage	172	83420	485
24.	Moringa	1017	508500	500
25.	Cauliflower	47	9400	200
26.	Cashew	5520	27600	5

* Please provide latest data from authorized sources. Please quote the source

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April 2010	54.3	39.5	19.5	53.0
May 2010	61.2	40.5	23.0	51.5
June 2010	60.5	37.0	22.0	58.5
July 2010	70.9	36.5	22.5	62.0
August 2010	125.6	34.0	24.0	71.5
September 2010	73.3	37.5	21.5	51.5
October 2010	245.1	37.0	21.0	60.5
November 2010	59.8	32.0	17.0	59.5
December 2010	20.3	31.0	16.5	50.0
January 2011	3.7	33.0	15.0	52.5
February 2011	0	37.5	16.0	42.0
March 2011	1.4	37.3	21.5	54.4

* Please provide latest data from authorized sources. Please quote the source

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

Category	**Population**	**Production**	**Productivity**
Cattle			
Crossbred	74277	133698600 lt	10 lt
Indigenous	28663	20637360 lt	4 lt
Buffalo	39650	42822000 lt	6 lt
Sheep			
Crossbred	33515	837875 kg	25 kg
Indigenous	18732	374640 kg	20 kg
Goats	83454	2086350 kg	25 kg
Pigs			
Crossbred	9050	452500 kg	
Indigenous	12524	438340 kg	
Rabbits	1070	5350 kg	
Poultry			
Hens	244337	366506 kg	1.5 kg
Desi	44293	88586 kg	2 kg
Improved	147745	221618 kg	1.5 kg
Ducks	974	2435 kg	2.5 kg
Turkey and others	992	7936 kg	8 kg

Category	**Area**	**Production**	**Productivity**
Fish			
Marine			
Inland	20	10795 kg	540 kg
Prawn			
Scampi			
Shrimp			

* Please provide latest data from authorized sources. Please quote the source

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

2.8 Details of Operational area / Villages

Sl.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	**Uthamapalayam**	**Cumbum**	Puthupatti, Hanumanthanpatti, Kakilsikkayanpatti, Narayanathevanpatti	4 years	Grapes	1.Downy Mildew 2. Improper Water and Nutrient Management 3.Post harvest losses, Lack of knowledge about grape squash and juice preparation	Popularization of Integrated Disease Management, Popularization of Integrated Water Management, Popularization of Integrated Nutrient Management, Popularization of Processing and Value addition
					Banana	1.Low yield & low density of population and less productivity and profitability 2. Drudgery in banana fibre extraction 3.Nutrient deficiency 4.Sigatoka leaf spot 5. Pseudostem weevil 6.High labour requirement and Ineffective conventional Pit digging 7. Ineffective conventional waste disposal	Popularization of Integrated Crop Management, Popularization of Drudgery Reduction Technologies, Popularization of Integrated Nutrient Management, Popularization of Integrated Disease Management, Integrated Pest Management
					Coconut	1.Problem in tree climbing and Labour scarcity for coconut harvesting 2.Root wilt disease 3.Button Shedding	Popularization of Drudgery Reduction Technologies, Popularization of Integrated Disease Management, Popularization of Integrated Nutrient Management
		Uthamapalayam	Rayappan Patti, Chinnaovulapuram, Ammapatti, Ellapatti	4 years	Banana	1.Low yield & low density of population and less productivity and profitability 2. Drudgery in banana fibre extraction 3.Nutrient deficiency 4.Sigatoka leaf spot 5. Pseudostem weevil 6.High labour requirement and Ineffective conventional Pit digging 7. Ineffective conventional waste disposal	Popularization of Integrated Crop Management, Popularization of Drudgery Reduction Technologies, Popularization of Integrated Nutrient Management, Popularization of Integrated Disease Management, Popularization of Integrated Pest Management
					French Beans	Non availability of quality seeds,Cultivation of old varieties, Not following ICM practices	Varietal Introduction, Popularization of Integrated Crop Management
					Brinjal	1.Improper Nutrient Management and Micronutrients disorder 2.Mealy bug, Fruit borer 3.Vein clearing, Mosaic	Popularization of INM, Popularization of IPM, Popularization of IDM
		Chinnamanur	Sangarapram, Pottipuram, Kutchanoor, Chinnamanur, Markayan Kottai, Pullikuthi, Erasi	6 years	Betel vine	Improper betel vine cultivation with frequent incidence of Phytopthora wilt	Popularization of IDM
					Paddy	1. Brown Leaf Spot 2. High cost and Drudgery in weeding 3. Poor yield and Non availability of quality seeds 4.Yellow Stem Borer and Leaf Folder 5. Shealth Blight 6. High labour cost for	Popularization of IDM, Popularization of Drudgery Reduction Technologies, Hybrid Introduction, Popularization of IPM, Popularization of IDM

Sl.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
						manual transplanting	
					Cumbu	1.Poor yield 2.Iimproper Nutrient Management 3.Nutrient Deficiencies 4.Incidence of Heliothis 5.Ergot	Varietal Introduction , Popularization of INM, Popularization of IPM, Popularization of IDM
					Sunflower	1.Non availability of quality seeds 2.Poor seed setting 3.Improper Nutrient Management	Hybrid Introduction, Popularization of INM
					Groundnut	1.Non availability of quality seeds and improved varieties and practices 2.Nutrient deficiencies 3. Lack of Water availability	Varietal Introduction , Popularization of ICM,Popularization of INM, Popularization of IPM
2	**Bodinayakanur**	**Bodinayakanur**	Rasigapuram,Silamalai, Maniyampatti, Silamarathupatti, Dombucherry, Manickapuram, Bathrakalipuram	4 years	Cotton	1. Reddening of Leaf 2.Repeated use of old varieties and use of poor quality seeds 3. Mealybug 4.Whitefly 5.Imbalanced fertilizer application 6.Lack of drought tolerant varieties	Popularization of INM, Varietal Introduction , Popularization of IPM
					Cowpea	1.Poor yield 2.Nutrient deficiencies	Popularization of ICM,Popularization of INM
					Dairy Cattle	1.Mineral deficiency in Cattle 2.Infertility in dairy cows 3.Non-availability of quality fodder crops 4.FMD 5.Lack of knowledge on feed preparation 6.Lack of knowledge on fodder preservation 7.Lack of Veterinary services in Remote area 8.Non availability of quality fodders and non cultivation of new varieties under Mixed Fodder condition	Popularization of INM, Varietal Introduction , Popularization of ICM, Popularization of IDM
					Conservation of Agriculture	1.Exploitation of Natural Resources 2.Decreasing Soil Fertility 3.Moving Agro Ecological Zones 4.Drought	Popularization of Conservation of Agriculture
3	**Theni**	**Theni**	Kottur, Seelayampatti, Kuppinayakkanpatti , VC puram, Jangalpatti, Alagapuri	6 years	Paddy	1. Brown Leaf Spot 2. High cost and Drudgery in weeding 3. Poor yield and Non availability of quality seeds 4.Yellow Stem Borer and Leaf Folder 5. Shealth Blight 6. High labour cost for manual transplanting	Popularization of IDM, Popularization of Drudgery Reduction Technologies, Hybrid Introduction, Popularization of IPM
					Maize	1. Improper Nutrient Management 2. Micro nutrient deficiencies	Popularization of INM

Sl.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
					Redgram	1.Lower yield due to unpredictable and erratic rainfall 2.Poor germination and poor field establishment 3.Non availability of quality seeds and cultivation of old varieties 4.Pod borer 5.Iimproper Nutrient Management 6.Pulse beetle during storage	Popularization of ICM, Varietal Introduction , Popularization of INM, Popularization of IPM
					Green gram	1.Non availability of quality seeds and cultivation of old varieties 2.Deficit water supply 3.Improper Nutrient Management 4.Pod borer	Varietal Introduction , Popularization of Integrated Water Management Popularization of INM, Popularization of IPM
					Black gram	1.Non availability of quality seeds and cultivation of old varieties 2.Improper Nutrient Management 3.Pod borer	Varietal Introduction , Popularization of INM, Popularization of IPM
					Poultry Farming	Ranikhet disease in Desi Chicken	Popularization of IDM
4	**Periyakulam**	**Periyakulam**	Lakshmipuram, Kumbakarai	3 years	Sugarcane	1.Low yield and quality of Cane 2.Improper Nutrient Management 3.Heavy Labour Requirement	Popularization of INM, Popularization of Drudgery Reduction Technologies,
					Mango	1.Improper Nutrient Management and Nutrient deficiency 2.Non Flowering	Popularization of INM, Popularization of ICM
					Sericulture	1.Poor yield 2.Mealy bug 3.Nutrient deficiency 4.Poor management of Mulbery	Varietal Introduction , Popularization of IPM, Popularization of INM, Popularization of ICM
5	**Andipatti**	**Myladumparai**	Kandamanur, Kadamalaikundu, Thangammalpuram, Bommarajapuram	3 years	Cashew	1.Tea Mosquito Bug menace 2.Unutilised cashew apple	Popularization of IPM, Popularization of Processing and Value addition
					Cardamom	Thrips infestation in berries	Popularization of IPM
					Tomato	1.Fruit Cracking and poor nutrient management 2.Fruit borer infestation	Popularization of INM, Popularization of IPM
		Andipatti	Renganathapuram, Boominayakanpatti, Kathirnarasingapuram	3 years	Sorghum	1.Poor quality seeds 2.Cultivation of old varieties 3.Nutrient Deficiency 4.Shootfly	Varietal Introduction , Popularization of INM, Popularization of IPM
					Moringa	1.Fruit fly incidence, 2.Flower dropping 3.Poor knowledge about nutritive value of moringa	Popularization of IPM, Popularization of INM, Popularization of Processing and Value addition
					Castor	1.Poor yield 2.Poor Nutrient Management, 3.Spodoptera, Semi lopper, Capsule borer 4.Seed damage during Manual shelling and high cost of Manual shelling	Hybrid Introduction, Popularization of INM, Popularization of IPM, Popularization of Drudgery Reduction Technologies

Sl.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
						Lack of knowledge about household food security	Popularisation of Nutrition Garden
						Under utilized agricultural waste, More time for collection o fuel wood by rural women,Environmental pollution of smoke during cooking	Popularisation of Biomas Stove
						Underutilized fruits and vegetables	Popularization of Processing and Value addition
						High labour cost and unavailability of labour and Drudgery among farm women	Popularisation of Drudgery Reduction Technologies
					Home Science	Lack of knowledge about women and child care	Education on women and child care
						Less awareness on food resources for Pregnant and lactating mother	Education on Nutrition for Pregnant and lactating mother
						Less awareness on food resources for adolescent girls	Education on Nutrition for Adolescent girls
						Low income and less employment opportunity for rural women	Empowerment of rural Women through vocational training
						Mal nutrition among chidden	Popularisation of Low Cost Nutrient Mix

2.9 Priority thrust areas

S. No	Thrust area
1	Varietal/ Hybrid Introduction
2	Popularization of Integrated Disease Management
3	Popularization of Integrated Nutrient Management
4	Popularization of Integrated Pest Management
5	Popularization of Integrated Crop Management
6	Popularization of Drudgery Reduction Technologies
7	Popularization of Processing and Value addition
8	Popularization of Conservation of Agriculture

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
10	10	91	97	19	19	214	204

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
144	174	2880	3787	1116	1030	9800	12474

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
20 q	53.5 q	3000 Nos	3000 Nos

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
15	2	1100 kg	7159 kg

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	
													No	Kg
1	Integrated Disease Management	Paddy	1. Brown Leaf Spot 2. High cost and Drudgery in weeding 3. Poor yield and Non availability of quality seeds 4.Yellow Stem Borer and Leaf Folder 5. Shealth Blight 6. High labour cost for manual transplanting	1.Assessment of Management of Brown Leaf Spot in Paddy 2.Assessment of Performance and Suitability of various Weeders in SRI Paddy Cultivation	1. IPM in Paddy and Management of yellow stem borer and leaf folder in paddy 2. CORH 3 rice hybrid with SRI with management of Sheath blight in Paddy 3. Mechanised Paddy Farming.	15	-	-	39	Seed – 8 kg	-	-	Azadirachtin 1 % Trichogramma japonicam Pheromone traps Trichogramma chilonis Azospirillum Phosphobacteria Pseudomonas Pseudomonas fluroscens	500 ml/ha 5 cc/ha 12 /ha 5 cc/ha 13 pkts 13 pkts 100 gm 17 kg
2	Integrated Nutrient Management	Maize	1. Improper Nutrient Management 2. Micro nutrient deficiencies	-	Popularization of ICM with TNAU Maize Maxim	4	-	-	13		-	-	-	-
3	Varietal Introduction	Sorghum	1.Poor quality seeds 2.Cultivation of old varieties 3.Nutrient Deficiency 4.Shootfly	-	1.Cultivation of CO(S) 28 Sorghum	8	-	-	23	Seeds – 37.5 kg	-	-	Azospirillum Phosphobacteria	13 pkts 13 pkts
4	Integrated Crop Management	Redgram	1.Lower yield due to unpredictable and erratic rainfall 2.Poor germination and poor field establishment 3.Non availability of quality seeds and cultivation of old varieties 4.Pod borer 5.Iimproper Nutrient Management 6.Pulse beetle during storage	Assessment of Suitable Planting Method in Redgram		1	-	-	11	LRG 41 – 40 kg	-	-	-	-
5	Integrated Crop Management	Green gram	1.Non availability of quality seeds and cultivation of old varieties 2.Deficit water supply 3.Improper Nutrient Management 4.Pod borer	-	1)Cultivation of CO 7 Green gram 2.Introduction of Mini Mobile Sprinkler	9	-	-	24	Seed – 25 kg	-	-	Trichoderma viride Rhizobium Phosphobacteria	200 gm 13 pkts 13 pkts
6	Integrated Nutrient Management, and Integ	Cotton	1. Reddening of Leaf 2.Repeated use of old varieties and use of poor quality seeds 3. Mealybug 4.Whitefly 5.Imbalanced	Assessment of Leaf Reddening Management in Cotton	1.Mealybug Management in Cotton	9	-	-	12	-	-	-	-	-

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	
													No	Kg
	rated Pest Management		fertilizer application 6.Lack of drought tolerant varieties											
7	Integrated Crop Management	Sugarcane	1.Low yield and quality of Cane 2.Improper Nutrient Management 3.Heavy Labour Requirement		Popularization of ICM with TNAU Sugarcane Booster	6	-	-	7	-	-	-	-	-
8	Integrated Disease Management	Grapes	1.Downy Mildew 2. Improper Water and Nutrient Management 3.Post harvest losses, Lack of knowledge about grape squash and juice preparation	Assessment of Management of Downy Mildew in Grapes		3	-	-	11	-	-	-	-	-
9	Integrated Crop Management	Banana	1.Low yield & low density of population and less productivity and profitability 2. Drudgery in banana fibre extraction 3.Nutrient deficiency 4.Sigatoka leaf spot 5. Pseudostem weevil 6.High labour requirement and Ineffective conventional Pit digging 7. Ineffective conventional waste disposal	1.Assessment of Suitable method of planting in Banana for higher productivity	1. Drudgery reduction in Banana Fibre Extraction 2.IIHR Banana Special in nutrient management 3. IDM in Banana with Management of Sigatoka Leaf Spot in Banana 4.IPM in Banana with Management of Pseudostem weevil	28	-	-	94	-	Suckers - 9880	-	Baevaria bassiana	6 kg
10	Integrated Pest Management	Cashew	Tea Mosquito Bug menace 2.Unutilised cashew apple	-	Management of Tea mosquito bug in Cashew	2	-	-	5	-	-	-	-	-
11	Integrated Disease Management	Betel vine	Improper betel vine cultivation with frequent incidence of Phytopthora wilt	Assessment of Management of Phytopthora Wilt in Betel vine	-	2	-	-	10	-	-	-	Trochoderma Neem Cake	10 kg 300 kg
12	Integrated Nutrient Management	Brinjal	1.Improper Nutrient Management and Micronutrients disorder 2.Mealy bug, Fruit borer 3.Vein clearing, Mosaic	-	INM in Brinjal	1	-	-	2	-	-	-	-	-
13	Integrated Nutrient Management	Mango	1.Improper Nutrient Management and Nutrient deficiency 2.Non Flowering	-	INM in Mango	1	-	-	6	-	-	-	-	-
14	Varietal Introduction	French Beans	Non availability of quality seeds, Cultivation of old varieties, Not following	Assessment of new French Bean variety –	Popularization of Arka Suvidha	2	-	-	7	Seeds – 195 kg	-	-	-	-

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	
													No	Kg
			ICM practices	Arka Anoop										
15	Animal Cattle Management	Dairy Cattle	1.Mineral deficiency in Cattle 2.Infertility in dairy cows 3.Non-availability of quality fodder crops 4.FMD 5.Lack of knowledge on feed preparation 6.Lack of knowledge on fodder preservation 7.Lack of Veterinary services in Remote area 8.Non availability of quality fodders and non cultivation of new varieties under Mixed Fodder condition	Assessment of area specific mineral mixture For Dairy Cows	1. Popularization of Mixed Fodder	2	-	-	4	CoFS-29 – 5 kg Desmanthus – 5 kg Agathi – 2.5 kg Subabul – 5 kg	Cumbu napier Co-4 - 20,000 sets	-	-	-
16	Poultry Disease Management	Poultry farming	No Vaccination or Management for Ranikhet disease in Desi Chicken	Assessment of Oral Pellet Vaccination in Desi Chicken	-	-	-	-	1	-	-	-	-	-
17	Home science Management	Home science	1.Not keeping vegetables in preservators and less shelf life under open condition 2.Labour scarcity 3.Post harvest loss 4.Malnutrition among children	-	Introduction of vegetable preservator (CRIDA model)	4	-	-	9	-	-	-	-	-

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	Extension Activities
1	2	3	4	5	6	7	8
1	Assessment of Suitable Planting Method in Banana for higher profitability	NRCB, Trichy	Banana	1	-	7	22
2	Assessment of Management of Downy Mildew in Grapes	NRCG	Grapes	1	-	3	11
3	Assessment of Management of Phytopthora Wilt in Betel vine	TNAU	Betelvine	1	-	2	10
4	Assessment of Management of Brown Leaf Spot in Paddy	CRRI, Cuttack	Paddy	1	-	5	7
5	Assessment of Performance and Suitability of various Weeders in Paddy Cultivation	KVK, Madurai	Paddy	1	-	3	2
6	Assessment of new French Bean variety – Arka Anoop	IIHR, Bangalore	French Bean	1	-	1	5
7	Assessment of Leaf Reddening Management in Cotton	Farmers Innovation	Cotton	1	-	5	4
8	Poultry Farming	TANUVAS, Chennai	Desi Chick	1	-	-	1
9	Dairy Farming	TANUVAS, Chennai	Dairy	1	-	-	1
10	Assessment of Suitable Planting Method in Redgram	UAS, Dharwad	Redgram	1	-	1	11

11	Popularization of Co S 28	TNAU	Sorghum	-	1	4	13
12	Popularization of ICM with TNAU Sugarcane Booster	TNAU	Sugarcane	-	1	6	7
13	Popularization of ICM with TNAU Maize Maxim	TNAU	Maize	-	1	8	23
14	ICM in Banana and IIHR Banana special in nutrient management	IIHR	Banana	-	1	7	22
15	IPM in Paddy and Management of yellow stem borer and Leaf folder in paddy	TNAU	Paddy	-	1	5	11
16	IDM in Banana with Management of Sigatoka Leaf Spot in Banana	TNAU	Banana	-	1	6	17
17	Introduction of vegetable preservator (CRIDA model)	CRIDA	Vegetable Preservator	-	1	4	9
18	Introduction of Mini Mobile Sprinkler	TNAU	Greengram	-	1	4	15
19	CO RH 3 Hybrid with SRI with management of Shealth blight in Paddy	TNAU	Rice	-	1	3	11
20	Popularization of Arka Suvidha	IIHR	French Bean	-	1	1	5
21	Popularization of Mixed Fodder	TANUVAS	Fodder	-	1	2	4
22	IPM in Banana with Management of Pseudostem weevil	NRCB	Banana	-	1	5	6
23	Drudgery reduction in Banana Fibre Extraction	Farmers Innovation	Banana	-	1	3	7
24	Management of Tea mosquito bug in Cashew	TNAU	Cashew	-	1	2	5
25	Mealybug Management in Cotton	TNAU	Cotton	-	1	4	3
26	INM in Brinjal	IIHR	Brinja	-	1	1	2
27	INM in Mango	IIHR	Mango	-	1	3	9
28	Mechanized Paddy Farming	TNAU	Paddy	-	1	1	7
29	Introduction of improved variety Co(Gg)-7 with seed rate of 25 Kg/ha	TNAU	Greengram	-	1	5	9
				10	**19**	**101**	**259**

3.B2 contd..

No. of farmers covered															
OFT				**FLD**				**Training**				**Extension Activities**			
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**
3	-	-	-	-	-	-	-	59	9	18	21	125	12	7	0
5	-	-	-	-	-	-	-	27	-	8	1	44	-	5	-
5	-	-	-	-	-	-	-	26	-	-	-	57	-	5	-
5	-	-	-	-	-	-	-	36	33	7	-	60	2	10	-
5	-	-	-	-	-	-	-	36	14	2	8	65	6	3	-
5	-	-	-	-	-	-	-	10	2	5	2	17	-	6	-
5	-	-	-	-	-	-	-	25	-	-	-	33	7	-	-
40	10	-	-	-	-	-	-	-	-	-	-	30	6	10	-
8	2	-	-	-	-	-	-	-	-	-	-	8	2	-	-
4	-	-	-	-	-	-	-	8	4	-	-	72	3	-	-
-	-	-	-	12	-	-	-	45	4	1	-	140	14	-	6
-	-	-	-	10	-	-	-	72	17	19	19	92	17	21	8
-	-	-	-	10	-	-	-	89	14	4	-	221	16	8	9
-	-	-	-	12	-	-	-	-	3	59	4	8	2	78	4
-	-	-	-	12	-	-	-	50	24	12	9	49	15	2	2
-	-	-	-	12	-	-	-	69	28	9	8	130	27	21	11
-	-	-	-	-	8	-	2	-	52	-	14	-	67	-	42
-	-	-	-	-	10	-	2	37	35	26	19	64	12	5	7
-	-	-	-	12	-	-	-	72	29	3	19	131	12	7	-
-	-	-	-	8	-	2	-	7	4	2	1	35	20	8	3
-	-	-	-	-	10	-	10	-	-	7	5	-	-	49	27
-	-	-	-	10	-	-	-	36	22	7	10	44	12	15	7
-	-	-	-	-	8	-	2	-	27	-	23	-	62	-	27
-	-	-	-	10	-	-	-	10	8	10	4	30	40	47	20
-	-	-	-	12	-	-	-	48	-	10	-	33	-	13	-
-	-	-	-	10	-	-	-	10	-	1	-	27	-	4	-
-	-	-	-	5	-	5	-	35	14	9	25	85	12	32	-
-	-	-	-	-	5	-	5	-	7	-	5	-	23	-	12
-	-	-	-	12	-	-	-	-	3	59	4	8	2	78	4
85	**12**	**-**	**-**	**147**	**41**	**7**	**21**	**807**	**353**	**278**	**201**	**1608**	**391**	**434**	**189**

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				1						1
Varietal Evaluation										
Integrated Pest Management										
Integrated Crop Management			1		1	1				3
Integrated Disease Management	1					1		1		3
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**		**1**	**1**	**1**	**2**		**1**		**8**

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

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										
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										
Mushroom cultivation										
Total										

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	1					1
Disease of Management		1				1
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL	**1**	**1**				**2**

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

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	Cotton	Leaf Reddening Management in Cotton	5	5	6
Varietal Evaluation	French Bean	New French Bean Variety – Arka Anoop	5	5	3
Integrated Pest Management					
Integrated Crop Management	Banana	Suitable Planting method in Banana for higher profitability	3	3	0.9
	Red gram	Assessment of Suitable Planting Method inRedgram	4	4	2.4
Integrated Disease Management	Grapes	Management of Downy Mildew in Grapes	5	5	3
	Betelvine	Management of Phytopthora Wilt in Betelvine	5	5	3
	Paddy	Management of Brown Leaf Spot in Paddy	5	5	3
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					

Value addition					
Drudgery Reduction	Paddy	Assessment of Performance and suitability of various Weeders in SRI Paddy Cultivation	5	5	6
Storage Technique					
Mushroom cultivation					
Total			**37**	**37**	**27.3**

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					
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					
Mushroom cultivation					
Total					

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	Cow	Assessment of regular mineral mixture	10	10
Disease management	Poultry	Assessment of oral pellet vaccination in Desi Chicken	50	50
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total			**60**	**60**

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

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
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
Grapes	Irrigated	1. Heavy incidence leading to severe reduction in yield.2.Indiscriminate use of different combination of fungicides. 3. Downy mildew incidence in grapes in an area of 50 ha among 100 Puthupatti farmers.	Assessment of Management of Downy Mildew in Grapes	5	AP 1 Four Spray of Copper hydroxide 2gm/lt at 15-20 days interval to cover entire rainy period **Source: NRCG** AP 2 Spray Copper Fungicides (Bordeaux mixture 0.5%, Copper Oxide 2%,or COC 0.3%) **Source IIHR, Bangalore**	% of incidence at different levels, control efficiency, Percentage of damaged fruits, Percentage of Yield increase and Quality of fruits, yield, BCR	**% of incidence at different levels**. **New Leaf Formation Stage:** FP: 60.94, RP: 60.96, AP1: 61.2, AP2: 61.8, **Vegetative Stage:** FP: 30.46, RP: 35.66, AP1: 23.34, AP2: 29.3, **Fruiting Stage:** FP: 16.32, RP: 16.66, AP1: 18.24, AP2: 18.48, **Control efficiency %, New Leaf Formation Stage:** FP: 49.9, RP: 51.0, AP1: 34.8, AP2: 41.9, **Vegetative Stage:** FP: 50.4, RP: 50.0, AP1: 50.01, AP2: 58.9, **Fruiting Stage:** FP: 14.3, RP: 33.3, AP1: 48.5, AP2: 62.2, **Percentage of damaged fruits:** FP: 11.11, RP: 9.64, AP1: 4.58, AP2: 1.3, **Percentage of yield increase** , RP: 9.8, AP1: 24.5, AP2: 39.1, **Yield:**FP: 20.46, RP: 22.48, AP1: 25.48, AP2: 28.46**Quality of fruits:** FP: Poor, RP: Moderate, API: Good., APII: Very Good, **BCR:** FP:2.18,RP:2.39 ,AP I:2.71,APII:3.05	The yield in AP2 i4664 t/ha which is 39.1% increase over farmer practice.	Successive dose of copper fungicides prevent the disease spread. These doses have to be applied alternated with different trades and fresh preparations.		
Betel vine	Irrigated	1.Heavy incidence leading to heavy yield loss 2.Non adoption of modern technologies for the management of the disease 3. Improper betel vine cultivation with frequent incidence of Phytopthora wilt in an area of 5 ha among 20 Chinnamanur farmers.	Assessment of Management of Phytopthora Wilt in Betel vine	5	**Integrated Method for the Management of Phytophthora Wilt:** 1.Apply 150 kg N/ha/year through Neem Cake (75 Kg N) and Urea (75 Kg N) and 100 kg P_2O_5 through Super phosphate and 30 kg Muriate of potash in 3 split doses first at 15 days after lifting the vines and second and third dose at	% of incidence at different levels, control efficiency, Plant height, Number of branches per vine, Number of leaves per plant, yield, BCR	**% of incidence of different levels: Vegetative Stage:** FP: 18.6, RP: 4.38, AP: 12.32, **Harvesting Stage:** FP:20.06.RP:4.61, AP:2.71, **Control efficiency(%):** FP: 12.5, RP: 93.06, AP: 98.41, **Plant Height (Cm):** FP: 215.73, RP: 226.09, AP: 235.71, **No of branches per vine** FP: 7, RP: 8, AP: 7, **No of leaves per plant** FP: 170 to 191,	The yield in Alternate Practice is 8.57 t/ha. This is 8.04% increase over recommended Practice and 31.39% increase over Farmers Practice.	The alternate practice with Neem cake application, Urea application, Super Phosphate increased the strength of vine. Together with this control measures with Bordeaux mixture 1% Calotrophis leavess		

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
					40-45 days intervals. Apply on beds, shade dried neem leaves or Calotrophis leaves at 2 t/ha and cover it with mud (2 t in 2 split doses) 2.Drench Bordeaux mixture 1% in basins formed around the vine at monthly intervals starting from October – January, three times soil drench and six times spray from June-July 3.During winter season avoid frequent irrigation 4.Remove the affected vines way from the garden and burn them 5.Application of Alliette (Chlorathaloni l) 3 g/lt 4 times monthly intervals 6.Application of Trichoderrma Viride @ 5 g/vine **Source: TNAU,Coimbatore**		RP: 172 to 193, AP: 175 to 195, **Yield** FP: 6.55 t/ha, RP: 7.95 t/ha, AP: 8.57 t/ha, **BCR:** FP: 1.5, RP: 2.0, AP: 2.4		application with monthly interval, suitable plant protection measures such as application of Trichoderma helps to control phytophthora wilt in betelvine. Though Sirugamani-1 gives resistance, the leatheriness and high pungency leads to non preference among people.		
Paddy	Irrigated	This disease has a worldwide distribution, and it has been reported in all rice growing tracts of Tamil Nadu during last year. The disease causes blight of seedlings grown from heavily infected seeds. These symptoms will appear during panicle initiation stage and also affected the grains. Farmers do not adopt preventive measures at the time of initial stage of the crop. Hence the assessment of technologies achieves expected results in control of disease which in turn results in good quality of seeds and higher yield. High incidence of brown leaf spot in paddy in an area of 150 ha among 200	Assessment of Management of Brown Leaf Spot in Paddy	5	Seed treatment with *P fluroscence* @ 10g/ kgs of seeds + Seedling treatment with *P. fluroscens* @ 2.5 kg/ hectare @ Application of *P. fluroscens* @ 1 kg/ acre at 30 days after transplanting @ Foliar application of *P. fluroscens* @ 2.5 kg/ hectare at 45 DAT + Spraying Tricyclazole 75 WP @ 1gm /lit with the help of hand operated knapsack sprayer. **Source: CRRI,**	% of incidence at different stages, control efficiency, Percentage of infested tillers, Percentage of Yield increase and Quality of grains, yield, BCR	% of incidence at different stages Tillering Stage:95.3, Flowering Stage :89.4, Maturity Stage :81.7 Control Effeciency (%) Tillering Stage :10.01, Flowering Stage : 8.72, Maturity Stage :3.54 Percentage of infested tillers FP:95.4%, RP:89.1%, AP:81.8%. Quality of grains: good, Yield FP:3990 Kg/ha, RP: 6092 Kg/ha, AP:6561 kg/ha, yield increase (%) RP:53.08, AP:64.40, BCR: FP:1.32, RP:2.02, AP:2.18	The yield in Alternate Practice is 6561 Kg/ha with yield increase of 64.40 over FP. Similarly the yield of recommended practice is 6092 Kg/ha than the farmers Practice 3990 Kg/ha which is 53.08 percent yield increase over control.	Seed and seedlings treatment, soil application, foliar application of Pseudomonas itself give resistance against the spread of Brown Leaf Spot and keep the spread of disease under check.		

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
		Markayankottai farmers.			**Cuttack.**						
French Beans	Irrigated	In the last two decades, the farmers are cultivating the French Beans as a remunerative crop. But the farmers are cultivating old variety and its having the characteristics of more fibre content and susceptible to rust diseases. The assessment of new variety having the following marketable characters like; 1.Resistant to bacterial and rust diseases 2.Plants are bushy and photo-insensitive 3.Pods are ready to harvest in 45 days after sowing 4.Pods are flat, smooth, long (17-18 cm) and crisp with less parchment 5.Average yield of 20t/ha in 70 days 6. French beans (Phaseolus Vulgaris) are a predominant vegetable crop in Theni District. Though the crop is more remunerative for the past 15 years, the farmers are cultivating the same variety named Arka Komal. Consumer preference was very low for this variety due to its high fibre content and stringy characters. The farmers are not aware of the newly released varieties crop in an area of 100 ha among 70 Ellapatti farmers.	Assessment of new French Bean variety – Arka Anoop	4	Arka Anoop + 135:135:135 NPK per Ha + seed treatment with carbendezim 4 gram per kg seed, FYM: 25 tons per Ha. (basal application), Justification: Plants resistant to bacterial and rust Disease, plants are bushy, photo insensitive, developed between (Arka bold X Arka komal), pods are flat, smooth long (17-18 cm), crispy less parchment, yield (20 tons/ha)	Parameters to be assessed: 100 pod Weight, Pod colour ,Yield , B:C Ratio. Consumer preference Test weight, Pod colour, Yield, Market preference, B:C ratio	**Test Weight:** FP: 139.6 gm, RP:139.92gm, AP:172.86gm. **Yield:** FP:8.4t/ha, RP:8.5 t/ha, AP:13.8 t/ha, BC Ratio: FP:1.8 RP:2.04: AP:2.85	The test weight of the Arka Anoop is 172.8gm followed by Arka Komal is 139.92gm and local variety: 139.6gm. The seed color is purple. The yield of Arka Anoop is 13.8 t/ha followed by Arka Komal 8.5 t/ha and in FP 8.4 t/ha The yield increase is 83.9% in Arka Anoop over Arka Komal variety.	The farmers revealed planting of Arka Anoop give resistance to bacterial rust disease found bushy in nature pods are flat, smooth, long and crispy in nature and less parchment and the yield is more compared to other varieties.		
Cotton	Irrigated	1. Reddening of leaf in cotton, 2. Reduced Boll size, 3. Poor boll bursting, 4. Reduced yield, 5. Reddening of leaf in cotton in an area of 50 ha among 150 Rasingapuram farmers.	Assessment of Leaf Reddening Management in Cotton	3	Variety: SVPR 2, Fertilizer: 80:40:40 Kg NPK/ha, Basal application 25 kg/ha of $MgSO_4$, Foliar application: 3% $MgSO_4$ **Source: Farmer's Innovation**	Percentage of reduction in magnesium efficiency, yield,BCR.	% reduction in magnesium deficiency FP: 19.74, RP: 90.25, AP: 91.25. yield: FP:1335.3 kg/ha, RP:1738 Kg/ha, AP:1804 kg/ha, BCR: FP: 1.60, RP:1.80, AP:1.89	The yield of cotton under alternate practice is 1804 kg/ha which is proportionally equal to recommended practice 1738 kg/ha in recommended practice. The spray of 5% MgSo4 caused scorching effect in one tenth of the plants. Hence the leaves shown burnt appearance. The yield under farmer	Farmers understood the importance of 3% MgSo4 spray in reducing leaf reddening in cotton and also realized the effect of increased percentage of spray solution		

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
								practice is 1335.3 kg/ha which showed lowest yield than other 2 practices			
Redgram	Rain fed	1. To produce healthy seedlings through protray method 2. Transplanting, 3. Lower yield due to unpredictable and erratic rainfall, 4.Poor germination and poor field establishment in an area of 50 ha among 50 Kuppinayakkanpatti farmers.	Assessment of Suitable Planting Method in Redgram	4	Seedlings raised in Polythene bags and transplanted in Main field **Source: UAS, Dharwad**	Field stand and establishment, Cost of cultivation, labour requirement, yield, BCR	Germination Percentage FP:60.83%, RP:72.19%, AP:97.6%. Plant population/m2 FP:9.2, RP:10.8, AP:11.6. No. of Pods/plant FP: 612/plant, RP:657/plant, AP:700/plant. Yield: FP: 0.825 t/ha, RP:1.075 t/ha, AP:1.13 t/ha. BCR FP: 2.047, RP:2.12, AP: 2.67	The yield of Red gram in transplanted method assures good return with 1.13 t/ha followed by seed dibbling method which was recommended earlier with an average yield of 1.075 t/ha. In transplanted method the causalities can be substituted with seedlings raised in polythene bags	The alternate practice (transplanting method) was found effective in Redgram planting and it give more return more population occurred in this method.Also delayed transplanting leads to flower dropping.		
Banana	Irrigated	The productivity of input and profitability of banana growers is decreasing and cost of cultivation is increasing every year. To improve the productivity of inputs and chances in the method of planting is important. Assessing the method of planting will provide solution to achieve higher productivity, profitability and remunerative income within the available resources. Low yield & low density of population and less productivity and profitability in an area of 250 ha among 200 Rayappanpatti farmers.	Assessment of Suitable Planting Method in Banana for higher profitability	3	High density planting with the spacing of 1.8 x 3.6 (three suckers per pit=4630 suckers/ha).Higher population, higher yield and higher profitability **Source : NRCB, Trichy**	Number of hands/ bunch Number of fingers/bunch, Bunch weight, Yield/ham BCR	OFT is under progress				
Paddy	Irrigated	Mechanized farming is slowly get acceptance in many areas to overcome the labour shortage. In rice cultivation, weeding is a major concern to determine the yield of the crop. Though different type of weeders (Motorized weeder, Cono weeder and rotary weeder) is used for controlling weeds, ergonomics play a major role in success of every implement. The usage of weeder are	Assessment of Performance and Suitability of various Weeders in Paddy Cultivation	2	Multi Row Power Weeder **Special Features:**1.Weeder for SRI rice at row spacing of 22 to 26 cm.2.Light weight weeder (17 Kg) and suitable for all soils.3.Self propelled weeder – no need to push or pull.4.Can be operated and lifted by	Area coverage ,Weed control efficiency, Drudgery reduction, Time and labour required, Weed control efficiency, Drudgery reduction, No. of productive tillers/hill, Yield, B:C ratio	OFT is under progress				

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
		measured in term of ergonomics, implement use efficiency, weed control efficiency, tillering efficiency of rice crops and economics are worked out for both the weeders. The yield of rice crop was mainly determined by weeding and proper nutrient management practices. Now the district is facing acute labour shortage for agricultural work. Due to this, weeding operation was not carried out in time. The weeds are compete with main crops for nutrient, water, light and spacing and finally the weeds are occupied major area within a short span and reduce the yield of main crop in an area of 200 ha among 300 Kutchanoor farmers.			one person easily to change rows.5.Complete cutting of weeds at a depth of 3 to 4 cm with less than 1% plant damage **Source: TNAU, Coimbatore**						
Poultry Farming		Assessment of Oral Pellet Vaccination in Desi Chicken, No Vaccination or Management for Ranikhet disease in Desi Chicken in an area of 1000 birds among 50 Ellapatti farmers.	Assessment of oral pellet vaccination in Desi Chicken	1000 birds	1.Oral Pellet ranikhet Vaccine on the 7^{th} to 14^{th} day. 2.RDVK-Subcutaneous 8^{th} and 16^{th} week. **Source: TANUVAS, Chennai**	1.One drop of blood in filter paper on 8^{th} week both in Non vaccinated (5% of the birds) and Vaccinated flock (10% of birds) 2.Mortality pattern age wise	OFT is under progress				
Dairy Farming		Assessment of regular mineral mixture, Irregular mineral supplementation in a minimum of 3 cows among 10 farmers.	Assessment of regular mineral mixture	30 cows	**Area Specific Mineral Mixture:** 30-50 g/day continuously for one year from the first day after calving **Source: TANUVAS, Chennai**	1.Milk yield during the lactation period 2.Onset of first estrum after calving 3. No. of Insemination required for conception.	OFT is under progress				
Results of OFTs completed for the year 2009-10											
Banana	Irrigated	The productivity of input and profitability of banana growers is decreasing and cost of cultivation is increasing every year.	Assessment of Suitable Planting method in Banana for higher profitability	6	High density planting with the spacing of 1.8 x 3.6 (three suckers per pit=4630 suckers/ha).Higher population, higher yield and higher profitability **Source: NRCB, Trichy**	Number of fingers/bunch, Bunch weight, Yield/ha BCR	No. of fingers/bunch: FP: 28.7, RP: 30.2, AP: 29.6. No. of bunches FP: 13.8, RP: 15.2, AP: 14.1, Weight of finger: FP: 325g, RP: 342g, AP: 331g, bunch Weight: FP: 48.7 kg, RP:49.1 kg, AP: 48.9 kg. Yield:FP:96.1 tn/ha,RP:105.3 tn/ha,AP:101.8 tn/ha.BCR:FP:2.1,RP:2.5,AP:2.7.	The yield of banana is found higher in recommended practice 105.3 t/ha which is 15.58% increase over conventional farmers Practice 96.1 t/ha and 10.89% increase over Alternate Practice 101.8 t/ha.	The farmers expressed the yield in paired row system is found more than alternate and farmers practice., even though the cost of cultivation is found equal to Farmers Practice. Though		

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
									the yield in Alternate Practice is optimum the cost of cultivation is deduced it is reflected in more benefit than Recommended Practice.		
Banana	Irrigated	The disposal of pseudo stem after the harvest of banana is a lab our and cost intensive. The demand for the natural fibre at national and international level is high. Nowadays the banana fibre is one of the alternatives for natural fibre for making high quality sarees and currency. The higher quality of the fibre generally getting by hand stripping but hand stripping involve drudgery and outcome is very less and a non profitable enterprises.	Approaches for drudgery reduction and quality improvement of banana fibre	5	Retting by means of biological organism (CAP enzyme @ 10 ml mixed with 50 ml of water and diluted with 5 litres and keeping for 12 hours) Retting process increase the out come and more utilization of pseudo stem and better marketability. **Source: Innovative Farmers**	Fibre quality, drudgery %, fibre thickness& strength, outcome %, BCR	The % fibre available from banana pseudostem FP:122, RP:113, AP: 106, T4: 104, Fibre Outcome: Kg/hr FP:0.348, RP:0.53, AP 0.89, AP: 0.54, Fibre Thickness(mm): FP:0.113, RP:0.114, AP: 0.113, AP: 0.116 BCR: APII: 3.07. API: 3.57, RP: 3.07, FP: 3.45	Low drudgery found in treatment 4 followed by T3 with 104% and 106% respectively. High quality of fibre was available in retting with biological CAP enzyme which was found in T3 with 0.89 mean fiber thickness.	It was found that the fibre extraction was very easy with biological retting process which reduced the drudgery with high profit compare to hand stripping method		
Goat	-	Low weight and low productivity in Goat. Goat husbandry is an important source of livelihood for the rural poor, particularly for the women, land less and marginal farmers. Goat is ideally suited for the poorest of the poor, because of short gestation period, Low risk capital investment and low cost of maintenance. But, due to the indiscriminate breeding and absence of elite bucks of good breeds, there has been severe genetic erosion, resulting in low weight at birth, poor growth and susceptibility to various diseases.	Assessment of Goat Breeding	25	AI with Tellichery goat semen	Body weight gain, number of kids/birth, BCR	**Body weight:** FP: 1.18 Kg, RP: 2.29 Kg, AP: 1.74 Kg, No. of **Kids/birth:** FP: 1.8, RP: 1.6, AP: 2.1, BCR: FPI 4.81, RP: 4.83, AP: 5.36	In artificial insemination with Boer goat semen the body weight increased up to 2.29 kg followed by the A.I with Tellicherry goat semen increased upto 1.18 kg. Instead the Boer goat give birth to 1.6 kid and Tellicherry goat give birth to 2.1 kid and 1.8 in natural breeding.	The goat growers preferred goat breeding under A.I with Tellicherry goat semen than other two process		
Milch Cow	-	The quality of cow milk is low due to improper uptake of fodder and low conversion of feed into milk	Effect of EM in uptake efficiency, cost reduction, quality and milk production	10	Green fodder 10-15 kg/cow / day Dry fodder 5 kg / cow/ day Concentrate feed 1.5- 2 kg / cow / day Mineral mixture-25-30 gm / cow day EM bokashi 200 gm / cow / day .	Milk yield, SNF %,Fat %,B:C Ratio	**Milk yield:** FP: 1215 lt/10 months, RP: 1535 lt/10 months, AP: 2055 lt/10 months, **SNF%:** FP: 7.8, RP: 7.9, AP: 8.1, **Fat%**: FP: 3.5, RP: 3.8, AP: 4.2, BCR: AP: 3.52, RP: 3.10, FP: 2.90	The milk yield in AP (2055 lt/cow/ 10 months) was found highest followed by RP (1535 lt/cow/ 10 months). The cows fed with unscientific	The cattle growers appreciated the practice adopted in T3 for increasing the productivity of milk and at the same time the		

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
					EM solution 40 ml /cow/ day			way of feeding received less milk yield with FP (1215 lt/cow/10 months). Similarly the SNF% 8.1, far % 4.2 was also noticed higher in AP followed by RP(SNF 7.9, fat 3.8) and FP (SNF 7.8, fat 3.5)	showed less interest due to difficulty of getting EM and its high cost		

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
Technology option 1(Farmer's practice) Application of Copper oxychloride 3 gm per liter of water spray at an interval of 7 days	-	20.46	t/ha	2,21,300	2.18
Technology option 2 (Recommended Practice) Spray of 1% Bordeaux mixture	TNAU	22.48	t/ha	2,62,100	2.39
Technology option 3 (Alternate practice 1) Four Spray of Copper hydroxide 2gm/lt at 15-20 days interval to cover entire rainy period	NRCG	25.48	t/ha	3,22,100	2.71
Technology option 4 (Alternate practice 2) Spray Copper Fungicides (Bordeaux Mixture 0.5%, Copper oxide 0.2% or COC 0.3 %)	IIHR	28.64	t/ha	3,85,300	3.05
Technology option 1(Farmer's practice) Cultivation of local varieties, water stagnation and improper use of agrochemicals	-	6.53	t/ha	1,17,270	1.50
Technology option 2 (Recommended Practice) Adoption of resistant variety Sirugamani -1, Selection of planting sets from unaffected vine	TNAU	7.95	t/ha	1,98,900	2.00
Technology option 3 (Alternate practice) **Integrated Method for the Management of Phytophthora Wilt:** 1.Apply 150 kg N/ha/year through Neem Cake (75 Kg N) and Urea (75 Kg N) and 100 kg P_2O_5 through Super phosphate and 30 kg Muriate of potash in 3 split doses first at 15 days after lifting the vines and second and third dose at 40-45 days intervals. Apply on beds, shade dried neem leaves or Calotrophis leaves at 2 t/ha and cover it with mud (2 t in 2 split doses) 2.Drench Bordeaux mixture 1% in basins formed around the vine at monthly intervals starting from October – January, three times soil drench and six times spray from June-July 3.During winter season avoid frequent irrigation 4.Remove the affected vines way from the garden and burn them 5.Application of Alliette (Chlorathalonil) 3 g/lt 4 times monthly intervals 6.Application of Trichoderma Viride @ 5 g/vine	TNAU	8.57	t/ha	2,53,550	2.40
Technology option 1(Farmer's practice) Spraying Edifenphos 1ml/litre.	-	3990	Kg/ha	28577	1.67
Technology option 2 (Recommended Practice) Soil application of *Pseudomonas fluroscens* @ 2.5 kg/ha before transplanting + Seedling treatment with *P. fluroscens* @ 2.5 kg/ hectare + Foliar application of *P. fluroscens* @ 1 kg/ha and 45 days after planting + Spraying Mancozeb 45 WP @ 2gm /litre with the help of hand operated knapsack sprayer.	TNAU	6092	Kg/ha	23490	1.55
Technology option 3 (Alternate practice) Seed treatment with *P fluroscens* @ 10g/ kgs of seeds + Seedling treatment with *P. fluroscens* @ 2.5 kg/ hectare @ Application of *P. fluroscens* @ 1 kg/ acre at 30 days after transplanting @ Foliar application of *P. fluroscens* @ 2.5 kg/ hectare at 45 DAT + Spraying Tricyclazole 75 WP @ 1gm /lit with the help of hand operated knapsack sprayer.	CRRI	6561	Kg/ha	11558	1.27
Technology option 1(Farmer's practice) Local Variety	-	8.42	t/ha	20358	1.8
Technology option 2(Recommended Practice) Variety : Arka komal Spacing: 45X30 cm, Fertilizers : 135:135:135 Kg per Ha, FYM : 25 ton per Ha, Chemicals: Kelthane 250 ml per Ha. (Red spider mite) : Planto vax 250 ml per Ha. (Rust) Carbendezim 250 gram (Leaf spot)	IIHR	8.5	t/ha	25600	2.04
Technology option 3 (Alternate practice) Details of technology: Arka	IIHR	13.8	t/ha	48340	2.85

Anoop + 135:135:135 NPK per Ha + seed treatment with carbendezim 4 gram per kg seed, FYM: 25 tons per Ha. (basal application)					
Technology option 1(Farmer's practice) Variety: SVPR 2, Fertilizer: 100 Kg DAP and 50 Kg MoP/ha	-	1335.3	Kg/ha	15160	1.60
Technology option 2 (Recommended Practice) Variety: SVPR 2, Fertilizer: 80:40:40 Kg NPK/ha, Basal application 25 kg/ha of $MgSO_4$, Foliar application: 5% $MgSO_4$	TNAU	1738	Kg/ha	13660	1.82
Technology option 3 (Alternate practice) Variety: SVPR 2, Fertilizer: 80:40:40 Kg NPK/ha, Basal application 25 kg/ha of $MgSO_4$, Foliar application: 3% $MgSO_4$	Farmers Innovation	1804	Kg/ha	54120	1.89
Technology option 1(Farmer's practice) Conventional method of Redgram cultivation	-	0.825	t/ha	11150	2.07
Technology option 2 (Recommended Practice) **Seeds dibbling by hand recommended by TNAU** a. Recommended practice for adoption: Recommended fertilizer: 12.5:25:12.5 kgs of NPK / ha. Foliar spray of DAP 2% and NAA 40 ppm at flowering stage and 15 days after first spray.	TNAU	1.075	t/ha	13142	1.12
Technology option 3 (Alternate practice) Seedlings raised in Polythene bags and transplanted in Main field**.**	UAS	1.13	t/ha	16100	2.67
Technology option 1(Farmer's practice) Planting at the spacing of 1.5x1.5m (single suckers=4400plants/ha) Even though planting at closer spacing, the number of bunches/ha is less and input efficiency is also low	-	OFT is Under Progress			
Technology option 2 (Recommended Practice) High density planting at the spacing of 1.2x1.2m pair row method of planting with the spacing of 2 m with single suckers(5250 suckers/ha). Higher population and higher yield	TNAU				
Technology option 3 (Alternate practice) High density planting with the spacing of 1.8 x 3.6 (three suckers per pit=4630 suckers/ha).Higher population, higher yield and higher profitability	NRCB				
Technology option 1(Farmer's practice) 4 times weeding with single row cono weeder.	TNAU	OFT is Under Progress			
Technology option 2 (Recommended Practice) 4 times weeding with rotary weeder.	TNAU				
Technology option 3 (Alternate practice 1) Multi Row Power Weeder.	TNAU				
Technology option 4 (Alternate practice 2) Power Weeder (MDU, Madurai).	KVK, Madurai				
Technology option 1(Farmer's practice) No Vaccination or Vaccination at 8^{th} to 10^{th} week with RDVK vaccine at Veterinary Dispensaries	-	OFT is Under Progress			
Technology option 2 (Recommended Practice) 1.Lasota vaccine – Eye drops – 7^{th} and 14^{th} day, 2.RDVK-Subcutaneous 8^{th} and 16^{th} week	TANUVAS				
Technology option 3 (Alternate practice) 1.Oral Pellet ranikhet Vaccine on the 7^{th} to 14^{th} day, 2.RDVK-Subcutaneous 8^{th} and 16^{th} week.	TANUVAS				
Technology option 1(Farmer's practice) No / Irregular Mineral supplementation	-	OFT is Under Progress			
Technology option 2 (Recommended Practice) **Mineral Mixture:** 30-50 g/day continuously for one year from the first day after calving	TANUVAS				
Technology option 3 (Alternate practice) **Area Specific Mineral Mixture:** 30-50 g/day continuously for one year from the first day after calving	TANUVAS				
Results of OFTs completed for the year 2009-10					
Technology option 1(Farmer's practice) Planting at the spacing of 1.5x1.5m (single suckers=4400plants/ha) Even though planting at closer spacing, the number of bunches/ha is less and input efficiency is also low	-	96.1	t/ha	3,67,330	2.1
Technology option 2 (Recommended Practice) High density planting at the spacing of 1.2x1.2m pair row method of planting with the spacing of 2 m with single suckers(5250 suckers/ha). Higher population and higher yield	TNAU	105.3	t/ha	3,82,086	2.5
Technology option 3 (Alternate practice) High density planting with the spacing of 1.8 x 3.6 (three suckers per pit=4630 suckers/ha).Higher population, higher yield and higher profitability	NRCB, Trichy	101.8	t/ha	4,32,500	2.7
Technology Option 1(Farmer's practice): Hand stripping High quality of fibre and additional revenue and enterprises for farm women	CTRI, Rajmundi	0.348	Kg/hr	82,000	2.02
Technology Option 2(Recommended Practice): Retting by means of chemical NaOH @10% at 60 ^{0}C water for two days.	CTRI, Rajmundi	0.53	Kg/hr	1,13,000	2.41
Technology Option 3 (Alternate practice)Retting by means of biological organism (CAP enzyme @ 10 ml mixed with 50 ml of water and diluted with 5 litres and keeping for 12 hours)	Farmers Innovation	0.89	Kg/hr	1,42,000	2.77
Technology Option 4: Retting by means of biological organism (Xylanase0.1%, P^H of 9.65 at 70^0C for 45 min with constant stirring.	Farmers Innovation	0.54	Kg/hr	1,15,000	2.43
Technology Option 1(Farmer's practice): Natural breeding	-	1.8	Kids/birth	2140	2.14
Technology Option 2(Recommended Practice): AI with Boer goat semen	TANUVAS	1.6	Kids/birth	3780	3.78

Technology Option 3 (Alternate practice) AI with Tellichery goat semen	TANUVAS	2.1	Kids/birth	2920	2.92
Technology Option 1(Farmer's practice): Not following the scientific feeding	-	1215	Lt/cow/10 months	19,925	2.90
Technology Option 2(Recommended Practice): Green fodder 10-15 kg/cow / day Dry fodder 5 kg / cow/ day Concentrate feed 1.5- 2 kg / cow / day Mineral mixture-25-30 gm / cow day	TANUVAS	1535	Lt/cow/10 months	26,030	3.10
Technology Option 3 (Alternate practice) Green fodder 10-15 kg/cow / day Dry fodder 5 kg / cow/ day Concentrate feed 1.5- 2 kg / cow / day Mineral mixture-25-30 gm / cow day EM bokasi 200gm/cow/day EM Solution 40 ml/cow/day	TANUVAS	2055	Lt/cow/10 months	36,805	3.52

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 Management of Downy Mildew in Grapes**			
2	**Problem Definition**	1. Heavy incidence leading to severe reduction in yield.2.Indiscriminate use of different combination of fungicides. 3. Downy mildew incidence in grapes in an area of 50 ha among 100 Puthupatti farmers.			
3	**Details of technologies selected for assessment**	Technology option 1(Farmer's practice) Application of Copper oxychloride 3 gm per liter of water spray at an interval of 7 days Technology option 2 (Recommended Practice) Spray of 1% Bordeaux mixture Technology option 3 (Alternate practice 1) Four Spray of Copper hydroxide 2gm/lt at 15-20 days interval to cover entire rainy period Technology option 4 (Alternate practice 2) Spray Copper Fungicides (Bordeaux Mixture 0.5%, Copper oxide 0.2% or COC 0.3 %)			
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TNAU, Coimbatore** **Technology Option 3: NRCG, Pune** **Technology Option 4: IIHR, Bangalore**			
5	**Production system and thematic area**	Irrigated Garden land Downy Mildew in Grapes			
6	**Performance of the Technology with performance indicators**	**Alternate practice II**	**Alternate practice I**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Ton/Ha)	28.46	25.48	22.48	20.46
	Gross Cost (Rs/Ha)	145200	145750	160500	175350
	Gross Return (Rs/Ha)	530500	467850	422600	397050
	Net Return (Rs/Ha)	385300	322100	262100	221700
	BC Ratio	3.05	2.71	2.37	2.18
	Percent Incidence	18.48	18.24	16.66	16.32
	Control Efficiency %	62.2	48.5	33.3	14.3
	% Damaged Fruits	1.3	4.58	9.64	11.11
	% yield increase	28.64	25.48	22.48	20.46
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	Percent incidence of infestation at different levels, control efficiency, Damaged fruits, Percent yield increase, quality of fruits, yield, BCR			
8	**Final recommendation for micro level situation**	The yield in Alternate Practice is (28.64 t/ha) than other practices viz., Recommended Practice 22.48 t/ha. Farmers Practice 20.46 t/ha, this is 3.8% yield increase over Recommended Practice.			
9	**Constraints identified and feedback for research**	NIL			
10	**Process of farmers participation and their reaction**	Farmers have adopted IIHR, Bangalore technologies to control downy mildew disease in Grapes.			

1	**Title of Technology Assessed**	**Assessment of Management of Phytopthora Wilt in Betel vine**
2	**Problem Definition**	1. Heavy incidence leading to severe reduction in yield.2.Indiscriminate use of different combination of fungicides. 3. Downy mildew incidence in grapes in an area of 50 ha among 100 Puthupatti farmers.
3	**Details of technologies selected for assessment**	Technology option 1(Farmer's practice) Cultivation of local varieties, water stagnation and improper use of agrochemicals Technology option 2 (Recommended Practice) Adoption of resistant variety Sirugamani -1, Selection of planting sets from unaffected vine Technology option 3 (Alternate practice) **Integrated Method for the Management of Phytophthora Wilt:** 1.Apply 150 kg N/ha/year through Neem Cake (75 Kg N) and Urea (75 Kg N) and 100 kg P_2O_5 through Super phosphate and 30 kg Muriate of potash in 3 split doses first at 15 days after lifting the vines and second and third dose at 40-45 days intervals. Apply on beds, shade dried neem leaves or Calotrophis leaves at 2 t/ha and cover it with mud (2 t in 2 split doses) 2.Drench Bordeaux mixture 1% in basins formed around the vine at monthly intervals starting from October – January, three times soil drench and six times spray from June-July 3.During winter season avoid frequent irrigation 4.Remove the affected vines way from the garden and burn them 5.Application of Alliette (Chlorathalonil) 3 g/lt 4 times monthly intervals 6.Application of Trichoderma Viride @ 5 g/vine
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TNAU, Coimbatore** **Technology Option 3: TNAU, Coimbatore**

5	**Production system and thematic area**	Integrated and Phytophthora Wilt management in Betelvine		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Ton/Ha)	8.57	7.95	6.55
	Gross Cost (Rs/Ha)	209630	198150	175450
	Gross Return (Rs/Ha)	429000	397050	326900
	Net Return (Rs/Ha)	253550	198400	117270
	BC Ratio	2.4	2.0	1.5
	Percent Incidence	54.3	58.1	56.4
	Control Efficiency %	98.41	93.06	92.5
	Plant height (cm)	235.71	226.09	215.73
	No. of bunches/vine	8	8	7
	No. of leaves/plant	175-195	172-193	170-191
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	Percent incidence at different levels, control efficiency, plant height, No. of branches per vine, No. of leaves per plant, yield, BCR		
8	**Final recommendation for micro level situation**	The damage incidence initially was 19.62%, 16.5% and 8.5% during 2^{nd}, 3^{rd} and 4^{th} month defore treatment which was reduced to 1.3,1.8,0.86% respectively after treatment.		
9	**Constraints identified and feedback for research**	NIL		
10	**Process of farmers participation and their reaction**	Farmers have adopted Phyptophthora wilt management practices in Betelvine crop for getting maximum benefit.		

1	**Title of Technology Assessed**	**Assessment of Management of Brown Leaf Spot in Paddy**		
2	**Problem Definition**	This disease has a worldwide distribution, and it has been reported in all rice growing tracts of Tamil Nadu during last year. The disease causes blight of seedlings grown from heavily infected seeds. These symptoms will appear during panicle initiation stage and also affected the grains. Farmers do not adopt preventive measures at the time of initial stage of the crop. Hence the assessment of technologies achieves expected results in control of disease which in turn results in good quality of seeds and higher yield. High incidence of brown leaf spot in paddy in an area of 150 ha among 200 Markayankottai farmers.		
3	**Details of technologies selected for assessment**	Technology option 1(Farmer's practice) Spraying Edifenphos 1ml/litre. Technology option 2 (Recommended Practice) Soil application of *Pseudomonas fluroscens* @ 2.5 kg/ha before transplanting + Seedling treatment with *P. fluroscens* @ 2.5 kg/ hectare + Foliar application of *P. fluroscens* @ 1 kg/ha and 45 days after planting + Spraying Mancozeb 45 WP @ 2gm /litre with the help of hand operated knapsack sprayer. Technology option 3 (Alternate practice) Seed treatment with *P fluroscens* @ 10g/ kgs of seeds + Seedling treatment with *P. fluroscens* @ 2.5 kg/ hectare @ Application of *P. fluroscens* @ 1 kg/ acre at 30 days after transplanting @ Foliar application of *P. fluroscens* @ 2.5 kg/ hectare at 45 DAT + Spraying Tricyclazole 75 WP @ 1gm /lit with the help of hand operated knapsack sprayer.		
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TNAU, Coimbatore** **Technology Option 3: CRRI, Cuttack**		
5	**Production system and thematic area**	Integrated and IPM in Paddy		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Ton/Ha)	6.561	6.092	3.990
	Gross Cost (Rs/Ha)	15577	13490	11558
	Gross Return (Rs/Ha)	42646	39598	32435
	Net Return (Rs/Ha)	27069	26108	20877
	BC Ratio	1.32	2.02	2.18
	Percent Incidence	81.7	89.4	95.3
	Control Efficiency %	10.01	8.72	3.54
	% infested tillers	81.8	89.1	95.4
	% yield increase	64.40	53.08	-
	Quality of grains	Good	Good	Good
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	Percent incidence at different levels, control efficiency, percent yield increase, quality of grains, yield, BCR		
8	**Final recommendation for micro level situation**	The yield in Alternate Practice is 6561 kg/ha with an increased percent of 64.40 over control. Similarly the yield of Recommended Practices is 6092 kg/ha than Farmers Practice 3990 kg/ha which is 53.08 yield increase over control.		
9	**Constraints identified and feedback for research**	NIL		
10	**Process of farmers participation and their reaction**	Farmers have adopted the technology given by CRRI, Cuttack to manage Brown Leaf Spot disease in paddy.		

1	**Title of Technology Assessed**	**Assessment of new French Bean variety – Arka Anoop**		
2	**Problem Definition**	In the last two decades, the farmers are cultivating the French Beans as a remunerative crop. But the farmers are cultivating old variety and its having the characteristics of more fibre content and susceptible to rust diseases. The assessment of new variety having the following marketable characters like; 1.Resistant to bacterial and rust diseases 2.Plants are bushy and photo- insensitive 3.Pods are ready to harvest in 45 days after sowing 4.Pods are flat, smooth, long (17-18 cm) and crisp with less parchment 5.Average yield of 20t/ha in 70 days 6. French beans (Phaseolus Vulgaris) are a predominant vegetable crop in Theni District. Though the crop is more remunerative for the past 15 years, the farmers are cultivating the same variety named Arka Komal. Consumer preference was very low for this variety due to its high fibre content and stringy characters. The farmers are not aware of the newly released varieties crop in an area of 100 ha among 70 Ellapatti farmers.		
3	**Details of technologies selected for assessment**	Technology option 1(Farmer's practice) Local Variety Technology option 2(Recommended Practice) Variety : Arka komal Spacing: 45X30 cm, Fertilizers : 135:135:135 Kg per Ha, FYM : 25 ton per Ha, Chemicals: Kelthane 250 ml per Ha. (Red spider mite): Planto vax 250 ml per Ha. (Rust) Carbendezim 250 gram (Leaf spot). Technology option 3 (Alternate practice) Details of technology: Arka Anoop + 135:135:135 NPK per Ha + seed treatment with carbendezim 4 gram per kg seed, FYM: 25 tons per Ha. (basal application).		
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: IIHR, Bangalore** **Technology Option 3: IIHR, Bangalore**		
5	**Production system and thematic area**	Vegetable based production system		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Ton/Ha)	13.86	8.51	8.42
	Gross Cost (Rs/Ha)	26000	25000	25000
	Gross Return (Rs/Ha)	74340.6	50600	45358
	Net Return (Rs/Ha)	48340.6	25600	20358
	BC Ratio	2.85	2.04	1.8
	Test weight	172.86	139.92	139.61
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	Test weight, market preference, yield, BCR		
8	**Final recommendation for micro level situation**	The yield of Arka Anoop is 13.8 t/ha followed by Arka Komal 8.5 t/ha and in FP: 8.42 t/ha. The yield increase is 83.9% over Arka Komal Variety.		
9	**Constraints identified and feedback for research**	NIL		
10	**Process of farmers participation and their reaction**	Farmers revealed planting of Arka Anoop give resistance to bacterial diseases, found bushy in nature, pods are flate, smooth, long and crispy in nature. Yield more compare to other varieties.		

1	**Title of Technology Assessed**	**Assessment of Leaf Reddening Management in Cotton**		
2	**Problem Definition**	1. Reddening of leaf in cotton, 2. Reduced Boll size, 3. Poor boll bursting, 4. Reduced yield, 5. Reddening of leaf in cotton in an area of 50 ha among 150 Rasingapuram farmers.		
3	**Details of technologies selected for assessment**	Technology option 1(Farmer's practice) Variety: SVPR 2, Fertilizer: 100 Kg DAP and 50 Kg MoP/ha Technology option 2 (Recommended Practice) Variety: SVPR 2, Fertilizer: 80:40:40 Kg NPK/ha, Basal application 25 kg/ha of $MgSO_4$, Foliar application: 5% $MgSO_4$ Technology option 3 (Alternate practice) Variety: SVPR 2, Fertilizer: 80:40:40 Kg NPK/ha, Basal application 25 kg/ha of $MgSO_4$, Foliar application: 3% $MgSO_4$		
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TNAU, Coimbatore** **Technology Option 3: Farmers Innovation**		
5	**Production system and thematic area**	Irrigated management of leaf reddening in cotton		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Ton/Ha)	1.844	1.738	1.335
	Gross Cost (Rs/Ha)	43240	40360	38860
	Gross Return (Rs/Ha)	92200	86900	66750
	Net Return (Rs/Ha)	48960	46540	27890
	BC Ratio	1.89	1.80	1.60
	Percent reduction	91.25	90.25	19.74
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	Percent reduction of Reddening of leaf, yield, BCR		
8	**Final recommendation for micro level situation**	The yield of cotton in Alternate Practice is 1804 kg/ha which is proportionally equal to Recommended Practice 1738 kg/ha. 5% $MgSO_4$ spray cause scorching effect in one tenth of the plan it shows burnt appearance.		

9	**Constraints identified and feedback for research**	NIL
10	**Process of farmers participation and their reaction**	Farmers have adopted to spray 3% $MgSO_4$ to avoid reddening of leafs in cotton.

1	**Title of Technology Assessed**	**Assessment of Suitable Planting Method in Redgram**		
2	**Problem Definition**	1. To produce healthy seedlings through protray method 2. Transplanting, 3. Lower yield due to unpredictable and erratic rainfall, 4.Poor germination and poor field establishment in an area of 50 ha among 50 Kuppinayakkanpatti farmers.		
3	**Details of technologies selected for assessment**	Technology option 1(Farmer's practice) Conventional method of Redgram cultivation Technology option 2 (Recommended Practice) **Seeds dibbling by hand recommended by TNAU** a. Recommended practice for adoption: Recommended fertilizer: 12.5:25:12.5 kgs of NPK / ha. Foliar spray of DAP 2% and NAA 40 ppm at flowering stage and 15 days after first spray. Technology option 3 (Alternate practice) Seedlings raised in Polythene bags and transplanted in Main field		
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TNAU, Coimbatore** **Technology Option 3: UAS**		
5	**Production system and thematic area**	Irrigated with Integrated Crop Management		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Ton/Ha)	1.130	1.075	0.825
	Gross Cost (Rs/Ha)	22175	20150	18400
	Gross Return (Rs/Ha)	56500	53750	41250
	Net Return (Rs/Ha)	34325	33600	22850
	BC Ratio	2.67	2.12	2.047
	Germination %	97.67	72.19	60.83
	Plant populats/m^2	11.6	10.8	9.2
	No. of Pod/plant	700	657	612
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	Germination Percentage, Plant population, No. of pod/plant, yield, BCR		
8	**Final recommendation for micro level situation**	The yield of redgram in transplanted method assured good return with 1.13 t/ha followed by seed dippling method 1.075 t/ha..		
9	**Constraints identified and feedback for research**	NIL		
10	**Process of farmers participation and their reaction**	In transplanted method causalities can be substituted with seedlings raised in polythene bags.		

1	**Title of Technology Assessed**	**Assessment of Suitable Method of Planting in Banana for higher profitability**		
2	**Problem Definition**	Low yield and low density of population and less productivity and profitability.		
3	**Details of technologies selected for assessment**	Technology option 1(Farmer's practice) Planting at the spacing of 1.5x1.5m (single suckers=4400plants/ha) Even though planting at closer spacing, the number of bunches/ha is less and input efficiency is also low Technology option 2 (Recommended Practice) High density planting at the spacing of 1.2x1.2m pair row method of planting with the spacing of 2 m with single suckers(5250 suckers/ha). Higher population and higher yield Technology option 3 (Alternate practice) High density planting with the spacing of 1.8 x 3.6 (three suckers per pit=4630 suckers/ha).Higher population, higher yield and higher profitability		
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TNAU, Coimbatore** **Technology Option 3: NRCB, Trichy**		
5	**Production system and thematic area**	Ratoon Banana under garden land situation.		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Ton/Ha)			
	Gross Cost (Rs/Ha)			
	Gross Return (Rs/Ha)			
	Net Return (Rs/Ha)	OFT under Progress		
	BC Ratio			
	Percent Incidence			
	Control Efficiency %			
	No. of Plants affected /10			
	No. of Flies Trapped /Plant			
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	No. of hands/bunch, No. of fingers/bunch, bunch weight, yield/ha, BCR		

8	**Final recommendation for micro level situation**	-
9	**Constraints identified and feedback for research**	-
10	**Process of farmers participation and their reaction**	Farmers observed the planting method under paired row planting, triple sucker planting

1	**Title of Technology Assessed**	**Assessment of Performance and Suitability of various Weeders in Paddy Cultivation**		
2	**Problem Definition**	Mechanized farming is slowly get acceptance in many areas to overcome the labour shortage. In rice cultivation, weeding is a major concern to determine the yield of the crop. Though different type of weeders (Motorized weeder, Cono weeder and rotary weeder) is used for controlling weeds, ergonomics play a major role in success of every implement. The usage of weeder are measured in term of ergonomics, implement use efficiency, weed control efficiency, tillering efficiency of rice crops and economics are worked out for both the weeders. The yield of rice crop was mainly determined by weeding and proper nutrient management practices. Now the district is facing acute labour shortage for agricultural work. Due to this, weeding operation was not carried out in time. The weeds are compete with main crops for nutrient, water, light and spacing and finally the weeds are occupied major area within a short span and reduce the yield of main crop in an area of 200 ha among 300 Kutchanoor farmers.		
3	**Details of technologies selected for assessment**	Technology option 1(Farmer's practice) 4 times weeding with single row cono weeder. Technology option 2 (Recommended Practice) 4 times weeding with rotary weeder. Technology option 3 (Alternate practice 1) Multi Row Power Weeder Technology option 4 (Alternate practice 2) Power Weeder (MDU, Madurai).		
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TNAU, Coimbatore** **Technology Option 3: TNAU, Coimbatore** **Technology Option4: KVK, Madurai**		
5	**Production system and thematic area**	Rice based cropping system		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Ton/Ha)			
	Gross Cost (Rs/Ha)			
	Gross Return (Rs/Ha)			
	Net Return (Rs/Ha)	OFT under Progress		
	BC Ratio			
	Percent Incidence			
	Control Efficiency %			
	No. of Plants affected /10			
	No. of Flies Trapped /Plant			
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	Area coverage, weed control efficiency, drudgery reduction, time and labour requirement. No. of productive tillers/hill, yield, BCR		
8	**Final recommendation for micro level situation**	OFT under progress		
9	**Constraints identified and feedback for research**	-		
10	**Process of farmers participation and their reaction**	Farmers have directly involved in the demonstration of weeding cono weeder, Rotary weeder, power weeder , power weeder. The result of nutria row power weeder is availability.		

1	**Title of Technology Assessed**	**Assessment of oral pellet vaccination in Desi Chicken**		
2	**Problem Definition**	Assessment of Oral Pellet Vaccination in Desi Chicken, No Vaccination or Management for Ranikhet disease in Desi Chicken in an area of 1000 birds among 50 Ellapatti farmers.		
3	**Details of technologies selected for assessment**	Technology option 1(Farmer's practice) No Vaccination or Vaccination at 8^{th} to 10^{th} week with RDVK vaccine at Veterinary Dispensaries Technology option 2 (Recommended Practice) 1.Lasota vaccine – Eye drops – 7^{th} and 14^{th} day, 2.RDVK-Subcutaneous 8^{th} and 16^{th} week Technology option 3 (Alternate practice) 1.Oral Pellet ranikhet Vaccine on the 7^{th} to 14^{th} day, 2.RDVK-Subcutaneous 8^{th} and 16^{th} week.		
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TANUVAS, Chennai** **Technology Option 3: TANUVAS, Chennai**		
5	**Production system and thematic area**	Poultry farming management of Ranikhelt Disease		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Ton/Ha)			
	Gross Cost (Rs/Ha)			
	Gross Return (Rs/Ha)			

	Net Return (Rs/Ha)	OFT under Progress		
	BC Ratio			
	Percent Incidence			
	Control Efficiency %			
	No. of Plants affected /10			
	No. of Flies Trapped /Plant			
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	One drop of blood in filter paper on 8th week both in non vaccinated (5% of the bird) and vaccinated flock (10% of the bird morality pattern age wise.		
8	**Final recommendation for micro level situation**	OFT under progress		
9	**Constraints identified and feedback for research**	-		
10	**Process of farmers participation and their reaction**	The poultry growers testing the vaccination and the programme is in progress.		

1	**Title of Technology Assessed**	**Assessment of regular mineral mixture**		
2	**Problem Definition**	Assessment of regular mineral mixture, Irregular mineral supplementation in a minimum of 3 cows among 10 farmers.		
3	**Details of technologies selected for assessment**	Technology option 1(Farmer's practice) No / Irregular Mineral supplementation Technology option 2 (Recommended Practice) **Mineral Mixture:** 30-50 g/day continuously for one year from the first day after calving Technology option 3 (Alternate practice) **Area Specific Mineral Mixture:** 30-50 g/day continuously for one year from the first day after calving		
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TANUVAS, Chennai** **Technology Option 3: TANUVAS, Chennai**		
5	**Production system and thematic area**	Dairy cattle with management of mineral supplement		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Ton/Ha)			
	Gross Cost (Rs/Ha)			
	Gross Return (Rs/Ha)			
	Net Return (Rs/Ha)	OFT under Progress		
	BC Ratio			
	Percent Incidence			
	Control Efficiency %			
	No. of Plants affected /10			
	No. of Flies Trapped /Plant			
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	Milk yield during lactating period, onset of estrum after calving, No. of semination required for conception.		
8	**Final recommendation for micro level situation**	OFT under progress		
9	**Constraints identified and feedback for research**	NIL		
10	**Process of farmers participation and their reaction**	The cattle growers utilizing mineral mixture in the programme and it is in observation.		

Results of OFT is completed for the year 2009-10:

1	**Title of Technology Assessed**	**Assessment of Suitable Planting method in Banana for higher profitability**
2	**Problem Definition**	The productivity of input and profitability of banana growers is decreasing and cost of cultivation is increasing every year.
3	**Details of technologies selected for assessment**	Technology option 1(Farmer's practice) Planting at the spacing of 1.5x1.5m (single suckers=4400plants/ha) Even though planting at closer spacing, the number of bunches/ha is less and input efficiency is also low Technology option 2 (Recommended Practice) High density planting at the spacing of 1.2x1.2m pair row method of planting with the spacing of 2 m with single suckers(5250 suckers/ha). Higher population and higher yield Technology option 3 (Alternate practice) High density planting with the spacing of 1.8 x 3.6 (three suckers per pit=4630 suckers/ha).Higher population, higher yield and higher profitability
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TNAU, Coimbatore** **Technology Option 3: NRCB, Trichy**

5	**Production system and thematic area**	Banana under Garden land with high density planting		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Ton/Ha)	101.86	105	96
	Gross Cost (Rs/Ha)	208350	262500	260000
	Gross Return (Rs/Ha)	578750	630000	560000
	Net Return (Rs/Ha)	370400	367500	300000
	BC Ratio	2.7	2.5	2.24
	No. of finger/bunch	29.6	30.2	28.7
	No. of bunches	14.1	15.2	13.8
	Weight of finger	331 g	342 g	325 g
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	No. of fingers/bunch, weight of bunch, no. of bunches, weight of finger,		
8	**Final recommendation for micro level situation**	The yield of banana is found higher in farmers practice with the spacing of 1.5 x 1.5 m which is revealed from No. of fingers/bunch, bunch, bunch weight, etc.,		
9	**Constraints identified and feedback for research**	NIL		
10	**Process of farmers participation and their reaction**	The farmers attributed the yield of banana in 3 treatments were not shown much difference.		

1	**Title of Technology Assessed**	**Approaches for drudgery reduction and quality improvement of banana fibre**			
2	**Problem Definition**	The disposal of pseudo stem after the harvest of banana is a lab our and cost intensive. The demand for the natural fibre at national and international level is high. Nowadays the banana fibre is one of the alternatives for natural fibre for making high quality sarees and currency. The higher quality of the fibre generally getting by hand stripping but hand stripping involve drudgery and outcome is very less and a non profitable enterprises.			
3	**Details of technologies selected for assessment**	Technology Option 1(Farmer's practice): Hand stripping High quality of fibre and additional revenue and enterprises for farm women Technology Option 2(Recommended Practice): Retting by means of chemical NaOH @10% at 60 ^{0}C water for two days. Technology Option 3 (Alternate practice)Retting by means of biological organism (CAP enzyme @ 10 ml mixed with 50 ml of water and diluted with 5 litres and keeping for 12 hours) Technology Option 4: Retting by means of biological organism (Xylanase0.1%, P^H of 9.65 at 70^{0}C for 45 min with constant stirring.			
4	**Source of technology**	**Technology Option 1: CTRI, Rajmundi** **Technology Option 2: CTRI, Rajmundi** **Technology Option 3: Farmers Innovation** **Technology Option 4: Farmers Innovation**			
5	**Production system and thematic area**	Banana fibre extraction			
6	**Performance of the Technology with performance indicators**	**Alternate practice II**	**Alternate practice I**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(Kg/Ha)	0.544	0.89	0.53	0.348
	Gross Cost (Rs/Ha)	55300	55250	54350	33450
	Gross Return (Rs/Ha)	172300	197250	167350	115450
	Net Return (Rs/Ha)	115000	142000	113000	82000
	BC Ratio	3.07	3.57	3.07	3.45
	No. of fibre availability	104	106	113	122
	Fibre Thickness (mm)	0.116	0.113	0.114	0.113
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	Percent fibre availability, fibre outcome, fibre thichness			
8	**Final recommendation for micro level situation**	Low drudgery found as 104% as against the higher of 122% drudgery. High quality fibre was available in retting with biological CAP enzyme.			
9	**Constraints identified and feedback for research**	NIL			
10	**Process of farmers participation and their reaction**	Fibre extraction was very easy with biological cutting process with reduced drudgery and high profit.			

1	**Title of Technology Assessed**	**Assessment of Goat Breeding**
2	**Problem Definition**	Low weight and low productivity in Goat. Goat husbandry is an important source of livelihood for the rural poor, particularly for the women, land less and marginal farmers. Goat is ideally suited for the poorest of the poor, because of short gestation period, Low risk capital investment and low cost of maintenance. But, due to the indiscriminate breeding and absence of elite bucks of good breeds, there has been severe genetic erosion, resulting in low weight at birth, poor growth and susceptibility to

		various diseases.		
3	**Details of technologies selected for assessment**	Technology Option 1(Farmer's practice): Natural breeding Technology Option 2(Recommended Practice): AI with Boer goat semen Technology Option 3 (Alternate practice) AI with Tellichery goat semen		
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TANUVAS, Chennai** **Technology Option 3: TANUVAS, Chennai**		
5	**Production system and thematic area**	Goat husbandry under rainfed situation		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(kids/birth)	2.1	1.6	1.8
	Gross Cost (Rs)	400	300	250
	Gross Return (Rs)	1920	1450	1340
	Net Return (Rs)	1520	1450	1390
	BC Ratio	4.81	4.83	5.36
	Body Weight (kg)	1.74	2.29	1.18
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	Body weight, No. of kids of birth		
8	**Final recommendation for micro level situation**	He Boer goat semen increased the body weight 2.29 kg in Artifical insemination. In tellicherry goat semen the body weight increased was 1.18 kg.		
9	**Constraints identified and feedback for research**	NIL		
10	**Process of farmers participation and their reaction**	The goat growers preferred under AI with Tellicherry goat semen than other process.		

1	**Title of Technology Assessed**	**Effect of EM in uptake efficiency, cost reduction, quality and milk production**		
2	**Problem Definition**	The quality of cow milk is low due to improper uptake of fodder and low conversion of feed into milk		
3	**Details of technologies selected for assessment**	Technology Option 1(Farmer's practice): Not following the scientific feeding Technology Option 2(Recommended Practice): Green fodder 10-15 kg/cow / day Dry fodder 5 kg / cow/ day Concentrate feed 1.5- 2 kg / cow / day Mineral mixture-25-30 gm / cow day Technology Option 3 (Alternate practice) Green fodder 10-15 kg/cow / day Dry fodder 5 kg / cow/ day Concentrate feed 1.5- 2 kg / cow / day Mineral mixture-25-30 gm / cow day EM bokasi 200gm/cow/day EM Solution 40 ml/cow/day		
4	**Source of technology**	**Technology Option 1: Farmers Practice** **Technology Option 2: TANUVAS, Chennai** **Technology Option 3: TANUVAS, Chennai**		
5	**Production system and thematic area**	-		
6	**Performance of the Technology with performance indicators**	**Alternate practice**	**Recommended Practice**	**Farmers Practice**
	Production per unit area(lt/cow/10 months)	2055	1535	1215
	Gross Cost (Rs)	14570	12345	10450
	Gross Return (Rs)	51371	38375	30375
	Net Return (Rs)	36805	26030	19925
	BC Ratio	3.52	3.10	2.90
	SNF %	8.1	7.9	7.8
	FAT %	4.2	3.8	3.5
7	**Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring** techniques	Milk yield, SNF percent, fat percent mixture.		
8	**Final recommendation for micro level situation**	The milk yield was found highest 2055 lt/cow/10 months in mineral mixture + EM solution fed to the cattle. In unscientific way of feeding cattle the milk yield was less with 1215 lt/cow/10 months. Similarly the SNP percent and fat percent responded accordingly.		
9	**Constraints identified and feedback for research**	NIL		
10	**Process of farmers participation and their reaction**	The cattle growers appreciated the practice adopted in mineral mixture + EM application in increasing the production of milk yield of SNF % and fat percent.		

4.D1. Results of Technologies Refined : NIL

Results of On Farm Trial

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

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

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

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	
	Oilseeds													
	Pulses	Rainfed	Kharif 2010	Greengram	CO (Gg) 7	-	Integrated Weed Management, Varietal Introduction	Introduction of mini mobile sprinkler	5 ha	5 ha	2	10	12	
		Rainfed	Rabi 2010 - 11	Greengram	CO (Gg) 7	-	Integrated Crop Management	Introduction of improved variety Co (Gg)-7 with seed rate of 25 Kg/ha	3 ha	3 ha	0	12	12	
	Cereals	Irrigated	Kharif 2010	Paddy	ADT 36	-	Integrated Pest Management	IPM in Paddy and Management of yellow stem borer and Leaf folder in paddy	2 ha	2 ha	0	10	10	
		Irrigated	Rabi 2010-11	Rice	-	CORH 3	Integrated Crop Management	CO RH 3 Hybrid with SRI with management of Sheath blight in Paddy	5 ha	5 ha	0	12	12	
		Irrigated	Rabi 2010-11	Paddy	CO 49	-	Drudgery Reduction technologies	Mechanized paddy farming	3 ha	3 ha	10	0	10	
		Rainfed	Kharif 2010	Sorghum	Co S 28	-	Varietal/ Hybrid Introduction	Popularization of COS28	5 ha	5 ha	0	12	12	
		Rainfed	Kharif 2010	Maize	-	COHM 5	Popularization of Integrated Nutrient Management	Popularization of ICM with TNAU Maize Maxim	4 ha	4 ha	0	10	10	
	Millets													
	Vegetables	Irrigated	Rabi 2010-11	French Beans	Arka Suvida	-	Varietal introduction	Popularization of Arka Suvidha	1 ha	1 ha	0	10	10	
		Irrigated	Rabi 2010-11	Brinjal	Local Variety	-	Popularization of Integrated Nutrient Management	INM in Brinjal	5 ha	5 ha	0	10	10	
	Flowers													
	Ornamental													
	Fruit	Irrigated	Kharif 2010	Banana	Grand Naine	-	Popularization of Integrated Nutrient Management	ICM in Banana and IIHR Banana special in nutrient management	5 ha	5 ha	0	12	12	
		Irrigated	Kharif 2010	Banana	Grand Naine	-	Popularization of Integrated Disease Management	IDM in Banana with Management of Sigatoka Leaf Spot in Banana	5 ha	5 ha	0	12	12	
		Irrigated	Rabi 2010-11	Banana	Grand Naine	-	Popularization of Integrated Pest Management	IPM in Banana with Management of Pseudostem weevil	5 ha	5 ha	0	10	10	
		Irrigated	Rabi 2010-11	Banana	Grand Naine	-	Popularization of Drudgery reduction technologies	Drudgery reduction in Banana Fibre Extraction	10 units	10 units	2	8	10	
		Irrigated	Rabi 2010-11	Mango	PKM-1	-	Popularization of Integrated Nutrient Management	INM in Mango	5 ha	5 ha	5	5	10	

	Spices and condiments													
	Commercial	Irrigated	Kharif 2010	Sugarcane	CO 86032	-	Popularization of Integrated Nutrient Management	Popularization of ICM with TNAU Sugarcane Booster	3 ha	3 ha	0	10	10	
		Irrigated	Rabi 2010-11	Cotton	RCH 708	-	Popularization of Integrated Pest Management	Mealy bug Management in Cotton	5 ha	5 ha	0	12	12	
	Medicinal and aromatic													
	Fodder	Rainfed	Rabi 2010-11	Mixed Fodder	CO FS 29	-	Varietal Introduction	Population of Mixed Fodder	2 ha	2 ha	0	10	10	
	Plantation	Rainfed	Rabi 2010-11	Cashew	VRI-3	-	Popularization of integrated Pest Management	Management of Tea mosquito bug in Cashew	5 ha	5 ha	0	10	10	
	Fibre													
	Dairy													
	Poultry													
	Rabbitry													
	Pigerry													
	Sheep and goat													
	Duckery													
	Common carps													
	Mussels													
	Ornamental fishes													
	Oyster mushroom													
	Button mushroom													
	Vermicompost													
	Sericulture													
	Apiculture													
	Implements													
	Others (specify)	-	Kharif 2010	Fruits and Vegetables	-	-	Processing and Value addition	Introduction of vegetable preservator (CRIDA Model)	-	-	2	8	10	2 Units

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			Previous crop grown
										N	P	K	
	Oilseeds												
	Pulses	Rainfed	Kharif 2010	Greengram	CO (Gg) 7	-	Integrated Weed Management, Varietal Introduction	Introduction of mini mobile sprinkler	Kharif 2010	41	19	81	Cumbu
		Rainfed	Rabi 2010-11	Greengram	CO (Gg) 7	-	Integrated Crop Management	Introduction of improved variety Co(Gg)-7 with seed rate of 25 Kg/ha	Rabi 2010-11	47	21	95	Cumbu
	Cereals	Irrigated	Kharif 2010	Paddy	ADT 36	-	Integrated Pest Management	IPM in Paddy and Management of yellow stem borer and Leaf folder in paddy	Kharif 2010	62	31	129	Rice
		Irrigated	Rabi 2010-11	Rice	-	CORH 3	Integrated Crop Management	CO RH 3 Hybrid with SRI with management of Sheath blight in Paddy	Rabi 2010-11	64	30	110	Rice
		Irrigated	Rabi 2010-11	Paddy	CO 49	-	Drudgery Reduction technologies	Mechanized paddy farming	Rabi 2010-11	67	36	125	Rice
		Rainfed	Kharif 2010	Sorghum	Co S 28	-	Varietal/ Hybrid Introduction	Popularization of Co S 28	Kharif 2010	43	22	98	Green gram
		Rainfed	Kharif 2010	Maize	-	COHM 5	Popularization of Integrated Nutrient Management	Popularization of ICM with TNAU Maize Maxim	Kharif 2010	44	21	116	Black gram
	Millets												
	Vegetables	Irrigated	Rabi 2010-11	French Beans	Arka Suvida	-	Varietal introduction	Popularization of Arka Suvidha	Rabi 2010-11	51	36	77	Maize
		Irrigated	Rabi 2010-11	Brinjal	Local Variety	-	Popularization of Integrated Nutrient Management	INM in Brinjal	Rabi 2010-11	57	41	127	Lab Lab
	Flowers												
	Ornamental												
	Fruit	Irrigated	Kharif 2010	Banana	Grand Naine	-	Popularization of Integrated Nutrient Management	ICM in Banana and IIHR Banana special in nutrient management	Kharif 2010	88	61	174	Groundnut
		Irrigated	Kharif 2010	Banana	Grand Naine	-	Popularization of Integrated Disease Management	IDM in Banana with Management of Sigatoka Leaf Spot in Banana	Kharif 2010	86	58	176	Tomato
		Irrigated	Rabi 2010	Banana	Grand Naine	-	Popularization of Integrated Pest Management	IPM in Banana with Management of Pseudostem weevil	Rabi 2010-11	81	67	132	Tomato
		Irrigated	Rabi 2010-11	Banana	Grand Naine	-	Popularization of Drudgery reduction technologies	Drudgery reduction in Banana Fibre Extraction	Rabi 2010-11	77	65	112	Maize
		Irrigated	Rabi 2010-11	Mango	PKM-1	-	Popularization of Integrated Nutrient Management	INM in Mango	Rabi 2010-11	81	51	146	Tomato
	Spices and condiments												
	Commercial	Irrigated	Kharif 2010	Sugarcane	CO 86032	-	Popularization of Integrated Nutrient Management	Popularization of ICM with TNAU Sugarcane Booster	Kharif 2010	36	17	76	Beetroot
		Irrigated	Rabi 2010-11	Cotton	RCH 708	-	Popularization of Integrated Pest	Mealy bug Management in Cotton	Rabi 2010-11	72	41	83	Cluster Bean

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
							Management						
	Medicinal and aromatic												
	Fodder	Rainfed	Rabi 2010-11	Mixed Fodder	CO FS 29	-	Varietal Introduction	Population of Mixed Fodder	Rabi 2010-11	35	17	94	Green gram
	Plantation	Rainfed	Rabi 2010-11	Cashew	VRI-3	-	Popularization of integrated Pest Management	Management of Tea mosquito bug in Cashew	Rabi 2010-11	38	19	74	Cashew
	Fibre												
	Others	-	Kharif 2010	Fruits and Vegetables	-	-	Processing and Value addition	Introduction of vegetable preservator (CRIDA Model)	Kharif 2010				

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																			
Pulses Greengram	Introduction of mini mobile sprinkler	CO (Gg) 7	-	Rain fed	12	5	9.71	8.32	9.12	7.58	21.9	8000	22443	14443	2.80	7231	17519	10288	2.42
Greengram	Introduction of improved variety Co(Gg)-7 with seed rate of 25 Kg/ha	CO (Gg) 7	-	Rain fed	12	3	10.03	9.08	9.61	7.58	24.4	8741	23173	14438	2.6	7631	17519	9888	2.29
Cereals Paddy	IPM in Paddy and Management of yellow stem borer and Leaf folder in paddy	ADT 36	-	Irrigated	10	2	49.6	42.3	46.5	43.2	14.8	25400	54150	28750	2.13	25400	46785.6	21385.6	1.84
Rice	CO RH 3 Hybrid with SRI with management of Shealth blight in Paddy	-	CORH 3	Irrigated	12	5	88.6	82.1	85.3	66.5	28.01	35000	95953.8	60953.8	2.74	25000	61586.3	36586.3	2.46
Paddy	Mechanised paddy farming	CO 49	-	Irrigated	10	5	50.6	43.7	48.5	43.1	17.4	25000	54799.8	29799.8	2.19	25000	21677.3	46677.3	1.87
Sorghum	Co S 28	Co S 28	-	Rainfed	12	5	26.2	18.16	21.76	18.04	21.6	16721	42520	25799	2.54	16500	38500	22000	2.31
Maize	Popularization of ICM with TNAU Maize Maxim	-	COHM 5	Rainfed	10	4	72.8	63.4	68.5	43.6	66.9	35435	80080	44645	2.25	25638	47960	22322	1.8
Millets																			
Vegetables French Beans	Popularization of Arka Suvidha	Arka Suvida	-	Irrigated	10	1	86.41	56.11	75.75	53.13	15.05	12000	40300	28300	3.35	11200	35400	24200	3.16
Brinjal	INM in Brinjal	Local Variety	-	Irrigated	10	5	258.8	197.3	227.5	189.6	36.4	18600	48544	29944	2.60	16250	40150	23900	2.46
Flowers																			
Ornamental																			

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										
Fruits Banana	ICM in Banana and IIHR Banana special in nutrient management	Grand Naine	-	Irrigated	12	5	1078	953	1100.5	922.1	14.2	275000	862400	587000	3.13	247515	737688	490173	2.98
Banana	IDM in Banana with Management of Sigatoka Leaf Spot in Banana	Grand Naine	-	Irrigated	10	5	1045	8231	936	794	17.88	295000	836000	541000	2.85	252000	635200	383200	2.52
Banana	IPM in Banana with Management of Pseudostem weevil	Grant Naine	-	Irrigated	10	5	1021	896	957	802.3	27.2	298000	816800	518000	2.74	267500	641840	374340	2.39
Banana	Drudgery reduction in Banana Fibre Extraction	Grant Naine	-	Irrigated	10	10	0.886kg/hr	0.444 kg/hr	0.548 kg/hr	0.384kg/hr	133	84640	162000	77360	1.9	63092	107512	30152	1.70
Mango	INM in Mango	PKM-1	-	Irrigated	10	5	178.3	124.5	153.2	123.1	24.39	20400	69356	48956	3.3	17250	43125	25875	2.50
Spices and condiments																			
Commercial Sugarcane	Popularization of ICM with TNAU Sugarcane Booster	CO 86032	-	Irrigated	10	3	1243.4	94238	1022.3	856.2	45.2	58000	136730	78730	2.35	52000	94160	42160	1.81
Cotton	Mealy bug Management in Cotton	-	RCH 708	Irrigated	12	5	36.5	21.7	27.9	19.21	45.23	22700	78120	55420	3.44	20700	53788	33088	1.62
Medicinal and aromatic																			
Fodder	Population of Mixed Fodder	CO FS 29	-	Rainfed	Demonstration under progress														
Plantation Cashew	Management of Tea mosquito bug in Cashew	VRI-3	-	Rainfed	10	5	1.281	0.836	0.926	1.795	61.1	24000	64050	40050	2.6	39750	29720	10030	1.33
Fibre																			
Others (pl. specify)	Introduction of vegetable preservator (CRIDA Model)	-	-	-	10	-	96	48	72	30	2.20	3600	4800	1200	1.33	1000	1800	800	1.8

* 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**	**Local**
Greengram (Kharif 2010)		
No. of pods/plant	68	57
No. of seeds/pod	8	5
Test weight	6.3gm	4.2gm
Yield	912 kg/ha	758 kg/ha
Greengram (Rabi 2010 –11)		
No. of pods/plant	73	57
No. of seeds/pod	8	5
Test weight	6.5gm	4.2gm

Yield	961kg/ha	758 kg/ha
Paddy (Kharif 10)		
Plant Height	102.6 cm	94.2 cm
Panicle Length	22.2 cm	19.6 cm
% of reduction in Yellow stem borer &Leaf folder .	93.4%	23.8%
Rice (Rabi 10-11)		
Plant Height	110.6 cm	94.2 cm
Panicle Length	26.2 cm	22.4 cm
1000 grain weight	28.6 gm	15.5 gm
Paddy (Rabi 10-11)		
Plant Height	105.8 cm	94.3 cm
Panicle Length	24.7 cm	21.7 cm
% of efficiency	62.8%	28.9%
Area coverage	0.72 cents/acre/hr	10 farm womens/acre/day
Time saving	7 hrs	-
Labour saving	7	-
Sorghum (Kharif 10)		
Plant Height	170 cm	165 cm
Ear head weight	35.2 gm	30.3 gm
No. of filled grain	1560	1471
Maize(Kharif 10)		
Plant Height	195 cm	187 cm
No. of leaves/plant	12	10
100 seed weight	119.6	110.7
French Beans (Rabi 10-11)		
Plant Height	48 .3 cm	41.6 cm
Inflorescence Length	26 cm	21.3 cm
No. of flowers	120	96
Fruit Weight	15.8 gm	12.3 gm
Pod length	13.3 cm	11.8 cm
Brinjal (Rabi 10-11)		
No. of flowers/plant	186	163
No. of fruits/plant	168	146
Plant Height	75 cm	60 cm
Banana (Kharif 10)		
No. of hands/bunch	15	12
No. of fingers/hand	25	15
Individual fruit weight	300 gm	192 gm
Bunch weight	48 kg	32.6 kg
Banana (Kharif 10)		
No. of hands/bunch	14	11
No. of fingers/hand	20	15
Individual fruit weight	275 gm	210 gm
% of reduction in Sigatoka Leaf Spot	92.8%	22.6%
Banana (Rabi 10 –11)		
No. of hands/bunch	14	11
No. of fingers/hand	22	15
Individual fruit weight	286 gm	210 gm
% of reduction in Pseudostem Weevil	98.3%	42.6%
Mango (Rabi 10 –11)		
No. of inflorescence/branch	5	3
No. of branches/tree	320	305
No. of fruits/tree	1520	1150
Individual fruit weight	350 gm	280 gm
Sugarcane (Kharif 10)		
Plant height	285 cm	248 cm
Individual Cane Weight	2.6 kg	1.81 kg
Sugar Content	12.2%	11.1%
Cotton (Rabi 10 –11)		
Plant height	80 cm	75 cm
No. of branches	15	11
No. of squares/branch	18	12
No. o f bolls	12	9
% of reduction in Mealybug	91.9%	23%
Cashew (Rabi 10-11)		
No. of branches/tree	280	210
No. of inflorescence/branch	5	3
No. of fruits/branch	60	48
No. of inflorescence/tree	85	73
No. of nuts/inflorescence	14	9
% of reduction in Tea Mosquitobug	95.6%	26.7%
Fodder Sorghum (Rabi 10 –11)		
Plant height	Demonstration under progress	
No. of tiller/plant		
Days to 1st harvest		
Days to ratoon harvest		
Yield		

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																	
Poultry																	
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	Labour requirement in Mandays		% save	Savings in labour (Rs./ha)	*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

* 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**

5.B.6. Cotton NIL

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	
	Production Technology										
	IPM										
	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	Greengram	Introduction of mini mobile sprinkler	The water supplement through Mini mobile sprinkler was sufficient enough in providing moisture to the crop growth and the yield was satisfied as harvested from irrigated crop
2	Greengram	Introduction of improved variety Co(Gg)-7 with seed rate of 25 Kg/ha	Profused flowering and Uniform pod settings in greengram Co (Gg) 7 variety was observed under the adoption of pulse wonder 2.25 kg/ac, spray during peak flowering stage coinciding evenly distributed rainfall under rainfed condition. The pulse wonder increased drought tolerance and increased yield upto 25% because of decrease in the flower shedding.
3	Paddy	IPM in Paddy and Management of yellow stem borer and Leaf folder in paddy	The technology adopted for the control of yellow stem borer and leaf folder in paddy has resulted in effective control correspondingly the yield has also increased.
4	Rice	CO RH 3 Hybrid with SRI with management of Shealth blight in Paddy	The yield of CORH 3 under SRI practice helped in tiled maximization with time by shealth blight management.
5	Paddy	Mechanised paddy farming	The paddy transplanted reduced the drudgery, high cost of labour and saved the time. The planting was also uniform with required space with single seedling planting.
6	French beans	Popularization of Arka Suvidha	New variety of French beans increases the yield
7	Brinjal	INM in Brinjal	The spray of IIHR Vegetable special in brinjal helped in flower retention and fruit for formation for heavy bearing.
8	Sorghum	Co S 28	The sorghum CO S 28 was able to with stand prolonged drought upto 30 days and it gives good yield.
9	Maize	Popularization of ICM with TNAU Maize Maxim	The spray of TNAU Maize Maxim has satisfied the micro nutrient requirement and resulted in uniform grain filling, increased grain yield particularly. In rainfed condition it improved drought tolerance.
10	Banana	ICM in Banana and IIHR Banana special in nutrient management	The spray of IIHR Banana special has resulted in uniform bunch emergence, increasing number of hands/bunch and overall bunch weight.
11	Banana	IDM in Banana with Management of Sigatoka Leaf Spot in Banana	The spraying of 0.1% propiciconazol effectively controlled the sigatoka leaf spot and the control efficiency of sigatoka leaf spot is 91.9%.
12	Banana	IPM in Banana with Management of Pseudostem weevil	The technology adopted to control pseudostem weevil effectively reduced the pseudostem infestation and the cost of control measures is less and it is environmentally safe.
13	Banana	Drudgery reduction in Banana Fibre Extraction	The enzyme CAP was very effective in retting process than using sodium hydroxide and conventional method of fibre extraction.
14	Mango	INM in Mango	The spray of IIHR Mango special has resulted in better flower retention and formation and development of huge number of uniform sized mango fruits.
15	Sugarcane	Popularization of ICM with	The spray of TNAU Sugarcane Booster has resulted in enhanced cane growth and weight,

		TNAU Sugarcane Booster	improves intermodal length, improved cane yield, improved sugar content and in water defecit condition it increased drought tolerance.
16	Cotton	Mealybug Management in Cotton	Spraying of profenophos 50 EC 1 ml/lt mixed with fish oil resin soap 20 gm/lt effectively checked the activity of mealybug and while practicing the fish oil resin soap, it reduces the number of spray. Acephate and Fish oil resin soap mix helped to control the mealybug effectively.
17	Cashew	Management of Tea mosquito bug in Cashew	The alternate spray of different pesticides effectively controls all stages of tea mosquito bug and reduces further incidence in the ensuing season.
18	CRIDA preservator	Introduction of vegetable preservator (CRIDA Model)	The CRIDA preservator enhanced the shelf life of different type of vegetables/fruits during different seasons.
19	Fodder Sorghum	Population of Mixed Fodder	Demonstration in Progress

5.B.6.7 Farmers' reactions on specific technologies

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Greengram	Introduction of mini mobile sprinkler	The farmers accepted the mini mobile sprinkler which provided sufficient moisture to the crop in rainfed condition. The yield level of the crop was more satisfied to them.
2	Greengram	Introduction of improved variety Co(Gg)-7 with seed rate of 25 Kg/ha	Farmers realised the importance of pulse wonder spraying in decreasing flower shedding better pod formation and drought tolerance in water deficit condition.
3	Paddy	IPM in Paddy and Management of yellow stem borer and Leaf folder in paddy	The adoption of helped management practices effective management of Yellow Stem Borer and Leaf Folder for maximizing the yield.
4	Rice	CO RH 3 Hybrid with SRI with management of Shealth blight in Paddy	Farmers oponed that SRI method has helped in production of young virulent seedlings and the field establishment was very god because of wide spacing. The blight disease infestation was also effectively controlled.
5	Paddy	Mechanised paddy farming	Farmers appreciated this mechanization in paddy transplanting technology. It saves the labour cost and time management, uniform spacing in paddy transplanting.
6	French beans	Popularization of Arka Suvidha	Farmers accepted the variety of French Beans Arka Suvidha under irrigated condition which helped in increasing the disease resistance and yield.
7	Brinjal	INM in Brinjal	The farmers realized the importance of foliar application of micro nutrients as vegetable special in increasing flower retention and shining of Brinjal
8	Sorghum	Co S 28	Farmers realized the grain filling for sorghum variety CO S 28 under rainfed condition was good even under prolonged condition.
9	Maize	Popularization of ICM with TNAU Maize Maxim	Farmers who sprayed TNAU Maize Maxim was able to get good filled Maize grains than other farmers.
10	Banana	ICM in Banana and IIHR Banana special in nutrient management	Farmers indicated the cost saving of foliar application of micro nutrients as banana special which resulted in increasing bunch size and uniformity of fingers which increased marketability.
11	Banana	IDM in Banana with Management of Sigatoka Leaf Spot in Banana	The technology adopted to control the sigatoka disease was effective and the yield level was increased.
12	Banana	IPM in Banana with Management of Pseudostem weevil	The farmers accepted this technology to control the pseudostem weevil as effective. The infected tree percentage was reduced.
13	Banana	Drudgery reduction in Banana Fibre Extraction	Farmers appreciated the technology in getting maximum benefit with reduced expenses and less energy in getting banana fibre.
14	Mango	INM in Mango	Farmers who sprayed Mango Special was able to get heavy bearing than other farmers who was unable to get even normal yield.
15	Sugarcane	Popularization of ICM with TNAU Sugarcane Booster	Farmers who sprayed TNAU Sugarcane Booster was able to get good cane weight, good sugar content.
16	Cotton	Mealybug Management in Cotton	The technology adopted to control mealybug was effective in checking of mealybug in cotton ecosystem.
17	Cashew	Management of Tea mosquito bug in Cashew	The management practices adopted was very effective to control tea mosquito bug in Cashew
18	CRIDA preservator	Introduction of vegetable preservator (CRIDA Model)	The farmers realized the CRIDA presevator device in increasing the shelf life of fruits/vegetables.
19	Fodder Sorghum	Population of Mixed Fodder	Demonstration in Progress

5.B.6.8 Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	31	753	-
2	Farmers Training	79	1083	-
3	Media coverage	10	-	-
4	Training for extension functionaries	-	-	-
5	Field Visit	160	1547	-
6	Farmers Scientist Interaction	5	43	-
7	FSC Formation	6	143	-

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	Popularization of ICM with TNAU Maize Maxim	COHM 5	10	4	72.8	63.4	68.5	43.6	66.9	35435	80080	44645	2.25	25638	47960	22322	1.8
Rice	CO RH 3 Hybrid with SRI with management of Shealth blight in Paddy	CORH 3	12	5	88.6	82.1	85.3	66.5	28.01	35000	95953.8	60953.8	2.74	25000	61586.3	36586.3	2.46
Sorghum																	
Wheat																	
Others (pl.specify)																	
Total																	
Oilseeds																	
Castor																	
Mustard																	
Safflower																	
Sesame																	
Sunflower																	
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																	
Cotton	Mealy bug Management in Cotton	RCH 708	12	5	36.5	21.7	27.9	19.21	45.23	22700	78120	55420	3.44	20700	53788	33088	1.62
Total																	
Fodder crops																	
Maize (Fodder)																	
Sorghum (Fodder)																	
Others (pl.specify)																	
Total																	

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	3	38	17	55	5	0	5	43	17	60
Resource Conservation Technologies										
Cropping Systems	1	4	0	4	2	2	4	6	2	8
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production	1	25	25	50	0	0	0	25	25	50
Nursery management										
Integrated Crop Management	8	173	76	249	38	22	60	211	101	312
Soil and Water Conservation										
Integrated Nutrient Management	10	80	15	95	35	28	63	115	43	158
Production of organic inputs	1	0	10	10	0	0	0	10	0	10
Others (pl.specify)										
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)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
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										
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)										
Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	4	4	1	2	3	1	6	7
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	1	19	16	35	3	10	13	22	26	48
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	2	0	26	26	0	7	7	0	33	33
Women empowerment										
Location specific drudgery production	1	0	18	18	0	5	5	0	23	23
Rural Crafts										
Women and child care	1	0	2	2	0	9	9	0	11	11
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems	1	10	5	15	5	0	5	15	5	20
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements	2	15	13	28	1	1	2	16	14	30
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	8	204	85	289	30	8	38	234	93	327
Integrated Disease Management	6	64	17	81	22	2	24	86	19	105
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	3	24	26	50	3	7	10	27	33	60
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Small Scale processing	1	8	12	20	9	11	20	17	23	40
Capacity building for ICT application	6	88	47	135	19	11	30	107	58	165
Agro-forestry										
Production technologies										
Nursery management										

Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**57**	**752**	**414**	**1166**	**173**	**125**	**298**	**925**	**539**	**1464**

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										
Resource Conservation Technologies	1	17	3	20	4	1	5	21	4	25
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	9	98	27	125	18	2	20	116	29	145
Soil and Water Conservation										
Integrated Nutrient Management	23	291	32	323	117	21	138	408	53	461
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising	1	0	19	19	0	4	4	0	23	23
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)										
c) Ornamental Plants										

Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
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										
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)										
Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology	1	11	6	17	8	0	8	19	6	25
Production of quality animal products										

Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	17	17	0	5	5	0	22	22
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet	1	0	18	18	0	5	5	0	23	23
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	3	0	58	58	0	4	4	0	62	62
Storage loss minimization techniques										
Value addition	10	0	184	184	0	36	36	0	220	220
Women empowerment	2	0	38	38	0	3	3	0	41	41
Location specific drudgery production	1	0	19	19	0	4	4	0	23	23
Rural Crafts										
Women and child care	2	0	18	18	0	24	24	0	42	42
Drudgery reduction	4	0	44	44	0	35	35	0	79	79
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	2	21	34	55	13	12	25	34	46	80
Post Harvest Technology	1	7	5	12	4	0	4	11	5	16
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	21	254	55	309	71	57	128	325	112	437
Integrated Disease Management	8	79	26	105	28	14	42	107	40	147
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										
Capacity Building for Income Generation Activities	2	0	39	39	0	4	4	0	43	43
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**93**	**778**	**642**	**1420**	**263**	**231**	**494**	**1041**	**873**	**1914**

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										
Seed production	1	25	25	50	0	0	0	25	25	50
Production of organic inputs	1	0	10	10	0	0	0	10	0	10
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing	1	8	12	20	9	11	20	17	23	40
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										
Capacity building for ICT Application	3	24	26	50	3	7	10	27	33	60
TOTAL	**6**	**57**	**73**	**130**	**12**	**18**	**30**	**79**	**81**	**160**

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	1	0	19	19	0	4	4	0	23	23
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing	2	21	34	55	13	12	25	34	46	80
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										
Capacity building for income generation activities	2	0	39	39	0	4	4	0	43	43
TOTAL	**5**	**21**	**92**	**113**	**13**	**20**	**33**	**34**	**112**	**146**

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										
Integrated Pest Management										
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	4	55	19	74	10	6	16	65	25	90
Information networking among farmers										
Capacity building for ICT application	3	64	21	85	16	4	20	80	25	105
Management in farm animals										
Livestock feed and fodder production										
Household food security	1	0	4	4	1	2	3	1	6	7
Any other (pl.specify)										
Total	**8**	**119**	**44**	**163**	**27**	**12**	**39**	**146**	**56**	**202**

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										
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	4	49	19	68	11	8	19	60	27	87
Information networking among farmers										
Capacity building for ICT application	1	6	4	10	2	2	4	8	6	14
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total	**5**	**55**	**23**	**78**	**13**	**10**	**23**	**68**	**33**	**101**

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	2	55	12	67	0	3	3	55	15	70
1.b.	Commercial production of vegetables										
2	**Production and value addition**										
2.a.	Fruit Plants	2	67	97	164	15	21	36	82	118	200
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**										
7.a.	Processing and value addition										
7.b.	Others (pl.specify)										
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements	4	38	38	76	2	2	4	40	40	80
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	3	29	46	75	22	23	45	51	69	120
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	**Agricultural Extension**										
12.a.	Capacity Building and Group Dynamics	2	40	3	43	10	0	10	50	3	53
12.b.	Others (pl.specify)										
	Total	**13**	**229**	**196**	**425**	**49**	**49**	**98**	**278**	**245**	**523**

Details of sponsoring agencies involved

1. CAPART, New Delhi.
2. Department of Agricultural Engineering, Theni District.
3. ATMA, Theni.
4. NABARD, Theni.

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	0	10	10	0	0	0	10	0	10
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	1	25	25	50	0	0	0	25	25	50
4.f.	Sericulture										
4.g.	Mushroom cultivation										
4.h.	Nursery, grafting etc.	1	0	19	19	0	4	4	19	4	23
4.i.	Tailoring, stitching, embroidery, dying etc.	3	29	46	75	22	23	45	51	69	120
4.j.	Agril. para-workers, para-vet training										
4.k.	House Hold food security										
5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics	5	24	65	89	3	11	14	44	59	103
5.b.	Others (pl.specify)										
	Grand Total	**11**	**78**	**165**	**243**	**25**	**38**	**63**	**149**	**157**	**306**

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 Days	14	262	94	356	55	39	94	0	0	0
Kisan Mela										
Exhibitions	6	627	133	760	170	51	221	184	15	199
TV Programmes										
Radio Programmes	2	0	0	0	0	0	0	0	0	0
Film Show										
Diagnostic Visits	1	1	0	1	0	0	0	0	0	0
Exposure Visits										
Animal Camps										
Field Visits	100	784	146	930	156	49	205	25	3	28
Kisan Gosthi										
Mahila Mandals										
Farmers visits to KVK	133	161	25	186	7	3	10	21	0	21
Advisory enquiry / Helplineservices										
Farmers Meeting										
Farm Science Club Meeting	7	140	8	148	7	2	9	0	0	0
Extension literature	137	1785	1252	3037	379	303	682	20	6	26
Newspaper/Radio/TV coverage	8									
FFS Demonstration										
Scientists visits to farmers fields	23	99	44	143	8	3	11	0	2	2
SHG Formation	6	0	94	94	0	10	10	0	0	0
Self Help Group meetings	18	0	294	294	0	55	55	0	0	0
Ex-trainees sammelan	1	0	0	0	0	0	0	28	12	40
Home visit	76	58	341	399	10	154	164	0	0	0
Farmwomen visit to KVK	38	0	94	94	0	19	19	0	0	0
Telephone calls	183	139	31	170	2	1	3	9	0	9
FLD Farmers Scientists Interaction	5	31	12	43	20	12	32	0	0	0
FLD Field visit	60	496	121	617	116	54	170	0	0	0
FLD FSC Formation	6	143	0	143	28	0	28	0	0	0
FLD Field Day	17	309	88	397	45	11	56	0	0	0
OFT field visit	69	246	98	344	38	37	75	0	0	0
OFT FSC Meeting	1	20	0	20	5	0	5	0	0	0
Village forest committee meeting										
FFS Session Conducted										
Method demonstration	4	50	5	55	30	8	38	0	0	0
Farmer Enquiry	8	8	0	8	0	0	0	0	0	0
FFS Field Day	1	15	0	15	5	0	5	0	0	0
FFS Field Visit	6	36	17	53	4	0	4	0	0	0
Human Rights Day										
Popular Article										
Lecture Delivered	6	121	84	205	32	30	62	115	55	170
Field Survey										
NGO Network Meeting	6	0	0	0	0	0	0	70	36	106
OFT Field Day	1	21	4	25	4	1	5	0	0	0
Video Clipping	1	0	0	0	0	0	0	0	0	0
Awareness Campaign on Parthenium Eradication	1	0	0	0	0	0	0	29	16	45
FLD FSC Meting	3	86	0	86	19	0	19	0	0	0
FLD Training	8	57	10	67	38	20	58	0	0	0
FLD Demonstration	1	2	0	2	12	8	20	0	0	0
OFT Training	1	5	0	5	0	0	0	0	0	0
Farmers Tour	4	76	19	95	15	2	17	0	0	0
Radio Coverage	2	0	0	0	0	0	0	0	0	0
Tractor Service Mela	1	10	0	10	0	0	0	0	0	0
Technology Week										
International Drug Abuse Prevention and Awareness Day	1	26	31	57	4	4	8	1	9	10
Radio Talk	1	0	0	0	0	0	0	0	0	0
Joint Diagnostic Field Visit	2	6	0	6	0	0	0	7	0	7
SMS Messages	56	142	0	142	15	0	15	66	3	69

World Differently Abled Day	1	0	0	0	0	0	0	25	25	50
Seminar	1	166	234	400	29	45	74	0	0	0
Meet with expert programme	1	30	30	60	5	5	10	0	0	0
Biogas Awareness Camp	1	12	8	20	2	1	3	0	0	0
Awareness Programme for Panchayat Presidents on Disabled Rehabilitants	1	13	5	18	0	0	0	0	0	0
Total	**1030**	**6183**	**3322**	**9505**	**1260**	**927**	**2187**	**600**	**182**	**782**

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)	Sorghum	CO S 28	-	12 q	24000	60
Oilseeds	Cumbu	Co Cu 9	-	9 q	18000	40
Pulses	Groundnut	VRI 2	-	16.5 q	41250	30
Commercial crops	Greengram	CO 7	-	8 q	32000	35
Vegetables	Blackgram	VBN 3	-	8 q	60000	30
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others (specify)						
Total				**53.5 q**	**175250**	**195**

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						
Vegetable seedlings						
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation	Cashew	VRI 3	-	3000	15000	10
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						
Total				**3000**	**15000**	**10**

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	Vermicompost	7000	35000	35
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others (specify)	Earthworm	159	38850	15
Total		**7159**	**73850**	**50**

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 (Goat)	Kannaiah	2	3000	2
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		**2**	**3000**	**2**

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.)

Date of Start : January to March 2004
Periodicity : Quarterly
No. of issues during the reporting Period : 4
No. of copies distributed :1000

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers			
Technical reports			
News letters	Farm Science News Letter	Dr.P.Marimuthu, Mr.M.Lord Savariraj Mrs.S.Karpagavalli Mrs.K.Veerasikkammal Mr.N.Raja	1
Technical bulletins	Advanced Technologies in Cashew, Coconut, Mango and Sugarcane production	Dr.P.Marimuthu, Mr.M.Lord Savariraj Mrs.S.Karpagavalli Mrs.K.Veerasikkammal Mr.N.Raja	1
Popular articles	IIHR Banana Special	Dr.P.Marimuthu	1
Extension literature	Cultivation of Arka Rose Onion	Dr.P.Marimuthu, Mr.M.Lord Savariraj Mrs.S.Karpagavalli Mrs.K.Veerasikkammal Mr.N.Raja	164
	Integrated Pest and Disease Management in Pulses		
	Induction Training for Special Group Facilitators		
	Project Preparation and Management		
	Repair and Maintenance of Tractor		
	Integrated Pest Management in Banana		
	Integrated Nutrient Management in Banana		
	Drudgery Reduction Technologies among Farm Women		
	Documentation and Reporting		
	Integrated Nutrient Management in Lime		
	Management of Tea Mosquito bug in Cashew		
	Onion Pickle Preparation		

	Candle Making		
	Agarpathi Making		
	Chalk Piece Making		
	Cultivation aspects Arka Rose in Onion		
	Induction Training for Special group facilitators		
	Drudgery Reduction Technologies among farm women		
	Bollworm Management in Cotton		
	INM in Maize		
	Downy Mildew Management in Grapes		
	Integrated Nutrient Management in Banana		
	Nutrimix Powder Preparation		
	Mango special Nutrient Management		
	Pest and Disease Management in Pulses		
	Storage Pest Management in Rice		
	Women and child care		
	Foliar Application of IIHR Banana Special		
	Pest and Disease Management in Mango		
	Home Care Products		
	Onion Pickle Preparation		
	Pest and Disease Management in Banana		
	Organic Farming		
	Monitoring and Evaluation		
	Organic Pest Management		
	Project Preparation and Management		
	Root Feeding of TNAU Coconut Tonic		
	Drudgery Reduction Technologies		
	INM in Banana		
	Leaf Reddening Management in Cotton		
	Integrated Nutrient Management in Banana		
	Onion Pickle Preparation		
	Sigatoka leaf spot Management in Banana		
	Foliar Spray of IIHR Banana Special		
	Downy Mildew Management in Grapes		
	Cultivation of Moringa		
	Vegetables Preservation Technologies		
	Project Preparation		
	Fruit fly Management in Moringa		
	Vegetable Pickle Preparation		
	Cultivation of Betelvine		
	Organic Pest and Disease Management		
	Vegetable Pickle Preparation		
	Leadership Development for Farmers Club Convenors		
	Protein Rich foods for Rural Youth		
	Pest and Disease Management in Redgram		
	Pest and Disease Management in Cumbu		
	Nutrition Education for Pregnant Mothers		
	Pest and Disease Management in Coconut		
	Project Planing and Management		
	Seed hardening in Sorghum		
	Integrated Nutrient Management in Maize		
	Nutrimix Powder Preparation		
	Pest and Disease Management in Banana		
	Maize Cultivation and Fertigation in Maize		
	Pest and Disease Management in Maize		
	Pest and Disease Management in Sorghum		
	Sorghum Cultivation and Integrated Nutrient Management		
	Nutrient Education		
	Integrated Nutrient Management in Sugarcane		
	Women and Child Care		
	Pest and Disease Management in Paddy		
	Income Generating activities for empowerment of rural women		
	Fertigation in Maize		
	Pest and Disease Management in Paddy		
	CRIDA Vegetable Preservator Technologies		
	Development of Social Entrepreneurs		
	Management of Brown Leaf Spot in Paddy		
	SRI		
	Pest and Disease Management in SRI		
	Technologies about Paddy Transplantor		
	Nutrient Management in Sorghum		
	SHG Formation and Maintenance		
	Pest and Disease Management in Paddy		
	Mini Mobile Sprinkler Technologies		

	Integrated Crop Management in Moringa		
	Integrated Nutrient Management in Sugarcane		
	Foliar application of Banana Special		
	Income Generation Activities for Rural Women		
	Integrated Pest and Disease Management in Maize		
	Greengram Cultivation in Dryland		
	Gender Main Stream through SHGs		
	Integrated Crop Management in Greengram		
	Dryland Management Practices		
	Household food security by Kitchen Gardening through farm women		
	Stem Weevil Management in Banana		
	Phytopthora Wilt Management in Betelvine		
	Use of Spraying equipments in Agriculture		
	Use of Agriculture equipments in Agriculture		
	Designing and Development for high nutrient efficiency diet for Rural Youths		
	Mechanized Weed Management in Crops		
	Water Management through Sprinkler and Drip Irrigation and Water Saving devices		
	Foliar Application of Pulses Wonder		
	Integrated Nutrient Management in Pulses		
	Foliar Application of Maize Maxim		
	Micronutrient application in Maize		
	Maize Cultivation		
	Downy Mildew Management in Grapes		
	Leaf Reddening Management in Cotton		
	Modern Technologies in Sugarcane Cultivation		
	Use of Power Sprayer and Dusters in Agricultural Crop Protection		
	Selection, Operation and Maintenance of Plant Protection equipments		
	Management of Rural Development Projects		
	Women and Child Care		
	Micro Nutrient deficiency management in Coconut		
	Mango Cultivation		
	Integrated Pest and Disease Management in Mango		
	Management of Papaya Mealybug		
	Integrated Pest and Disease Management in Sugarcane		
	Site Specific Nutrient Management in Rice		
	Seed Production in Pulses		
	SHG Formation and Maintenance		
	Package of Practices for mechanisation in Paddy		
	Mechanised weed Management in Crops		
	CRIDA Vegetable Preservator technologies		
	SRI Cultivation Practices		
	Entrepreneurial activity for women and landless in watershed area		
	Livelihood Development for women and landless in watershed area		
	Suitable Entrepreneurial activities		
	Income Generating activities for rural youth		
	Integrated Nutrient Management in Rice		
	Integrated Nutrient and Water Management in French Beans		
	Value aded products from Pickle Preparation		
	SHG Formation and Maintenance of disabled persons		
	Impact of Climate Change and Forest Migration		
	Pest and Disease Management in Maize at Duraisamypuram		
	Pest and Disease Management in Maize at Elayirampannai		
	Mixed Fodder Cultivation Practices		
	Pest and Disease Management in Moringa		
	Fodder Cultivation for Cattle Growers		
	Integrated Nutrient Management in Sugarcane and Foliar application of Sugarcane Booster		
	Foliar application of Maize Maxim		
	Maize Cultivation at Duraisamypuram		
	Maize Cultivation at Elayirampannai		
	Foliar application of Micro Nutrient		
	Conservation Agriculture		
	Integrated Nutrient Management in Rice and Mechanised Weed Management in Crops		
	Mealybug Management in Cotton		
	Sprouted Cereals and Pulses in daily diet		
	INM in Banana and Foliar application of Banana Special		
	House Hold security by Nutrient Garden		

	Integrated Pest and Disease Management in French beans		
	Value added products from Tomato		
	Pest and Disease Management in storage on Maize		
	Integrated Pest and Disease Management in Rice		
	Value added products from Bakery		
	Pest and Disease Management in Banana		
	Integrated Pest and Disease Management in Sugarcane		
	Drudgery Reduction technologies among farm women		
	Integrated Pest and Disease Management in Maize		
	Pest and Disease Management in Coconut		
	Value added products from low cost minor millets		
	Integrated Pest Management in Rice		
	Reporting and Documentation		
Others (Pl. specify)			
TOTAL			**167**

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).

Success Story - I
Cultivation of Aloe under Zoro Tillage Practice

Background:

Mr.V.Srinivasa Raghavan aged 52 is a farmer who cultivate and practice advanced technologies to increase the production. Normally he is cultivating Cotton, Maize, Tomato, Chillie, Beetroot, Onion, altogether in 15 acres with adequate irrigation. Apart from this 15 acres of land, he own another 50 acres which are dry undulated and slopy. The soil is highly poor with pebbles and sand which are not suitable for cultivation. Several times he has tried to do intensive cultivation with assured irrigation. He made brewell in his land area, but the water in the bore was very minimum with poor quality which is not sufficient enough for cultivation. He tried to cultivate tree crops such as Tamarind, Cashew and neem. The land is very poor in nutrient even for growing tree. The growth of tree was not to a standard level as other trees grown in normal and fertile land. Hence it was realized and understood by the farmer to change pattern of cultivation from trees to other crops. Sometimes middle man had given much pressure to sell the land to companies of textile mills and wind mills. The farmer was very much stubborn to cultivate the land with a suitable crop.

During the time he has attended the training programme conducted by KVK like FLD, OFT, Extension programme organized for farmers, farm women at KVK. He has acquired basic knowledge and skill on decision making in Agriculture and allied sector. Apart from the training given, he specifically approached the KVK scientists and explained the nature of land and expressed the steps and activities he has spent on every venture, the pain and time he spent over the process of development, the recurrent losses he has incurred in the establishment process, his financial loans in private, public and bank, mental agony he come across in his life because of huge investment, etc. The KVK scientists visited the farm and offered only one suggestion and technologies for adoption.

Technology I – Cultivation:

1. Cultivation of Aloe barbadensis
2. Spacing 2 feet in the line and 3 feet in the row
3. Adoption of drip single point with micro tip
4. Optimum clearance of weed growth with sickle
5. Zero tillage from starting to end
6. Drip irrigation once in a week or 10 days depending upon the water availability from bore which was highly flexible according to winter, summer and rainy days.
7. Plant protection with fungicides if disease noticed if any.
8. Harvesting matured stuffy and bluffy leaves from button of the stem.

Technology II – Commercial Preparations:

1. Plugging the matured leaves.
2. Removing the outer layer and extracting crystal pulp alone.
3. Using crystal pulp as raw materials for Aloe juice.
4. Utilizing Aloe juice for the production of cosmatics, Energy drinks and medicinal peoducts.

Totally more than 100 products are being manufactured at this centre. All the products are packed properly and sold through Medicals, General Stores and Soft drink shops. These products are marketed in local and external market. Apart from own production crystal pulp is sold to other manufacturing units established in other areas for a considerable price.

Concept of Developing the unit:

By doing Aloe Cultivation,

- Conservation Agriculture is being practiced.
- The input and capital investment cost are very less
- Environmentally safe without disturbing nature.
- The byproducts are highly safe to human health.
- The purchase price is economically cheaper than other synthetic materials in the market.
- More employment opportunity in the cultivation and also in the production.

Impact:
Horizontal Spread:

- Zero tillage practices are reducing the cost of cultivation.
- Adoption of other farmers in cultivating the Aloe and selling the some to industry.
- People purchase chemical free natural products from the market.
- Consumer awareness has been created by the sellers in the market.
- Attracted the attension of many people involving in cultivation, especially the dryland and marketers involving in product promotion.
- Herbal cosmatics, Energy drinks and medical products are produced and utilization by consumer produces are poison free, leading to healthy living.

Economic Gains:

The farmer spent less investment cost and get maximum benefit out of the cultivation. The people and the consumer purchase and utilize good healthy product at a reasonable market price.

Employment Generation:

It provides adequate employment generation to the local illiterate people with adequate wages, skilled women in the production unit with weekly remuneration, educated persons in production and marketing, scientists in Research activities, business man in export marketing and other people who directly and indirectly involved.

Success Story - II
Yield Maximisation in Banana through High Technology

Background:

Mr.G.Nathan Meeran, S/o Gulam Mohaideen is a farmer from Uthamapalayam, Uthamapalayam Block, Theni District. He own 25 acre of land traditionally from his fore fathers and cultivated Banana, Onion, Beetroot, Coriander, Brinjal, Tomato with an average yield profit of 2 lakhs per year. There are four bore wells available with assured irrigation supply. The acute water shortage due to reduced water supply decreased the area under cultivation and the farmer faced financial problem.

Earlier the farmer cultivated banana 'As it is, where it is'. The production has no quality and quantity. No specific sucker selection and sucker treatment was made. Nutrient application or giving importance to nutritional status of soil was given least importance. Traditional practices of irrigation was followed in check basin with more wastage of water. Intercropping was given much more importance than main crop. More spacing of 7 x 5 feet was practiced. Un scientific way of cultivation was practiced. The understanding on pest and disease, its control activities was very poor. Wrong selection of pesticides were made for a particular pest or disease. Marketing was not extensive and it was localized. The market price was very low. No storage facilities with cold storage was available.

Intervention:
Process:

The farmer has attended training programme conducted by the KVK scientists. Hence the farmer lured by the scientific adventures communicated in the training and demonstration. Again he separately contacted the KVK scientists and explained the difficulty of getting more income and the prevailing situation in the farm. He narrated the previous procedures adopted in his farm to get income. He revealed the repeated failed process in every attempt he made to get maximum benefit and the loss he incurred everytime. The KVK scientists visited the farm and taught the recent innovations in the field of agriculture. The scientists understood the option of the farmer to proceed further with reduced expenses, inputs, labour storage reduced water potential and with minimum risk. Hence the farmer was introduced with Department of Horticulture, Jain Irrigations, Nagarjuna Fertilizers, NRCB and TNAU Scientists. The farmer visited Jalgoan four times in Maharashtra to study about different irrigation methods, soil study, cultivation practices adopted in Jain Irrigations. There after the KVK scientists explained new innovations in Banana cultivation.

Technology:

After assessing the soil condition, water availability and quality of water, the following technology options were suggested to the farmer for adoption.

- Cultivating Tissue Culture (G9) Banana.
- Adopting drip irrigation system.
- Application of bio inoculants such as pseudomonas, Trichoderma, Bavaria, etc.
- Utilizing waste materials into compost and vermicompost preparation.
- Raising Green manure and insita ploughing.
- Application of Tank silt and FYM, birds leavings.
- Soil rest for one year to avoid banana disease causing fungal spores.
- Adopting paired row planting 4 x 6 ft and 3 sucker planting.
- Utilizing power weeder to reduce weed problem.
- Fertigation through drip. Spraying IIHR Banana Special micro nutrient.
- Bunch cover to avoid dust, pest and disease infestation.
- Inter connection of bore well deliveries and diversifying the routes of water flow to the field where irrigation is most essential.

Marketing:

The farmer was sent to New Delhi to attend Good Agricultural Practice (GAP) which was arranged by the IARI. He learned the market strategies in India and Abroad. He revealed that consumer awareness is very important to avail the product at reasonable rate. Further he opined the farmers need support price for banana and extensive storage facilities has to be created to avoid the perishability of the commodity.

Awards and Membership:

Presently the farmer has received Progressive farmer identity Award from Association for Improvement in Production and Utilization of Banana. Also he is a member of Banana growers Association at All India, Tamilnadu State and Theni district level.

Impact:
Horizontal Spread:

Adoption of the above technology has spread to Surulipatti, KK Patti, NT Patti, Rayappanpatti, Chinnamanur, Erasai, Hanumanthanpatti, Pudupatti, KG Patti villagers. The particular farmer is a Management Committee member of a reputed college in Uthamapalayam. He is having good report with local leading farmers in surrounding villages. Many farmers visit the farm and adopted the technologies and many are likely to adopt the same technology with minimum investment.

Economic Gain:

Presently the farmer gain Rs. 52 lakhs from his 25 acres of farm every year as gross profit. Cost of cultivation also was less and it is affordable. He has acquired enough knowledge on banana cultivation. He has the ability to select the time of planting, input choice with low cost, managing the fertilizer, pesticide dosage, time and quantity of irrigation and harvesting. He plant 52,000 tissue culture plants in 25 acres at an average of 5,200 plants per hectare at an average price of Rs. 200 per bunch. While calculating the expenses, he spent approximately 26 lakhs and gain 52 lakhs as net profit per year.

Employment Generation:

Everyday 10 farm women and five men are working in his farm. Apart from that employment is provided to the casual labourers for Farm Yard Manure application, planting, removed of old pseudostem, hand hoeing, bunding, etc from time to time.

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

Unemployed agricultural graduate has been developed into Agri business consultant to realize yield maximization in Cardomum and Banana.

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
1	Greengram	Immediately after the harvest, bold good quality seeds are separated, shade dried, then on new moon day seeds are mixed with dried neem leaves and placed in indigenously designed Bronze storgare bin and fine sand upto 5 cm height is spread over and tied with cotton cloth for preservation upto 9 months.	Storage without Pest and Disease infestation.

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

No.	Courses for	Identified through
1.	Farmers	• Base line survey • Joint diagnostic survey with Dept. of Agriculture • Farmers visits to KVK, Scientist's visit to KVK • Farm Science Club Meeting, Village Development Society Meeting
2.	Farm Women	• Base line survey, TANWA Trainees • Self Help Group Members • By Village Meeting
3.	Rural Youths	• Nehru Yuva Kendra • DRDA, District Social Welfare Office • NSS at School • Direct Personal contact of Rural Youths
4.	In Service Personnel/ Extension Functionaries	• Consultation with higher officials

10.G. Field activities

i. Number of villages adopted: 36
ii. No. of farm families selected: 1080
iii. No. of survey/PRA conducted: 36

10.H. Activities of Soil and Water Testing Laboratory

1.Status of establishment of Lab : Established
2.Year of establishment : **04.08.2006**
3.List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1.	Spectrophotometer	1	60,000
2.	Flame photometer	1	50,000
3.	pH meter	1	10,000
4.	Physical balance	1	10,000
5.	Chemical balance	1	1,00,000
6.	Water distillation Still	2	2,00,000
7.	Kjeldahl digestion	1	45,000
8.	Shaker	1	25,000
9.	Refrigerator	1	20,000
10.	Hot air oven	1	15,000
11.	Hot plate	1	25,000
12.	Grinder	1	30,000
13.	Racks, Almarah, angle, wash basin, gas burner		3,20,000
14.	Chemicals, Glasswares		2,50,000
15.	Pestle mortar, Soil sample auger, Cloth bag, Plastic jar, tray		20,000
16.	Digital pH meter	1	2,000
Total			**11,82,000**

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	1257	1090	421	62300
Water Samples	930	881	400	46350

Plant samples	7	7	7	700
Manure samples	0	0	0	0
Others (specify)	0	0	0	0
Total	**2194**	**1978**	**828**	**109350**

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	69	69	48	3450
Water Samples	60	60	42	3000
Plant samples	0	0	0	0
Manure samples	0	0	0	0
Others (specify)	0	0	0	0
Total	**129**	**129**	**90**	**6450**

10.I. Technology Week celebration: NIL

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)**
Sorghum CO S 28 Cultivation	12	71.3	29400	40000
Cumbu Co Cu 9 Cultivation	22	62.3	21420	26000
Redgram Co RG 7 Cultivation	27	47.6	19450	25226
Greengram Co (Gg) 7 Cultivation	22	38.2	18300	24444
Blackgram VBN 3 Cultivation	20	64.7	19430	28762
Foliar Application of IIHR Banana Special	65	67.8	330000	415000
Mealybug management in Cotton	43	84.3	111420	135831
Phytophthora Wilt Management in Betelvine	20	64.9	326900	429000
Fruit fly management in Moringa	23	63.7	315900	421800
Tea Mosquito bug Management in Cashew	29	44.83	25895	31500
SRI	20	68.4	26470	35780
Onion pickle preparation	21	23.81	-	5000/year
Foliar application of Pulse Wonder	35	59.7	18300	29572
Foliar application of Maize Maxim	38	76.7	47960	80080

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)

S.No	**Village**	**Discipline**	**Crop/Enterprise**	**Technology**	**Treatment**	**% of Adoption**
1.	Chinnamanur Markayankottai	Plant Protection	Betelvine	Application of Chlorothalanil for Pytopthora wilt management	IPM	64.9
2.	Alagapurai Jangalpatti Dharmapuri Kuppinayakkanpatti	Agronomy	Pulses	Foliar application of pulse wonder	INM	59.7
3.	VC Puram Dharmapuri Rajendra Nagar Anna Nagar Govinda Nagar	Agronomy	Maize	Foliar application of Maize Maxim	INM	76.3
4.	Kottur Seelayampattti Chinnamanur Markayankottai	Agronomy	Paddy	CORH 3 with SRI	ICM	68.4
5.	Alagapuri Kuppinayakkanpatti	Agronomy	Greengram	Cultivation of CO Gg 7	ICM	38.2
6.	Hanumanthanpatti C.Puthupatti Narayanathevanpatti Cumbum Gudalur	Horticulture	Banana	Foliar application of IIHR Banana Special	INM	67.8
7.	Rasingapuram Silamalai Silamarathupatti Bathrirakalipuram Dombucherry	Plant Protection	Cotton	Application Neem Oil 3% + Fish Oil Resin Soap 25 gm/lt + Yellow Sticky Trap 5/ha for Whitefly management	IPM	58
8.	Rasingapuram Silamalai Silamarathupatti Bathrirakalipuram Dombucherry	Plant Protection	Cotton	Spraying of Acepate 2 gm/lt + Fish Oil Resin Soap 25 gm/lt for Mealybug management	IPM	62%

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

Impact of Integration of Agriculture, Horticulture and Animal Husbandry for Successful and Profitable Farming

Background:

Theni district is potential area for Agricultural, Horticultural production with the cultivation of Agricultural and Horticultural crops together with cattle and goat growing. These production meet the local demand and marketing to other states in India and abroad also. The source of irrigation mainly rely upon Periyar Vaigai River project and other 18 canals from the main source to different parts of Theni district. Ponds are refilled yearly twice through this canal systems and the surrounding open wells are get recharged and it is highly helpful for irrigating Garden land cultivation. The places where garden land cultivation is not practiced, dryland cultivation is adopted. Every farmer has either open or borewell system of irrigation in their own land to irrigate the crop.

Intensive Agricultural Practices:

More than fifty percent of the farming communities in Theni district are resource rich farmer and the remaining and moderate and resource poor. The purchasing power is more among resource rich farmer and they are very much adoptive to high technologies in Agriculture. This habit oriented them to adopt new chemicals and indiscriminate application of pesticides and fertilizers to the crop was practiced to increase the yield. The gross return may increase to satisfy the farmer, while calculating the production and productivity. The real net return may not be acceptable in increasing the per capita income. The farmer were not able to realize the profit equivalent to a normal business by an ordinary man. The ultimate reason is the use of inorganic chemical inputs which is more than 60% than organic inputs and the income cannot be realized at the end Agriculture. Though the farmers have enormous local resources with them, they were not utilizing it in a proper way with a minimum risk and labour source. The technologies are available with them at the nearest agricultural centre. Eventhen they are not in a position to avail those simple inexpensive technologies. The farmer need awareness through trainings and demonstrations. Farmers do not calculate the cost of cultivation invested in his farm. They completely blind off the cost of production and cost benefit ratio. Their main focus is to achieve more production and high market price.

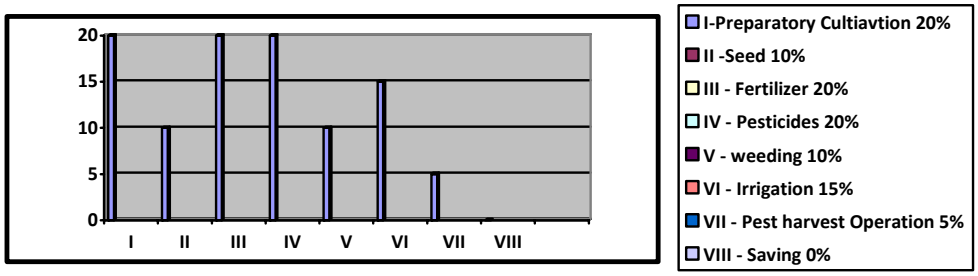
Success Story of the Innovative Farmer:

The farmer **Mr.D.Saminathan** is hailing from T.Sindalacherry village in Uthamapalayam Taluk of Theni district in Tamilnadu. He has developed 10 acres of land holding with assured supply of irrigation through drip system. The land was initially cultivated with Cotton, Beetroot, Sorghum, Maize, Redgram and Groundnut. He used heavy dose of fertilizer and pesticides and other inorganic inputs to the cultivable crop to increase the production and unit area productivity. This land was developed by his father initially and the response in yield was not sufficient enough to his expectation. On continuous cultivation his father could not take up the lead because of drastic reduction in production and increased cost of cultivation. At one particular point the land was morgaged to Bank for further cultivation operation. He could not realize the profit margin. There were no increase in production while doing the same agricultural practice. The subsequent cultivation pulled him down economically and under debenture. The land productivity was slowly decreased, the loan was not repaid, the debenture become more and it was resulted in likely to sell the land repaying the debenture in the Bank.

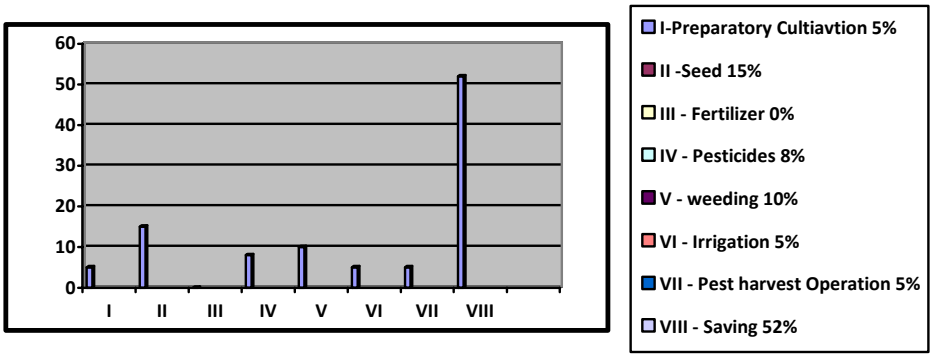
Intervention of KVK at particular point of time made him to aware and adopt technologies of Integration of Agriculture, Horticulture and Animal Husbandry. He started practicing the Integration Process and suitable technologies to adopt the Integration with available resource potential. This approach lighten him, convinced his father to avoid the old inorganic agricultural practices and to adopt morden methods, techniques and strategies to save unnecessary investment in land. Together the change ensured several direct and indirect benefits. Prominent among the investment are cattle rearing with cow, Vermicompost unit, goat rearing, production of enriched farm yard manure, cultivation of vegetables, Banana and Guava which are promising in increase the farm income.

Input cost before and after Integrated Farming System:

Input cost before Integration of Different Farming Practices:



Input cost after Integrated Farming System:



Intervention process:

The farmer has participated in the trainings and demonstration on organic farming, cattle and goat farming, fodder cultivation, compost making, Enriched FYM preparation, FLD on Groundnut, Greengram and regular extension activities of the KVK. He has been guided and motivated to takeup integrated farming system model in his farm for reducing the dependency on external inputs and increasing net profit from his farm. So the farmer has started dairy and goat unit in his farm and them expanded cultivation activities for increasing the opportunity to effectively recycle the waste and utilize it in the farm for soil fertility maintenance.

Different Components Adopted in the Farm:
(Cost of Establishment, Gross Income, Net Income)

Integration of Different farming sector:

The farmer have decided to use only organic manures in his farm and accordingly he produced manures and cultivating Agricultural and Horticultural crops.

S.No	Components	Gross Income Rs.	Cost of Establishment Rs.	Net Income Rs.
1.	Cow/Milk yield (6 Cows)	1,50,000	1,00,000	50,000
2.	Goat/Meat (40 Goat)	1,50,000	20,000	1,30,000
3.	FYM/Cost of Labour	1,10,000	10,000	1,00,000
4.	Vermicompost/ Cost of Labour (10 x 3 ft x 10 unit)	70,000	50,000	20,000
5.	Banana (1 ac)	5,00,000	2,00,000	3,00,000
6.	Chillie (1 ac)	1,50,000	1,00,000	50,000
7.	Brinjal (1 ac)	1,30,000	70,000	60,000
8.	Lab Lab (1 ac)	75,000	35,000	40,000
9.	Guava (1 ac)	45,000	30,000	15,000
10.	Mango (150 tree)	1,00,000	90,000	10,000
	Total	**14,80,000**	**7,05,000**	**7,75,000**

Cattle/Cow growing:

Initially the farmer purchased 6 Cows @ Rs. 1,00,000 from external agencies. He has raised 0.25 ac of fodder including Napier Cumbu hybrid, Co Fodder Sorghum, Sasbania, Castor, Subabul and other essential fodder. Minimum of cattle feed with mineral mixture was purchased from market. Medical expenses were added in the production cost. Milk was sold to the local traders. Cow dung was collected separately and utilized for preparation of enriched Farm Yard Manure. Cow Urine is collected separately and used in the preparation of biopesticide. These biopesticides are act as feeding deterrent and nutrient supply through foliar spray to the agricultural and horticultural crops. A portion of cow dung and urine is used for raising vermicompost pit together with farm waste. The farmer is still want to establish and expand the units with morden systems such as increasing the number of cows, milking machine, feed milk, fodder cutter, morden cattle shed with water showers, etc. He revealed that around hundred percent of the fertilizers requirement is full filled by applying the enriched Farm Yard Manure, Compost and vermicompost. Annually the farmer gain net profit of Rs. 50,000 by rearing cow.

Goat production:

The farmer is very much guarantee and confident on goat production because of its assured income with less input cost because of input availability in the farm itself. Sometimes he feel that goat production may be an equivalent sourcealternate for cultivation even the cultivation fails. Initially he purchased 40 young goats for Rs. 20,000 and in third year, it have an assured income at an average of Rs. 1,30,000 per year. The goat is purchased for meat purpose by the traders, particularly the matured males and females. The female young ones are not sold because it is retained for re production purpose. The goat manure is a nutrient rich manure which contain all nutrients. Irrespective of the demand in the market, the farmer utilizinggoat manure for his own farm purpose. The farmer still want to expand the goat farm upto 100 aiming with an annual turn over of Rs. 4 Lakhs per year.

Enriched Farm Yard Manure:

The available cow dung, urine, goat manure farm wastes are used to prepare enriched Farm Yard Manure. Alternate layers of farm waste and FYM under Bangalore method (Partially above and partially below the ground level) helps in preparing FYM in 6 months. The farmer get Rs. One lakh worth of manure without transport charge every year. Similarly the goat manures also dried and made into powder form and applied to the crop field.

Vermicompost:

10 x 3 feet vermicompost pit 5 nos is available in the farm. The pit is constructed out of brick and cement, where in the waste, crops refuses are placed and utilized as vermifeed. Mostly banana trashes, vegetable leaves and sticks are chopped and placed in the pit and applied with cow dung water. The process is harvested every 60^{th} day with an annual production of 2,350 kg from all the pit to an estimate cost of Rs. 5/kg. Approximately 14,000 kg of vermicompost is available from 5 pits with an average of 28,000 kg/pit and 467 kg/pit is harvested in 60 days. All the products are utilized by the farmers in his own farm irrespective of the external demand. Further the farmer want to increase another 5 pits and willing to do commercial marketing outside to other farmers.

Irrigation Management:

To reduce the labour cost and saving water, drip system of irrigation is adopted. Timely irrigation is ensured in this method. Quantity of irrigation water is reduced enormously and the same is utilized for other crop purposes.

Banana Cultivation:

Banana is cultivated in four acres. Tissue culture banana is planted. First time planted G9 banana is allowed continuously for three times depending upon the availability of water and soil condition. Totally 4200 banana is planted in 4 acres. First harvest has been completed with a net profit of Rs. 1,55,000 with an initial investment cost of Rs. 4,50,000 including drip installation. Banana is cultivated without application of fertilizer. Need based pesticides spray alone is being taken up in a warrented situation. The farmer permit the subsequent 2^{nd} and 3^{rd} crop because it needs no capital/initial investment which is highly profitable for him.

Vegetable Cultivation:

Chillie, Brinjal, Lab Lab, Tomato also planted in the farm and it is highly remunerative at an optimum price. Nearly 100 percent income is assured in every vegetable cultivation under drip system of irrigation. Chillie has yielded with the net income of Rs. 1 Lakh with the cost of cultivation of Rs. 50,000, Brinjal with Rs. 70,000 net profit with Rs. 60,000 cost of cultivation and Lab Lab with Rs. 35,000 net profit with Rs. 40,000 cost of cultivation. The profit depends upon the flexuation of price in the market and never failed ever before while doing vegetable cultivation.

Horticultural Farming:

Mango tree 150 is raised randomly over 10 acres of land. It yield 100 kg/tree on an average. The total yield comes 15,000 kg @ Rs. 6/kg and the income shoot up to Rs. 90,000/year. The cost of cultivation comes Rs. 10,000 for filed activities viz., Ploughing, Pruning, Spraying, Plugging, etc. These trees has no adoption with drip irrigation regularly. It is outrightly dry and provided with loan micro outlets at the time of other crop cultivation in the particular field. No special operation and expenses and made for growing and protecting Mango trees.

Farmers visit to farm:

Many farmers from the district and other areas are visiting periodically to the farm. Those farmers were also adopted this technology because of its viability viz reduced cost of cultivation and maximum output. Particularly the farmers having 5-10 acres of land have lured by this farm, visit, gathering knowledge and they established accordingly. This method have lighten many farmers those who are in the vested interest of doing cultivation practices and willing to drop agriculture. Many farmers have exclaimed about the development because of its less investment budget with outstanding income potential.

Economic Gains: (Cost Benefit):

The farmer is able to realize a net profit of Rs. 7,75,000/year from this Integrated enterprise. He solely depends 90% of the input in his farm and another 10% of the inputs such as seeds, pesticides, labour from outside. The farmer revealed that his father spent Rs. 5 Lakhs and realized Gross profit of Rs. 3.5 Lakhs with the loss of Rs. 1.5 Lakhs/year. Likewise, repetitively four years suffered without any profit and finally in the state of debenture. Now the farmer realized the changes made in the farm with assured income. He received gross income of Rs. 14,80,000 with Rs. 7,05,000 cost of cultivation and calculating the cost benefit ratio 1:2.095.

Employment generation:

The farmer and his brother are maintaining the whole farm with two women labour. They are permanently working in cattle, goat shed and vermicompost unit. Other labourers are temporary depending upon the work available in the farm. The farmer and his brother also working together in drip maintenance, cattle and goat management, other field management from time to time based on need.

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
Dept. of Agriculture	Joint problem identification, Conducting Training programmes and Demonstration. Received assistance for getting seeds/critical inputs for FLD Programme. Participation in department training programme as resource person.
Soil Testing lab, Theni	Jointly organizing awareness campaigns
Dept. of Horticulture	Received assistance for conducting Training Programmes. Supply of quality seedlings to farmers.
Dept. of Animal Husbandry	Participation in animal health campaign
Horticultural College and Research Institute, Periyakulam	Received latest technologies for popularization to farmers, guidance to students for their Rural Horticultural work experience programme
Agricultural College and Research Institute, Madurai	Guidance to students for their Rural Agricultural Work Experience programme
Nehru Yuva Kendra, Theni	Creating awareness among farmers about scientific farming through field level NYK volunteers
Dept. of Sericulture	Arranging Mulberry cuttings, eggs to farmers
NGO Network	NGO Personnel were trained. Creating joint awareness about safeguarding environment through Campaigns
SPIC	Jointly organizing trainings
All India Radio, Madurai	Broadcasting of Talk/Interview of KVK staff and farmers
News Papers	Coverage of KVK activities
TAPCO Agro Farm, Srivilliputhur	Medicinal and aromatic plants oil marketing
DRDA	Joint implementation of Bio-gas training and plant construction
Tamil Nadu Agricultural University	Getting seeds of improved varieties for FLD programme
NABARD	Implementation of VVV club programme
Aavin, Theni	Maintaining Artificial Insemination centre
Agricultural Engineering department	Jointly organizing trainings
District Social Welfare Office, Theni	Getting assistance for rural women and rural youths
BDO Office, Chinnamanur	Grading of SHGs and Bio-gas programme implementation
Women Development Corporation, Theni	Received assistance for conducting training programmes for SHGs and NGOs
THADCO	Received financial assistance for SHG members as individual loans
FTC, TANUVAS, Theni	Jointly organizing training programmes
Joint Action for Sustainable Livelihood (JASuL) supported by SIEMENPUU Foundation, Finland.	Training extension workers on PRA techniques.
Vazhnthu Kattuvom Thittam,Theni	Jointly organizing trainings

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 (Rs.)
Training for Rural Youth	16.09.2010 to 20.09.2010	SIAAP	3,150
Trainng on water management through sprinkler and drip irrigation water saving devices	29.11.2010 to 04.12.2010	Department of Agrl. Engineeering	1,500
Training on selection operation and maintenance of plant protection equipments	03.01.2011 to 09.01.2011	Department of Agrl. Engineeering	16,000
Technologies to increase the Production of Coconut, Mango, Cashew and Sugarcane Crops, Value Addition of Products and its Marketing in Theni District	06.01.2011 to 10.01.2011	ATMA, Theni	1,00,000
Training program on landless and women livelihood development	20.01.2011 to 21.01.2011	NABARD	16,100
Training on package of agricultural machinery for paddy cultivation	19.01.2011 to 25.01.2011	Department of Agrl. Engineeering	20,800
Seminar on Augmentation of Pulses Production in Theni District	April 2010	ATMA,Theni	18,000
Induction Training for Special Group Facilitators	May 2010	Vazhnthu Kattuvom Thittam,Theni	2,00,000
Biogas users Camp	09.02.2011	TNAU	1,600
Farm School on Maize Cultivation	17.01.2011	ATMA, Kadamalaikundu	68,680
			4,45,830

12.C. Details of linkage with ATMA

Is ATMA operational in your District : Yes If yes since when: 2008-09

If Yes whether SREP prepared: Yes Year of preparation of SREP: 2009

If yes, what is the role of KVK in preparation of SREP of the district?

a) Participated in the PRA Agro Eco System Core Team member

b) Suggested List of programmes of Front Line Demonstration

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**				
02	**Research projects**				
03	**Training programmes**				
04	**Demonstrations**				
05	**Extension Programmes**				
	Kisan Mela				
	Technology Week				
	Exposure visit				
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	Seminar	1. Augmentation of Pulses Production technologies in Theni district. 2. Technologies to increase the Production of Coconut, Mango, Cashew and Sugarcane Crops, Value Addition of Products and its Marketing in Theni District		1 1	
06	**Publications**				
	Video Films				
	Books				
	Extension Literature				
	Pamphlets				
	Others (Pl. specify)				
07	**Other Activities** (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development				
	Farmers Field School	1. Maize cultivation Practices at Duraisamipuram 2. Maize cultivation Practices at Elayirampannai		1 1	
	Total			**3**	

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

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 NIL

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 NIL

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
April 2010	-	-	-
May	-	-	-
June	-	-	-
July	11	61	56
August	30	61	52
September	22	70	43
October	4	70	36

November	2	70	24
December	-	-	-
January 2011	5	70	28
February	-	-	-
March	-	-	-
Total	**74**	**402**	**239**

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	Cashew	2000	0.4	VRI 2	Nuts	3.89 q	8450	15949	-
2	Banana	2010	0.4	Grand Naine	Bunch	1800 Nos	108500	252000	-
3	Sorghum	2010	1.0	Co S 28	Grains	34 q	15600	34000	-
4	Cumbu	2010	0.4	Co Cu 9	Grains	10.2 q	5400	11730	-

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									
Sorghum	20.10.2010	18.02.2011	0.4	Co S 28	Seeds	12 q	6860	24000	
					Grains	4.2 q		4200	
Cumbu	18.10.2010	06.02.2011	0.4	Co Cu 9	Seeds	9 q	5600	18000	
					Grains	4.8 q		5520	
Maize	11.09.2010	18.01.2011	1.0	Big Boss	Grains	60 q	32200	60000	
Pulses									
Greengram	25.11.2010	09.02.2011	0.8	CO 7	Seeds	8 q	10250	32000	
Blackgram	01.12.2010	06.03.2011	0.8	VBN 3	Seeds	8 q	20400	54000	
Oilseeds									
Groundnut	25.02.2010	16.06.2010	0.4	VRI 2	Seeds	5 q	6500	12500	
	06.05.2010	20.08.2010	0.8		Seeds	10 q	12800	25000	
Fibers									
Spices & Plantation crops									
Cashew	02.05.2010	18.08.2010	0.01	VRI 3	Seedlings	500 Nos	6600	18000	
	18.10.2010	02.02.2011				2000 Nos			
	15.11.2010	10.03.2011				500 Nos			
Cashew	04.11.2010	April-May 10	1.0	VRI 2	Nuts	7.6 q	14200	31160	
Coconut	-	-	2.0	TxD	Nuts	24000 Nos	32000	96000	
Floriculture									
Fruits									
Mango	1998	April-May 2010	0.4	Neelum Bangalore	Fruits	14 q	4300	11200	
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	7000 kg		35,000	
2	Earthworm	159 kg		38,850	

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	Dairy	1995-96	Milk	5760	43500	74880	
2	Goatry	1995-96	Breeding	3	1400	3000	

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 2010	240	44	
May 2010	124	16	
June 2010	68	5	
July 2010	48	3	
Aug. 2010	49	9	
Sept. 2010	55	4	
Oct. 2010	20	2	
Nov. 2010	52	4	
Dec. 2010	164	9	
Jan. 2011	485	23	
Feb. 2011	265	7	
March 2011	0	0	
Total	**1570**	**126**	

13.F. Database management

S. No	Database target	Database created
01	Resource inventory of the District	4 years details collected for compilation
Data required since inception of the KVK		
1.	Farmers Database	4 years details compiled
2.	Technology Inventory for the District	
3.	Database for Technologies assessed and Refined	
4.	Frontline Demonstrations Database	
5.	Training Database	
6.	Database of Extension Programmes	
7.	Seeds and Planting Material Database	
8.	KVK Inventory of Assets	
9.	KVK Accounts Database	

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

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	Tamil Mercantile Bank	Odaipatti	077	SB	2949	-	TMBL0000077
With KVK	Tamil Mercantile Bank	Odaipatti	077	SB	3006	-	TMBL0000077

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	-	-	-	-	-
	b. POL, hiring vehicle, Kisan melas, printed materials, reports, demonstration boards	-	-	-	-	-
	Total	-	-	-	-	-
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**	78.00	69.52162	75.37162
2	**Traveling allowances**	1.25	1.25	1.38805
3	**Contingencies**			
A	Stationary and office expenses	2.50	2.50	2.51563
B	POL and R & M of vehicles	2.30	2.30	2.34673
C	Vocational Training (Meals)	1.00	1.00	1.00990
D	Vocational Training (Training Materials)	0.70	0.70	0.70130
E	FLD (Other than oilseeds and pulses)	1.95	1.95	1.95150
F	OFT	0.90	0.90	0.90980
G	Training of Extension Functionaries	0.25	0.25	0.25030
H	Maintenance of Building	0.60	0.60	0.60865
I	Extension Activities	0.50	0.50	0.50035
J	Farmers field School	0.25	0.25	0.25200
K	Library	0.05	0.05	0.10798
TOTAL (A)		**90.25**	**81.7762**	**87.91381**
B. Non-Recurring Contingencies				
1	Generator	1.00	1.00	1.00
2	Tractor with Implements	5.00	5.00	5.16
3	Power Tiller	1.50	1.50	1.52750
4	Digital Camera	0.25	0.25	0.2500
5	Rennovation and Repair	5.00	5.00	5.16039
6	Library	0.10	0.10	0.10200
7	EPABX	0.50	0.50	0.50220
TOTAL (B)		**13.35**	**13.35**	**13.70209**
C. REVOLVING FUND		**-**	**-**	**5.17365**
GRAND TOTAL (A+B+C)		**103.60**	**95.12162**	**106.78955**

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	0.62605	0.40250	0.23805	0.79050
April 2009 to March 2010	0.79050	3.95814	1.80720	2.94144
April 2010 to March 2011	2.94144	3.91404	5.17165	1.68383

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
Dr.P.Marimuthu,	Programme Coordinator	Inauguration Programme on Technological Products development by DG, ICAR, New Delhi	IIHR, Bangalore	29.04.2010
Dr.P.Marimuthu,	Programme Coordinator	Process for preparation of crop specific foliar micronutrient formulation for Banana	IIHR, Bangalore	12.05.2010
Mr.M.Lord Savariraj	SMS (Plant Protection)	Awareness meeting on the Use of genetically modified crops for extension functionaries	Ac &RI Madurai	12.08.10
Mr.M.Lord Savariraj	SMS (Plant Protection)	National Consultation Workshop for the Control of Papaya Mealy Bug and Strategy for Development and Conservation of the Parasitoids of Papaya Mealybugs	NBAII, Hebbal, Bangalore	30.10.2010
Dr.P.Marimuthu	Programme Coordinator	National Seminar on Extension Management Reform - Initiatives and Impacts	TNAU, Coimbatore	11.12.2010
Mrs.K.Veerasikkammal	SMS (Agronomy)	Training on Strengthening for gender perspective for Research and Extension	TANUVAS, Chennai	24.01.2010 to 25.01.2011
Mr.M.Lord Savariraj	SMS (Plant Protection)	Integrated Pest and Disease Management Strategies for high value crops	DEE, TNAU, Coimbatore	24.03.2011 to 25.03.2011
Mrs.S.Karpagavalli	SMS (Home Science)	Recent Trends in Post Harvest Technology	IICPT, Thanjavur	23.03.2011 to 25.03.2011
Mr.N.Raja	Farm Manager	Protected Cultivation of Horiculture Crops	DEE, TNAU, Coimbatore	28.03.2011 to 29.03.2011
Mr.S.Suruli Andavar	Programme Assistant (Computer)	Database Management, Web Content and Web Hosting	DEE, TNAU, Coimbatore	29.03.2011 to 31.03.2011
Mrs.K.Veerasiakkammal	SMS (Agronomy)	Weather Based Agro Advisory Services	DEE, TNAU, Coimbatore	30.03.2011 to 31.03.2011

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

Staff Participated in review Meetings

- Dr.P.Marimuthu, Programme Coordinator and Mr.M.Lord Savariraj has participated in the Pre Action Plan 2010-11 of KVK's at TNAU, Coimbatore from 15.04.2010 to 16.04.2010.
- Dr.P.Marimuthu, Programme Coordinator has participated in the Action Plan Review Meeting of KVK's of Tamilnadu and Puducherry at Zonal Project Directorate, Bangalore during 03.05.2010 to 04.05.2010.
- Dr.P.Marimuthu, Programme Coordinator has participated in the Regional KVK Interface Meeting during 22nd ICAR Regional Committee meeting at IVRI Regional Station, Bangalore on 15.05.2010.
- Mr.M.Lord Savariraj, SMS (Plant Protection) has attended Annual Review and Action Plan meeting on Bt Cotton AC & RI, Madurai dated on 214.06.2010 and 15.06.2010.
- Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the Annual Review Workshop of KVKs Zone VIII at KVK, UAS, Dharwad from 05.10.10 to 08.10.10.
- Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the "5th National Conference on KVKs 2010" at Maharana Pratap University of Agriculture and Technology, Udaipur during 22-24 December 2010.
- Dr.P.Marimuthu, Programme Coordinator has participated in the Pre Annual Action Plan 2011-12 at DEE office, TNAU, Coimbatore on 08.02.2011.
- Dr.P.Marimuthu, Programme Coordinator has participated in Annual Action Plan 2011-12 of KVK of Tamilnadu and Pondicherry at DEE office, TNAU, Coimbatore on 07.03.2011 to 10.03.2011.

Staff deputed for Training Programme

- Dr.P.Marimuthu, Programme Coordinator has participated in the Inauguration Programme on Technological Products development by DG, ICAR, New Delhi at IIHR, Bangalore on 29.04.2010.
- Dr.P.Marimuthu, Programme Coordinator has participated in the Training on process for preparation of crop specific foliar micronutrient formulation for Banana developed by IIHR, Bangalore on 12.05.2010.
- Mr.Lord Savariraj, SMS, Plant Protection has attended Awareness meeting on the Use of genetically modified crops for extension functionaries at Ac &RI Madurai on 12.08.10.
- Mr.M.Lord Savariraj, SMS (Plant Protection) has participated in the National Consultation Workshop at NBAII, Hebbal, Bangalore (For the Control of Papaya Mealy Bug) on 30.10.2010 on Strategy for Development and Conservation of the Parasitoids of Papaya Mealybugs.
- Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the "National Seminar on Extension Management Reform - Initiatives and Impacts" organised by Society of Extension Education at TNAU, Coimbatore on December 11.12.2010.
- Mrs.K.Veerasikkammal, SMS (Agronomy) has participated in the "Training on Strengthening for gender perspective for Research and Extension at TANUVAS, Chennai on 24-25.01.2011.
- Mr.M.Lord Savariraj, SMS (Plant Protection) has attended the training programme on "Integrated Pest and Disease Management Strategies for high value crops" at DEE, TNAU, Coimbatore on 24.03.2011 to 25.03.2011.
- Mrs.S.Karpagavalli, SMS (Home Science) has attended the training programme on "Recent Trends in Post Harvest Technology" at IICPT, Thanjavur, on 23.03.2011 to 25.03.2011.
- Mr.N.Raja, Farm Manager has attended the training programme on "Protected Cultivation of Horiculture Crops" at DEE, TNAU, Coimbatore on 28.03.2011 to 29.03.2011.
- Mr.S.Suruli Andavar, Programme Assistant(Computer) has attended the training programme on "Database Management, Web Content and Web Hosting" at DEE, TNAU, Coimbatore on 29.03.2011 to 31.03.2011.

- Mrs.K.Veerasiakkammal,SMS (Agronomy) has attended the training programme on "Weather Based Agro Advisory Services" at DEE, TNAU, Coimbatore on 30.03.2011 to 31.03.2011.

Linkage with line Department and Banks

- Dr.P.Marimuthu, Programme Coordinator has participated in the ATMA Block Level Technical Team Meeting at ADA Office at 07.05.2010.
- Mr.M.Lord Savariraj, SMS (Plant Protection) has attended ATMA Budget Prepararion meeting held at JDA office, Madurai dated on 15.07.2010 to 16.07.2010.
- Mr.Prabhakaran, Project Officer, Mahalir Thittam, Theni visited on 28.08.10 to interact with Disabled people on production of Candles, Chalkpiece and Agarpathi.
- We have submitted a Proposal on "Wholistic Approach for Revival and Development of Coconut Industry in Theni District of Tamil Nadu" to NABARD under Rural Innovation Fund Scheme.
- Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the Monthly Zonal Workshop organised at Horticultural College and Research Institute, Periyakulam on 16.09.2010.
- Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the ATMA FFS Programme Organised by ADA, Chinnamanur on 26.10.2010, Karunkattankulam.

Participated in NGO and Network Meetings

- Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the preparatory meeting for holding a State Level Conference on Climate Change organized by Citizen Global Platform at Denobili, Madurai on 28.08.10.
- Dr.P.Marimuthu, Programme Coordinator Coordinator has conducted a study along Priyar and Vaigai rivers to assess the river pollution on 18.09.2010.
- Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the workshop on Knowledge sharing and Capacity building on Mobile based Life Long learning organised by Vidiyal NGO, Rasingapuram and NABARD, Theni on 17.09.2010.
- Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the Discussional Meeting with NGOs at Gandhigram Rural University organised by People's Education Programme, Directorate of Distance Education on 22.11.2010.
- Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the National Workshop on search of Alternative Paradigm in the Context of Climate dissortion organised by Citizens Global Platform at GB Plant Institute of Himalayan Environment and Development, Almora during 29-30, December 2010.
- Dr.P.Marimuthu, Programme Coordinator has participated in the "Regional Conference on the impact of Climate Change on Sustainable development and means of mitigation" organized by NGO Network of KVK, Dindugal on 22.01.2011.

Linkage with TNAU Colleges/ICAR Institute/Other Organisation

- Dr.P.Marimuthu, Programme Coordinator has participated in the 76th Scientific workers Conference at TNAU, Coimbatore on 25.05.2010.
- Mr.V.Rajamanickam, SMS(Horticulture), has attended the "Farmers Day" celebration at TNAU, Coimbatore dated on 09.06.2010 and 10.06.2010.
- We have collaborated with Department of Millets, TNAU, Coimbatore for Popularisation of Cumbu variety CoCu 9 through FLD Programme among 10 Moorthinayakkanpatti farmers and distributed seeds on 27.08.2010.

Other KVK Activities

- Mr.Tha.Pandian, State Secretary, CPI has visited our KVK on 25.06.2010 and seen the activities of KVK.
- Dr.S.Prabhukumar, Zonal Project Director, ICAR, Bangalore has visited KVK on 29.07.2010 and visited trial on High Density Planting in Banana and given orientation to 9 IV B.Sc.,(Horti) students on Precision Farming, Nutrigation and Drip Irrigation.
- The Website (www.cendectkvk.org) was launched on 18.08.10 by Dr.s.Prabu Kumar,Zonal Project Director, Bangalore.
- Ms.Sarah Mellows and Mr. Michael Reed from East London University, UK visited for one month placement in CENDECT and studied various KVK activities.
- We have started production of Banana Special and Sorghum Co S 28 Seed production under Revolving Fund Scheme in our KVK.
- Dr.P.Marimuthu, Programme Coordinator Coordinator has participated in the Discussional Meeting organised by Cumbum Valley Grapes growers Association at KK Patti on 03.11.2010 and 20.11.2010.
- We have distributed COHM(5) Maize to 50 farmers through FLD Programme of Maize Research Station, TNAU, Vagarai on 13.12.2010.
- Dr.Kalaiselvan, DEE, TNAU has visited our KVK on 24.03.2011 and seen various KVK assests and demonstration units and OFT, FLD fields of KVK.

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	Cotton	Leaf Reddening Management in Cotton	5
Varietal Evaluation	French Bean	New French Bean Variety – Arka Anoop	5
Integrated Pest Management			
Integrated Crop Management	Banana	Suitable Planting method in Banana for higher profitability	3
	Red gram	Assessment of Suitable Planting Method inRedgram	4
Integrated Disease Management	Grapes	Management of Downy Mildew in Grapes	5
	Betelvine	Management of Phytopthora Wilt in Betelvine	5
	Paddy	Management of Brown Leaf Spot in Paddy	5
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction	Paddy	Assessment of Performance and suitability of various Weeders in SRI Paddy Cultivation	5
Storage Technique			
Others (Pl. specify)			
Total			**37**

Summary of technologies assessed under livestock

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Disease Management	Poultry	Assessment of oral pellet vaccination in Desi Chicken	50
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management	Cow	Assessment of regular mineral mixture	10
Production and Management			
Others (Pl. specify)			
Total			**60**

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Summary of technologies assessed under various enterprises

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

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			
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			

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

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
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 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																		
Paddy	Integrated Pest Management	IPM in Paddy and Management of yellow stem borer and Leaf folder in paddy	-	10	2	46.5	43.2	14.8	Plant height: 102.6 cm, Panicle height: 22.2 cm, % of reduction in Yellow Stem Borer: 93.4%	94.2 cm 19.6 cm 23.8 %	25400	54150	28750	2.13	25400	46785.6	21385.6	1.84
Rice	Integrated Crop Management	CO RH 3 Hybrid with SRI with management of Sheath blight in Paddy	-	12	5	85.3	66.5	28.01	Plant height: 110.6 cm, Panicle height: 26.2 cm, 1000 grain weight: 28.6 gm	94.2 cm 22.4 cm 15.5 gm	35000	95953.8	60953.8	2.74	25000	61586.3	36586.3	2.46
Paddy	Drudgery Reduction technologies	Mechanized paddy farming	-	10	5	48.5	43.1	17.4	Plant height: 105.8 cm, Panicle height: 24.7 cm, % of efficiency: 62.8%, Area coverage: 0.72 cents/acre/hr, Time saving: 7 hrs, Labour saving: 7	94.3 cm 21.7 cm 28.9 % 10 farm women's/acre/day - -	25000	54799.8	29799.8	2.19	25000	21677.3	46677.3	1.87
Sorghum	Varietal/ Hybrid Introduction	Popularization of Co S 28	-	12	5	21.76	18.04	21.6	Plant height: 170 cm Ear head weight: 35.2 gm No. of filled grain: 1560	165 cm 30.3 gm 1471	16721	42520	25799	2.54	16500	38500	22000	2.31
Maize	Popularization of Integrated Nutrient Management	Popularization of ICM with TNAU Maize Maxim	-	10	4	68.5	43.6	66.9	Plant height: 195 cm No. of leaves/plant: 12	187 cm 10	35435	80080	44645	2.25	25638	47960	22322	1.8

									100 seed weight: 119.6	110.7								
Millets																		
Oilseeds																		
Pulses																		
Greengram	Integrated Weed Management, Varietal Introduction	Introduction of mini mobile sprinkler	-	12	5	9.12	7.58	24.4	No. of pods/plant: 68 No. of seeds/pod: 8 Test weight: 6.3 gm Yield: 912 kg/ha	57 5 4.2 gm 758 Kg/ha	275000	862400	587000	3.13	247515	737688	490173	2.98
Greengram	Integrated Crop Management	Introduction of improved variety Co(Gg)-7 with seed rate of 25 Kg/ha	-	12	5	9.61	7.58	24.4	No. of pods/plant: 73 No. of seeds/pod: 8 Test weight: 6.5 gm Yield: 961 kg/ha	57 5 4.2 gm 758 Kg/ha	8741	23173	14438	2.6	7631	17519	9888	2.29
Vegetables																		
French Beans	Varietal introduction	Popularization of Arka Suvidha	-	10	1	75.75	53.13	15.05	Plant height: 48.3 cm Inflorescence Length: 26 cm No. of flowers: 120 Fruit weight: 15.8 gm Pod length: 13.3 cm	41.6 cm 21.3 cm 96 12.3 gm 11.8 cm	12000	40300	28300	3.35	11200	35400	24200	3.16
Brinjal	Popularization of Integrated Nutrient Management	INM in Brinjal	-	10	5	227.5	189.6	36.4	No. of flowers/plant: 186 No. of fruits/plant: 168 Plant height: 75 cm	163 146 60 cm	18600	48544	29944	2.60	16250	40150	23900	2.46
Flowers																		
Ornamental																		
Fruit																		
Banana	Popularization of Integrated Nutrient Management	ICM in Banana and IIHR Banana special in nutrient management	-	12	5	1100.5	922.1	14.2	No. of hands/bunch: 15 No of fingers/hand: 25 Individual fruit weight: 300 gm Bunch weight: 48 kg	12 15 192 gm 32.6 kg	275000	862400	587000	3.13	247515	737688	490173	2.98
Banana	Popularization of Integrated Disease Management	IDM in Banana with Management of Sigatoka Leaf Spot in Banana	-	10	5	936	794	17.88	No. of hands/bunch: 14 No of fingers/hand: 20 Individual fruit	11 15	295000	836000	541000	2.85	252000	635200	383200	2.52

									weight: 275 gm % of reduction in Sigatoka Leaf Spot: 92.8%	210 gm 22.6 %								
Banana	Popularization of Integrated Pest Management	IPM in Banana with Management of Pseudostem weevil	-	10	5	957	802.3	27.2	No. of hands/bunch: 14 No of fingers/hand: 22 Individual fruit weight: 286 gm % of reduction in Pseudostem Weevil: 98.3%	11 15 210 gm 42.6 %	298000	816800	518000	2.74	267500	641840	374340	2.39
Banana	Popularization of Drudgery reduction technologies	Drudgery reduction in Banana Fibre Extraction	-	10	10	0.548 kg/hr	0.384 kg/hr	133			84640	162000	77360	1.9	63092	107512	30152	1.70
Mango	Popularization of Integrated Nutrient Management	INM in Mango	-	10	5	153.2	123.1	24.39	No. of inflorescence/branch: 5 No. of branches/tree: 320 No. of fruits/tree: 1520 Individual fruit weight: 350 gm	3 305 1150 280 gm	20400	69356	48956	3.3	17250	43125	25875	2.50
Spices and condiments																		
Commercial																		
Sugarcane	Popularization of Integrated Nutrient Management	Popularization of ICM with TNAU Sugarcane Booster	-	10	3	1022.3	856.2	45.2	Plant height: 285 cm Individual cane weight: 2.6 kg Sugar content: 12.2%	248 cm 1.81 kg 11.1 %	58000	136730	78730	2.35	52000	94160	42160	1.81
Cotton	Popularization of Integrated Pest Management	Mealy bug Management in Cotton	-	12	5	27.9	19.21	45.23	Plant height: 80 cm No. of branches: 15 No of squares/branch: 18 No of bolls: 12 % of reduction in Mealybug : 91.9%	75 cm 11 12 9 23%	22700	78120	55420	3.44	20700	53788	33088	1.62
Medicinal and aromatic																		
Fodder																		
Mixed Fodder	Varietal Introduction	Population of Mixed Fodder	-	Demonstration under Progress														
Plantation																		

Cashew			-	10	5	0.926	1.795	61.1	No. of branches /tree: 280 No. of inflorescence/branch: 5 No. of fruits/branch: 60 No. of inflorescence/tree: 85 No. of nuts/inflorescence: 14 % of reduction in Tea Mosquito bug: 95.6%	210 3 48 73 9 26.7%	24000	64050	40050	2.6	39750	29720	10030	1.33
Fibre																		
Fruits and Vegetables	Processing and Value addition	Introduction of vegetable preservator (CRIDA Model)	-	10	-	72	30	2.20			3600	4800	1200	1.33	1000	1800	800	1.8

* 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																		
Poultry																		
Rabbitry																		
Pigerry																		
Sheep and goat																		
Duckery																		
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

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	Crop	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit ect.)			
						Demonstration	Check									

* 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										
Bajra										
Maize	COHM 5	10	4	68.5	43.6	66.9	35435	80080	44645	2.25
Rice	CORH3	12	5	85.3	66.5	28.1	35000	95953.8	60953.8	2.74
Sorghum										
Wheat										

Others (pl.specify)										
Total										
Oilseeds										
Castor										
Mustard										
Safflower										
Sesame										
Sunflower										
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										
Cotton	RCH 708	12	5	27.9	19.21	45.23	22700	78120	55420	3.44
Total										
Fodder crops										
Maize (Fodder)										
Sorghum (Fodder)										
Others (pl.specify)										
Total										

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	3	38	17	55	5	0	5	43	17	60
Resource Conservation Technologies										
Cropping Systems	1	4	0	4	2	2	4	6	2	8
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production	1	25	25	50	0	0	0	25	25	50
Nursery management										
Integrated Crop Management	8	173	76	249	38	22	60	211	101	312
Soil and Water Conservation										
Integrated Nutrient Management	10	80	15	95	35	28	63	115	43	158
Production of organic inputs	1	0	10	10	0	0	0	0	10	10
Others (pl.specify)										
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)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										

Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
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										
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)										
Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										

Household food security by kitchen gardening and nutrition gardening	1	0	4	4	1	2	3	1	6	7
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	1	19	16	35	3	10	13	22	26	48
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	2	0	26	26	0	7	7	0	33	33
Women empowerment										
Location specific drudgery production	1	0	18	18	0	5	5	0	23	23
Rural Crafts										
Women and child care	1	0	2	2	0	9	9	0	11	11
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems	1	10	5	15	5	0	5	15	5	20
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements	2	15	13	28	1	1	2	16	14	30
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	8	204	85	289	30	8	38	234	93	327
Integrated Disease Management	6	64	17	81	22	2	24	86	19	105
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	3	24	26	50	3	7	10	27	33	60
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Small Scale processing	1	8	12	20	9	11	20	17	23	40
Capacity building for ICT application	6	88	47	135	19	11	30	107	58	165
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**57**	**752**	**414**	**1166**	**173**	**125**	**298**	**925**	**539**	**1464**

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										
Resource Conservation Technologies	1	17	3	20	4	1	5	21	4	25
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	9	98	27	125	18	2	20	116	29	145
Soil and Water Conservation										
Integrated Nutrient Management	23	291	32	323	117	21	138	408	53	461
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising	1	0	19	19	0	4	4	0	23	23
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)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										

Others (pl.specify)										
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										
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)										
Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology	1	11	6	17	8	0	8	19	6	25
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	17	17	0	5	5	0	22	22
Design and development of low/minimum cost diet										

Designing and development for high nutrient efficiency diet	1	0	18	18	0	5	5	0	23	23
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	3	0	58	58	0	4	4	0	62	62
Storage loss minimization techniques										
Value addition	10	0	184	184	0	36	36	0	220	220
Women empowerment	2	0	38	38	0	3	3	0	41	41
Location specific drudgery production	1	0	19	19	0	4	4	0	23	23
Rural Crafts										
Women and child care	2	0	18	18	0	24	24	0	42	42
Drudgery reduction	4	0	44	44	0	35	35	0	79	79
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	2	21	34	55	13	12	25	34	46	80
Post Harvest Technology	1	7	5	12	4	0	4	11	5	16
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	21	254	55	309	71	57	128	328	112	437
Integrated Disease Management	8	79	26	105	28	14	42	107	40	147
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										
Capacity Building for Income Generation Activities	2	0	39	39	0	4	4	0	43	43
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**93**	**778**	**642**	**1420**	**263**	**231**	**494**	**1041**	**873**	**1914**

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										
Seed production	1	25	25	50	0	0	0	25	25	50
Production of organic inputs	1	0	10	10	0	0	0	10	0	10
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing	1	8	12	20	9	11	20	17	23	40
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										
Capacity building for ICT Application	3	24	26	50	3	7	10	27	33	60
TOTAL	**6**	**57**	**73**	**130**	**12**	**18**	**30**	**79**	**81**	**160**

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	1	0	19	19	0	4	4	0	23	23
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing	2	21	34	55	13	12	25	34	46	80
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										
Capacity building for income generation activities	2	0	39	39	0	4	4	0	43	43
TOTAL	**5**	**21**	**92**	**113**	**13**	**20**	**33**	**34**	**112**	**146**

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										
Integrated Pest Management										
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	4	55	19	74	10	6	16	65	25	90
Information networking among farmers										
Capacity building for ICT application	3	64	21	85	16	4	20	80	25	105
Management in farm animals										
Livestock feed and fodder production										
Household food security	1	0	4	4	1	2	3	1	6	7
Any other (pl.specify)										
Total	**8**	**119**	**44**	**163**	**27**	**12**	**39**	**146**	**56**	**202**

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										
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	4	49	19	68	11	8	19	60	27	87
Information networking among farmers										
Capacity building for ICT application	1	6	4	10	2	2	4	8	6	14
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total	**5**	**55**	**23**	**78**	**13**	**10**	**23**	**68**	**33**	**101**

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	2	55	12	67	0	3	3	55	15	70
1.b.	Commercial production of vegetables										
2	**Production and value addition**										
2.a.	Fruit Plants	2	67	97	164	15	21	36	82	118	200
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**										
7.a.	Processing and value addition										
7.b.	Others (pl.specify)										
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements	4	38	38	76	2	2	4	40	40	80
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	3	29	46	75	22	23	45	51	69	120
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	**Agricultural Extension**										
12.a.	Capacity Building and Group Dynamics	2	40	3	43	10	0	10	50	3	53
12.b.	Others (pl.specify)										
	Total	**13**	**229**	**196**	**425**	**49**	**49**	**98**	**278**	**245**	**523**

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	1	0	10	10	0	0	0	10	0	10
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	1	25	25	50	0	0	0	25	25	50
4.f.	Sericulture										
4.g.	Mushroom cultivation										
4.h.	Nursery, grafting etc.	1	0	19	19	0	4	4	19	4	23
4.i.	Tailoring, stitching, embroidery, dying etc.	3	29	46	75	22	23	45	51	69	120
4.j.	Agril. para-workers, para-vet training										
4.k.	House Hold food security										

5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics	5	24	65	89	3	11	14	44	59	103
5.b.	Others (pl.specify)										
	Grand Total	**11**	**78**	**165**	**243**	**25**	**38**	**63**	**149**	**157**	**306**

V. Extension Programmes

Activities	No. of Programmes	No. of farmers	No. of Extension Personnel	TOTAL
Field Days	14	450	0	450
Kisan Mela				
Exhibitions	6	981	199	1180
TV Programmes				
Radio Programmes	2	0	0	0
Film Show				
Diagnostic Visits	1	1	0	1
Exposure Visits				
Animal Camps				
Field Visits	100	1135	28	1163
Kisan Gosthi				
Mahila Mandals				
Farmers visits to KVK	133	196	21	217
Advisory enquiry / Helplineservices				
Farmers Meeting				
Farm Science Club Meeting	7	157	0	157
Extension literature	137	3719	26	3745
Newspaper/Radio/TV coverage	8			
FFS Demonstration				
Scientists visits to farmers fields	23	154	2	156
SHG Formation	6	104	0	104
Self Help Group meetings	18	349	0	349
Ex-trainees sammelan	1	0	40	40
Home visit	76	563	0	563
Farmwomen visit to KVK	38	113	0	113
Telephone calls	183	173	9	182
FLD Farmers Scientists Interaction	5	75	0	75
FLD Field visit	60	787	0	787
FLD FSC Formation	6	171	0	171
FLD Field Day	17	453	0	453
OFT field visit	69	419	0	419
OFT FSC Meeting	1	25	0	25
Village forest committee meeting				
FFS Session Conducted				
Method demonstration	4	93	0	93
Farmer Enquiry	8	8	0	8
FFS Field Day	1	20	0	20
FFS Field Visit	6	57	0	57
Human Rights Day				
Popular Article				
Lecture Delivered	6	267	170	437
Field Survey				
NGO Network Meeting	6	0	106	106
OFT Field Day	1	30	0	30
Video Clipping	1	0	0	
Awareness Campaign on Parthenium Eradication	1	0	45	45
FLD FSC Meting	3	105	0	105

FLD Training	8	125	0	125
FLD Demonstration	1	22	0	22
OFT Training	1	5	0	5
Farmers Tour	4	112	0	112
Radio Coverage	2	0	0	0
Tractor Service Mela	1	10	0	10
Technology Week				
International Drug Abuse Prevention and Awareness Day	1	65	10	75
Radio Talk	1		0	0
Joint Diagnostic Field Visit	2	6	7	13
SMS Messages	56	157	69	226
World Differently Abled Day	1	0	50	50
Seminar	1	474	0	474
Meet with expert programme	1	70	0	70
Biogas Awareness Camp	1	23	0	23
Awareness Programme for Panchayat Presidents on Disabled Rehabilitants	1	18	0	18
Total	**1030**	**11692**	**782**	**12474**

Details of other extension programmes

Particulars	Number
Electronic Media	
Extension Literature	103
News Letter	4
News paper coverage	8
Technical Articles	
Technical Bulletins	
Technical Reports	
Radio Talks	5
TV Talks	
Animal health amps (Number of animals treated)	
Others (pl.specify)	
Total	**120**

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	Sorghum	CO S 28	12 q	24000	60
	Cumbu	Co Cu 9	9 q	18000	40
Oilseeds	Groundnut	VRI 2	16.5 q	41250	30
Pulses	Greengram	CO 7	8 q	32000	35
	Blackgram	VBN 3	8 q	60000	30
Commercial crops					
Vegetables					
Flower crops					
Spices					
Fodder crop seeds					
Fiber crops					
Forest Species					
Others					
Total			**53.5 q**	**175250**	**195**

Production of planting materials by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Number	Value (Rs.)	Number of farmers
Commercial					
Vegetable seedlings					
Fruits					
Ornamental plants					
Medicinal and Aromatic					
Plantation	Cashew	VRI 3	3000	15000	10
Spices					
Tuber					
Fodder crop saplings					
Forest Species					
Others					
Total			**3000**	**15000**	**10**

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilizers	Vermicompost	7000	35000	35
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others	Earthworm	159	38850	15
Total		**7159**	**73850**	**50**

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 (Goat)	Kannaiah	2	3000	2
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		**2**	**3000**	**2**

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

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	69	71	48	3450
Water	60	60	42	3000
Plant	0	0	0	0
Manure	0	0	0	0
Others (pl.specify)	0	0	0	0
Total	**129**	**131**	**90**	**6450**

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted
1

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.)**

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