ICAR - KRISHI VIGYAN KENDRA, VIRINJIPURAM, VELLORE

Annual Report 2013 - 14

PART I - GENERAL INFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
Krishi Vigyan Kendra Virinjipuram – 632 104 Vellore district Tamil Nadu	(0416) 2914453	(0416) 2273221	kvkvrinjipuram@tnau.ac.in	www.kvkvellore.org

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

Address	Telephone		E mail	Web Address
	Office	Fax		
Tamil Nadu Agricultural University Coimbatore – 641 003, Tamil Nadu.	0422 - 6611201	0422 - 2431821	registrar@tnau.ac.in	www.tnau.ac.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. P. Sridhar, Ph.D.,	-	9442151096	kvkvrinjipuram@tnau.ac.in

1.4. Year of sanction: 2004

1.5. Staff Position (as 31st March 2014)

S. 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.Sridhar	Programme Coordinator	M	Agronomy	Ph.D.,	37400-67000 +10000 AGP	49950+ 10000	11.03.13	Permanent	OBC
2	SMS	Dr.S.Joshua Davidson	Assistant Professor (Agrl.Engg)	M	Agricultural Engineering	Ph.D.,	15600-39100 +8000 AGP	26660+ 8000	02.12.04	Permanent	OBC
3	SMS	Dr.M.Prasanthrajan	Assistant Professor (Environmental Science)	M	Environmental Science	Ph.D.,	15600-39100 +8000	26660+ 8000	10.03.14	Permanent	SC
4	SMS	Dr.M.Senthilkumar	Assistant Professor (Agrl.Extension)	M	Agricultural Extension	Ph.D.,	15600-39100 +6000 AGP	21990+ 6000	01.06.11	Permanent	OBC
5	SMS	Dr.V.Sendhilvel	Assistant Professor (Plant pathology)	M	Plant pathology	Ph.D.,	15600-39100 +7000 AGP	22830+ 7000	13.12.12	Permanent	OBC
6	SMS	Dr.T.Prabhu	Assistant Professor (Horticulture)	M	Horticulture	Ph.D.,	15600-39100 +7000 AGP	22830+ 7000	30.12.09	Permanent	SC
7	SMS	Dr.A.Suganthi	Assistant Professor (Entomology)	F	Entomology	Ph.D.,	15600-39100 +7000 AGP	22830+ 7000	04.01.10	Permanent	OBC
8	Programme Assistant (Lab Tech.)/T-4	Mr.K.R.Srinivasan	Programme Assistant (Technical)	M	Agricultural Extension	M.Sc.,	9300-34800 +4400 GP	10590+ 4400	24.2.11	Permanent	OBC
9	Programme Assistant (Computer)/ T-4	Mrs.S.Sangeetha	Programme Assistant (Computer)	F	Computer Science	M.C.A.,	9300-34800 +4400 GP	12580+ 4400	05.12.08	Permanent	OBC
10	Programme Assistant/ Farm Manager	Vacant from 23.08.13									
11	Accountant cum superintendent	Tmt.R.Krishnaveni	Superintendent	F	-	-	9300-34800 +4800 GP	14990+ 4800	15.04.04	Permanent	OBC
12	Jr. Stenographer	Mrs.G.Banumathi	Superintendent	F	-	-	9300-34800 +4800 GP	11520+ 4800	01.12.08	Permanent	OBC
13	Driver	Mr.Kumaran	Driver	M	-	-	5200-20200+ 2400 GP	9730+ 2400	09.05.13	Permanent	OBC
14	Driver	Th.G.Babusamy	Supervisor	M	-	-	9300-34800+ 4200	9660+ 4200	20.8.07	Permanent	OBC
15	Supporting staff	Th.P.Renu	Office Assistant (spl.Gr.)	M	-	-	5200-20200 +1800 GP	9270+ 1800	20.06.05	Permanent	OBC
16	Supporting staff	Tmt.A.Valliammal	PUSM	F	-	-	4800-10000 +1300 GP	7280+ 1300	04.05.04	Permanent	OBC

1.6. Total land with KVK (in ha) **:** 22.13 ha.

S. No.	Item	Area (ha)
1	Under Buildings	1.93
2.	Under Demonstration Units	2.00
3.	Under Crops	16.20
4.	Orchard/Agro-forestry	2.00
5.	Others	-

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-KVK	July, 2007	570	45,20,000	-	-	-
2.	Farmers Hostel	ICAR-KVK	July, 2007	285	31,00,000	-	-	-
3.	Staff Quarters					-	-	-
	1. SMS	ICAR-KVK	July, 2007	486	36,00,000	-	-	-
	2. SMS	ICAR-KVK	July, 2007			-	-	-
	3. SMS	ICAR-KVK	July, 2007			-	-	-
	4. SMS	ICAR-KVK	July, 2007			-	-	-
	5. SMS	ICAR-KVK	July, 2007			-	-	-
	6. SMS	ICAR-KVK	July, 2007			-	-	-
4.	Demonstration Units					-	-	-
	1.Shade net and Drip irrigation system	ICAR-KVK	Oct, 2007	2 ha.	2,00,000	-	-	-
	2. Backyard poultry	ICAR-KVK	Dec,2013	30	15,000	-	-	-
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
Jeep (TN 23 AA 4924)	2004	4,88,682	132600	Met with an accident on 27.09.2009. Needs replacement with a new vehicle.
Tractor (TN 23 AA 7655)	2005	4,93,716	3517	Needs major overhauling and repair work
Motor Bike (TN 23 AB 8345)	2006	38,781	34458	Good condition
Motor Bike (TN 23 AF 9661)	2009	41,976	26278	Good condition

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Photocopier	2005	74,500	Not in working condition. Needs replacement
Computer with Accessories	2005	75,000	Good condition
LCD	2007	53,000	Good condition
Computer (Desktop)	2007	47,000	Good condition
Generator 3KVA	2011	91,089	Good condition
Camera	2011	24,300	Good condition

1.8. Details SAC meeting conducted in 2013-14 : 06.08.2013

S. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	06.08.13	35	-	Mango approach/soft wood grafting may be done and distributed to farmers	Bangalora variety mango stones were raised in the nursery during July 2013. The approach grafting will be done during October 2014.
2.	06.08.13	35	-	Problematic Aonla trees at farmer's field in Kaniyambadi may be top worked by utilizing the service of APAC students from Kalavai	A team of scientists from IIHR Bangalore, Department of Fruit Crops along with SMS (Horti), KVK, Virinjipuram inspected the Amla field and recommended that application of recommended dose of fertilizers continuously for 2 years is alone enough for regular bearing and flowering.
3.	06.08.13	35	-	Grafting in *Solanum torvum* (Sundaikai) plant may be learnt from TNAU, Coimbatore for developing perennial brinjal plant	The grafting techniques has been tried in the farmer Mr.Krishna Manohar field at Guruvarajapalayam for the development of perennial brinjal plant.
4.	06.08.13	35	-	Horizontal spread of Cumbu Napier hybrid grass in Vellore Dt. may be assessed.	The horizontal spread of Cumbu Napier hybrid grass is being assessed with the help of Department of Animal Husbandry and Department of Agriculture, Vellore.
5.	06.08.13	35	-	Village youth may be trained on farm equipments/machineries in Collaboration with Dept. of Agrl. Engineering. Dry method of paddy seed sowing in trays may be experimented.	Skill training on mechanical paddy transplanter to rural youth was organized and conducted at Durgam Village in collaboration with Dept of Agrl. Engg, Vellore. A total of 16 youths were trained and named as **Green Army**. At present Green Army is providing custom hiring service at four blocks of Vellore District.
6.	06.08.13	35	-	Zero till seed drill may be demonstrated in farmers field	Zero till fertilizer seed drill in black gram was demonstrated to 10 farmers from Sakkaramallur, Mudinampet and Kamarajapuram under FLD programme 2013-2014.
7.	06.08.13	35	-	A trial may be conducted to reclaim tannery polluted land of Mr. Ganesan using sesbania, ragi and pressmud	FLD is approved for the financial year 2014-2015. Demo will be conducted with ragi var. C0-15 at Chennasamudram village.
8.	06.08.13	35	-	Seed production of any one vegetable may be taken up, especially ash gourd seed production may be tried.	Spiny brinjal VRM 1 seeds 9.40 kg has been produced and distributed to the farmers
9.	06.08.13	35	-	Upload all the demonstrations, OFT and trainings in the website.	In progress
10.	06.08.13	35	-	Trials may be conducted to address the problems in jasmine crop	FLD is approved in the KVK action plan 2014-2015. It will be conducted in the cluster of Pulivalam, Vellore block.
11.	06.08.13	35	-	Scientist may visit Pollachi farms to learn drought management technology in Coconut	Dr. T. Prabhu, SMS (Horticulture) visited CRS, Aliyar Nagar to learn drought management technologies. It is implemented through special FLD programme on drought management techniques in coconut during summer 2014.

12.	06.08.13	35	-	Process documentation of any one technology may be done by extension scientist	Documentation of vermicompost was done.
13.	06.08.13	35	-	Farmers may be given trainings on Maize cultivation	The farmers were trained in improved production techniques of maize. Using FLD mode, 50 farmers were trained for Maize Hybrid cultivation.
14.	06.08.13	35	-	Knowledge on marketing technologies for horticultural crops may be imparted	A total of 25 farmers were trained on marketing horticultural produces.
15.	06.08.13	35	-	Papaya Co 8 seedlings may be raised and distributed to farmers	Papaya CO 8 seedlings were raised in the nursery. The seedlings were distributed to farmers in time. A total of 250 seedlings were distributed to 25 farmers.
16.	06.08.13	35	-	Training may be given on papaya cultivation technology	A training on papaya cultivation technology was given to 25 Papaya growers on 20.11.13.
17.	06.08.13	35	-	Power weeder in paddy may be explored	Single row SRI power weeder manufactured by M/s. Om Sakthi Enterprises will be demonstrated to paddy farmers at Kalar Village.
18.	06.08.13	35	-	Training may be provided on enrichment of vermi-compost	It is included in the action plan 2014-2015
19.	06.08.13	35	-	Training may be given on drumstick cultivation	A total of 25 farmers were trained for the cultivation of drumstick cultivation on 20.11.13
20.	06.08.13	35	-	Sensitization on available credit facilities at banks for mushroom cultivation, may be done with the help of bank officials	A total of four trainings were given to 182 participants for the cultivation of mushroom. During the training programme, the participants were sensitized to avail the Bank Loan.
21.	06.08.13	35	-	Training on value addition in millets and tomato may be given	The training will be conducted to farmers during July 2014
22.	06.08.13	35	-	Training on citrus cultivation may be given	The training will be given to farmers during June 2014.

PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1.	**Wet Land:** Paddy-Paddy, Sugarcane, Banana
2.	**Garden Land:** Paddy-Paddy-Groundnut, Paddy-Paddy-Ragi / Cumbu / Pulses, Paddy-Paddy-Vegetables, Sugarcane, Banana, Flowers
3.	**Dry Land:** Groundnut-Pulses (with Pulses as Inter crop), Groundnut- Gingelly, Groundnut-Ragi/Horse gram, Minor Millets-horse gram, Cotton, Sorghum

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

S. No	Agro-climatic Zone	Characteristics
1.	North Eastern Zone	The climate is basically semi-arid tropical. While the period from March to June experiences very hot weather condition, cold weather condition prevails during November to January. The average minimum and maximum temperatures are 13^{o} Celsius and 44^{o} Celsius respectively.

S. No	Agro ecological situation	Characteristics
1.	Zone –AES 1 Walajah, Sholinghur, Arakkonam, Kaveripakkam and Nemili blocks.	Red Non calcareous soil, low rainfall and low elevation areas
2.	Zone –AES 2 Vellore, Kaniyambadi, Anaicut, K.V Kuppam, Katpadi, Arcot and Timiri block.	Red Non calcareous soil, low rainfall and medium elevation areas
3.	Zone –AES 3 Gudiyatham, Pernambut, Madhanoor, Alangayam, Tirupathur, Jolarpet, Kandili and Natrampalli blocks.	Red calcareous soil, low rainfall and medium elevation areas

2.3. Soil type/s :

S. No	Soil type	Characteristics	Area in ha
1.	Sandy and Sandy Loam	Sandy soil : Visible large particles to the unaided eye, usually light in colour and stays loose allowing moisture to penetrate easily. This soil type cannot form a ball when squeezed in the fist and feels coarse in texture when wet or dry. Sandy Loam soils : Sandy loam soils are dominated by sand particles, but contain enough clay and sediment to provide some structure and fertility. Sandy loam soils are broken down into four categories, including coarse sandy loam, fine sandy loam, sandy loam and very fine sandy loam. The size of the sand particles is measured in millimeters and their concentration in the soil is used to determine which category a soil falls under. Sandy loam soils are made of approximately 60 percent sand, 10 percent clay and 30 percent silt particles.	48894.0
2.	Red Loam	Soil composed mostly of sand and silt, and a smaller amount of clay (about 40%-40%-20% concentration respectively). The reddish colour reflects the presence of iron oxides that form as a result of chemical weathering.	178836.0
3.	Clay and Clay Loam	Clay : 40 percent or more clay, 45 percent or less sand, and less than 40 percent silt. Clay loam : 27 to 40 percent clay and more than 20 to 46 percent sand.	118125.0
4.	Black Cotton	They are very fertile. They are black in colour. They are high in organic matter. They often form in grasslands and wetlands. Organic matter contains plant nutrients and it also improves the physical properties of the soil, enhancing it for plant growth. It is also known as regur soil.	4020.0

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

S.No.	Crop	Area (ha.)	Production (Metric tons)	Productivity (kg /ha)
1	Paddy	43720	222098	5080
2	Cholam	6179	8193	1326
3	Cumbu	2056	5220	2539
4	Ragi	9794	40772	4163
5	Maize	5072	36518	7200
6	Redgram	13198	19137	1450
7	Greengram	1911	1643	860
8	Blackgram	3108	1828	588
9	Horsegram	9651	9439	978
10	Bengalgram	5	3	600
11	Otherpulses	2223	1334	600
12	Groundnut	36038	79356	2202
13	Castor	274	192	700
14	Gingelly	280	168	600
15	Sunflower	3	2	500
16	Sugarcane	11808	1109952	94000
17	Cotton	8164	55515	6800

(Source: Office of the Joint Director of Agriculture, Vellore)

Horticulture

S.No.	Crop	Area (ha)	Production (tonnes)	Productivity (tonnes /ha.)
Fruit Crops				
1	Banana	**3219**	28760	40
2	Mango	14667	146670	10
3	Guava	621	12420	20
4	Sapota	461	9542	20.7
5	Cashew	3	45	15.1
6	Jack	72	2290	31.8
7	Coconut	22680	4127*	104 **
8	Papaya	12	240	20
Vegetable Crops				
9	Brinjal	1244	31100	25
10	Tomato	1211	30275	25
11	Greens	169	3380	20
12	Tapioca	144	2880	20
13	Moringa	38	1520	40.0
14	Onion	48	720	15
15	Sweet potato	35	525	15
16	Ash gourd	4	60	15
17	Bitter gourd	20	300	15
18	Bottle gourd	12	180	15
19	Elephant yam	70	700	10
20	Ribbed gourd	9	135	15
21	Snake gourd	1	15	15
22	Water melon	20	400	20
Flower crops				
23	Jasmine	718	5744	8
24	Crossandra	70	560	8
25	Chrysanthemum	63	1260	20
26	Nerium	6	30	5

27	Marigold	14	210	15
Spices				
28	Chillies	899	8990	10
29	Turmeric	639	15975	25
30	Coriander	137	685	5
31	Curry leaf	27	5400	200
32	Mint	11	22	2.0
33	Tamarind	546	5460	10
Plantation crops				
34	Arecanut	14	140	10.0

(Source: Office of the Joint Director of Agriculture, Vellore) * in lakh nuts; ** in nuts per tree/year

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April'13	19.9	35.8	22.9	56.0
May'13	63.1	38.1	24.0	53.2
June'13	92.7	35.8	23.4	65.7
July'13	54.9	34.6	23.3	69.9
August'13	144.0	35.1	23.1	72.2
September'13	199.7	34.4	22.2	75.7
October'13	152.8	34.3	21.2	75.9
November'13	54.0	32.4	17.2	77.9
December'13	0	31.1	13.9	75.0
January'14	0	30.1	14.8	76.6
February'14	29.0	31.6	13.5	74.4
March'14	32.3	35.4	15.0	64.2

Rainfall (mm)	Normal	2013	Deviation (+) or (-)
Southwest monsoon (June, July, August, September)	439	491.3	+11.91
North East monsoon (October, November, December)	385	206.8	-46.28

- Source: Department of Agriculture, Vellore District.

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

Category	Population	Production	Productivity
Cattle	556632	-	-
Buffalow	16105	-	-
Sheep	383270	-	-
Goats	324052	-	-
Poultry	6504799	-	-

2.7 District profile has been **Updated** for 2013-14 Yes / No: Yes

2.8 Details of Operational area / Villages

S. No	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Vellore	Kaniyambadi	Adukkamparai, Kattuputhur, Nelvoy, Kammavanpettai	1	Paddy, Groundnut, banana, Redgram, brinjal	Drought, Labour shortage, Drought, suitable alternate crop for paddy, Low yield of existing variety maize var/hybrid alternate for private hybrid	Crop production, Crop diversification
2	Anaicut	Anaicut	Khandaneri, Sethuvalai, Mottupalayam	3	Paddy, Groundnut vegetables	Drought, Labour shortage, Vagaries of monsoon, frequent occurrence of drought, crop failure and low yield	Crop production, Varietal Evaluation
3	Thirupattur	Jolarpet	Melchakkarakuppam, Thiriyalam	2	Red gram, Paddy, Groundnut Cotton, Minor millets	Low yield, High pest and disease incidence	Crop production, Crop protection
4	Gudiyatham	Gudiyatham	Velleri, Nagal	4	Sugarcane Coconut, Banana, Cotton, Groundnut	Low yield, poor performance of local variety	Crop production
5	Katpadi	K.V.Kuppam	Devarishikuppam , Arjunapuram, Pasumathur, Vadavirinjipuram, Kamarajapuram, Mudinampattu, Mottur	4	Redgram, Groundnut Paddy, Sugarcane, Blackgram	Low yield, High pest incidence, Labour shortage, High labour wages, Shortage of fodder crop	Crop protection, Farm mechanization Fodder production
6	Walajah	Kaveripakkam	Chennasamudra m, Kalapanampattu,	2	Paddy, Ragi, Vegtables, Groundnut	suitable alternate crop for paddy, maize var/hybrid alternate for private hybrid	Crop diversification
7	Katpadi	Katapadi	Melmankuppam, Gangareddipalaya m, Thondranthulasi	3	Groundnut, Chilli, Tomato, Greens	Drought, Low yield, non replacement of existing variety	Crop production
8	Vellore	Vellore	Anpoondi, Sivanandhapura m, Ussoor	2	Groundnut, Redgram, Paddy	Drought, Micro nutrient deficiency, low yield	Integrated nutrient management
9	Arcot	Arcot	Tajpura, Sathur, Putheri	3	Paddy, Groundnut	Labour shortage, High labour wages, Drought, suitable alternate crop for paddy,	Farm mechanization Crop diversification
10	Gudiyatham	Gudiyatham	S.Mottur,	3	Milky Mushroom	Low consumer preference of existing variety	Allied enterprise

11	Anaicut	Anaicut	Ganganallore	4	Milky Mushroom	Low consumer preference of existing variety	Allied enterprise
12	Wallajah	Walajah	ThenkadappanthaglKadaperi	2	Brinjal, Tomato, banana	Low yield of existing variety	Crop production

2.9. Priority thrust areas

S. No	Thrust area
1	Drought mitigation
2	Varietal Evaluation
3	Crop diversification in Horticultural crops
4	Utilization of natural resource management
5	Pest and disease management
6	Fodder production
7	Farm mechanization
8	Allied enterprises/Mushroom cultivation

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
4	3	18	13	13	12	131	115

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
90	99	8208	8208	1185	1185	9616	9616

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
1.390	1.390	1698	1698

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
249	249	50	50

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		Paddy	Lack of awareness of newly released varieties, Water scarcity. Labour shortage and high labour wages	-	1.Demonstration of upland improved paddy variety Anna 4 and ICM practices 2. Direct paddy drum seeder	3	-	1	11	Anna 4 Paddy seeds- 3q/ha	-	-	3	Azospirillum- 12 kg Phosphobacteria-12 kg Pseudomonas- 30 kg
2		Groundnut	Vagaries of monsoon, frequent occurrence of drought, crop failure and low yield, Iron deficiency leading to yield loss	1. Assessment of Groundnut varieties under rainfed conditions in Vellore Dt. 2.Assessment of management techniques for iron chlorosis in Groundnut	Demonstration of groundnut variety TMV 13 & ICM practices	2	-	-	-	TMV 13-3 q/ha ICGV 91114-1.5 q/ha Kadiri 9 – 0.75 q/ha	-	-	4	Rhizobium- 2 kgs *T.viride*- 1 kg Phosphobacteria-2 kgs *Pseudomonas fluorescens- 5kgs*
3		Redgram	Low yield due to biotic stress, Under utilization of bio inoculums	Assessment of bio drenching against wilt disease in transplanted redgram	-	2	-	-	3	-	-	-	4	Liquid *Pseudomonas*- 26 litres Liquid *Trichoderma* – 6 litres Talc based Pseudomonas- 2 Kg Talc based Trichoderma- 2 Kg
4		Blackgram	Low productivity, Incidence of pest and diseases, High primary and secondary tillage cost, Labour shortage, High cultivation cost	-	1.Demonstration of ICM practices in black gram VBN 6 2.Tractor Drawn Zero till Ferti Seed drill	4	-	-	6	VBN 6 – 0.52 q/ha	-	-	4	Rhizobium- 2 kgs Phosphobacteria-2 kgs *Pseudomonas fluorescens- 8 kgs* *Trichoderma viride- 2 kgs*
5		Maize	Lack of awareness of newly released varieties	-	Demonstration of TNAU Maize hybrid CO 6	2				TNAU maize hybrid CO6- 1.2 q/ha			1	Azospirillum – 3 kg

6		Sorghum	Non-availability of sufficient quantities of green fodder, grazing yards and very less usage of crop residues as fodder	-	Demonstration of multicut fodder Sorghum variety Co (Fs)29	2			3	Co (Fs)29 0.30 q	-	-	-	-
7		Brinjal	Severe incidence of shoot and fruit borer, poor quality products, low yield, non adoption of IPM practices	-	Integrated crop management practices in spiny brinjal	-	-	-	-	Spiny brinjal VRM 1 0.025 q	-	-	-	-
8		Castor	Use of local varieties; lack of awareness about castor hybrids	-	Integrated crop management in castor hybrid YRCH1	-	-	-	-	YRCH 1 0.30 q	-		4	Azospirillum- 7.5kg Phosphobacteria- 7.5 kg *Pseudomonas*- 30 kgs *T.viride-6.kgs*
9		Coconut	Drought, Low yield, Loss of trees	-	Drought management techniques in coconut	-	-	-	-	-	-	-	-	-
10		Mushroom	Low yield, more fibre content, less market preference	-	Demonstration of *Tricholoma giganteum* CO (TG)3 mushroom	3	2	-	11	1.25 q	-	-	-	-
11		Integrated farming System	Poor utilization of resources, Low income	-	Integrated farming System	4	1	-	1	-	-	-	-	-

3.B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1	Demonstration of upland improved paddy variety Anna 4 and ICM practices	TNAU, Coimbatore	Paddy	-	15	1	-
2	Demonstration on Direct paddy drum seeder	TNAU, Coimbatore	Paddy	-	10	3	-
3	Assessment of Groundnut varities under rainfed conditions in Vellore Dt.	ICRISAT, ANGRAU Hyderabad	Groundnut	3	-	2	-
4	Assessment of management techniques for iron chlorosis in Groundnut	DGR, Gujarat	Groundnut	5	-	3	-
5	Demonstration of groundnut variety TMV 13 & ICM practices	TNAU	Groundnut	-	5	2	-
6	Assessment of biodrenching against wilt disease in transplanted redgram	UAS, Raichur	Red gram	5	-	2	-
7	Demonstration of ICM practices in black gram VBN 6	TNAU	Black gram	-	7	2	-
8	Demonstration on Tractor Drawn Zero till Ferti Seed drill	CIAE, Bhopal	Black gram	-	10	3	-
9	Demonstration of TNAU Maize hybrid CO 6	TNAU	Maize	-	15	2	-
10	Demonstration of multicut fodder Sorghum variety Co (Fs)29	TNAU	Fodder Sorghum	-	15	1	-
11	Integrated crop management practices in spiny brinjal	TNAU	Brinjal	-	10	4	-
12	Integrated crop management in Castor hybrid YRCH1	TNAU	Castor	-	15	2	-
13	Demonstration of *Tricholoma giganteum* Co (TG)3 mushroom	TNAU	Mushroom	-	10	5	-
14	Integrated farming System	TNAU	Animal & Fodder crops	-	3	3	-
15	Drought management techniques in coconut	TNAU	Coconut	-	5	-	-

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
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
8	2	3	-	103	9	3	-	1992	478	381	217	-	-	-	-

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	1									1
Integrated Pest Management										
Integrated Crop Management										
Integrated Disease Management			1							1
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										**3**

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation										
Integrated Pest Management										
Integrated Crop Management										
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						
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL						

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

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

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management	Groundnut	Assessment of management techniques for iron chlorosis in Groundnut	5	5	1 ha
Varietal Evaluation	Groundnut	Assessment of Groundnut varieties under rainfed conditions in Vellore Dt.	3	3	1 ha
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management	Red gram	Assessment of bio drenching against wilt disease in transplanted redgram	5	5	1 ha
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			**13**	**13**	**3 ha**

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 (Per trail covering all the Technological Options)
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				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

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

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

4.C1. Results of Technologies Assessed

Results of On Farm Trial -1

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Red gram	Irrigated	Low yield due to biotic stress, Under utilization of bio inoculums	Assessment of bio drenching against wilt disease in transplanted redgram	5	Seed treatment with *T.viride*@ 4gm/kg seed + drenching with liquid formulation of *Pseudomons flourescens* or *Trichoderma viride* @ 4 ml/lt on 2nd, 3rd and 4th month after planting	Disease incidence No. of pods/ per plant Yield BCR	1.49 % 450 11.78 q/ha 2.86	Drenching with liquid *Pseudomonas* and *Trichoderma* effectively controlled wilt incidence (1.49%) in redgram when compared to chemical spraying (17.06%).	Liquid formulation of *Pseudomonas* and *Trichoderma,* though costly, works effectively against wilt disease in Red gram as well as vegetable crops	-	-

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 : Spraying of carbendazim 500 g/ha twice	Farmer's practice	8.55	q/ha	25010	2.42
Technology option 2: Application of *Pseudomonas flourescens* or *Trichoderma viride* @ 2.5 kg/ha + 50 Kg of FYM at 30 DAT	TNAU	10.36	q/ha	32187.5	2.64
Technology option 3; Seed treatment with *T.viride*@ 4gm/kg seed + drenching with liquid formulation of *Pseudomonas flourescens* or *Trichoderma viride* @ 4 ml/lt on 2nd, 3rd and 4th month after planting	UAS, Raichur, 2011	11.78	q/ha	38325	2.86

Results of On Farm Trial 2

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Groundnut	Rainfed	Vagaries of monsoon, frequent occurrence of drought, crop failure and low yield	Assessment of groundnut varieties under rainfed conditions in vellore district	3	Assessment of ICGV 91114 and Kadiri 9 varieties	No. of plants/ m2 No. of pods/ plant BCR	28 20 2.02	ICGV 91114 performed well under rainfed condition in Vellore dist. when compared with Kadiri 9 and TMV 7 (as check)	ICGV 91114 withstands drought and produces bold kernals	-	-

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) TMV 7	TNAU	9.32	q/ha	17487	1.73
Technology option 2: ICGV 91114	ICRISAT	11.26	q/ha	26763	2.07
Technology option 3: Kadiri 9	ANGRAU	10.69	q/ha	24090	1.96

Results of On Farm Trial 3

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Groundnut	Rainfed	Iron deficiency leading to yield loss	Assessment of management techniques for iron chlorosis in Groundnut	5	Spray of 0.5 per cent $FeSO_4$ + 0.02 % citric acid at 30,40,60 and 75 DAS	Iron chlorosis affected plants No. of pod/plant Oil content 100 seed weight Total cholorophyll content (mg g-1 fresh wt) at 60 DAS Yield BCR	62% 27 43.4 % 43.7 gms 1.97 12.76 q/ha 2.04	Spraying of $FeSO_4$ along with citric acid resulted in visibly enhanced crop growth and higher yields	Farmers compared the crop stand with nearby fields and opined that the after application of FeSO4 + Citric acid, the plants turned green	-	-

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 : No application of Micronutrient Mixture	Farmer's practice	10.73	q/ha	13651	1.58
Technology option 2; Spraying of 1% $FeSO_4$ on 30, 40 and 50 DAS	TNAU	12.07	q/ha	20841	1.99
Technology option 3: Spraying of 0.5 per cent $FeSO_4$ + 0.02 per cent citric acid on 30, 40, 60 and 75 DAS	DGR, Gujarat, 2011	12.76	q/ha	22738	2.04

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

On Farm Trial – 1

1	Title of Technology Assessed	:	Assessment of biodrenching against wilt disease in transplanted redgram
2	Problem Definition	:	Low yield due to biotic stress, Under utilization of bio inoculums
3	Details of technologies selected for assessment	:	Seed treatment with *T.viride* @ 4gm/kg seed + drenching with liquid formulation of *Pseudomonas flourescens* or *Trichoderma viride* @ 4 ml/lt on 2nd, 3rd and 4th month after planting
4	Source of technology	:	UAS, Raichur, 2011
5	Production system and thematic area	:	Irrigated; Integrated disease management
6	Performance of the Technology with performance indicators	:	% Disease incidence: 1.49 No. of pods / plant: 450 Yield: 11.78 q/ha BCR: 2.86
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Liquid formulation of *Pseudomonas* and *Trichoderma*, though costly, works very effectively against wilt disease in Red gram
8	Final recommendation for micro level situation	:	Drenching with *Pseudomonas* or *Trichoderma* @4 ml/lt must be done during early crop growth period (i.e 2 nd, 3rd and 4th month after planting),when the crop is more prone to the incidence.
9	Constraints identified and feedback for research	:	High cost of liquid bio agents.
10	Process of farmers participation and their reaction	:	Proactive red gram growers were ready to follow the technology as they witnessed the effect of proper application of bioagents in managing the wilt disease, a major problem in redgram crop. Realizing the benefit in redgram, one of the beneficiary farmer tested the liquid bioagent in his watermelon crop also and achieved good results.

On Farm Trial – 2

<table>
<tr><td>1</td><td>Title of the technology assessed</td><td>:</td><td>Assessment of groundnut varieties under rainfed conditions in vellore district</td></tr>
<tr><td>2</td><td>Problem Definition</td><td></td><td>Vagaries of monsoon, frequent occurrence of drought, crop failure and low yield</td></tr>
<tr><td>3</td><td>Details of technologies selected for assessment</td><td>:</td><td>Assessment of ICGV 91114 and Kadiri 9 varieties</td></tr>
<tr><td>4</td><td>Source of technology</td><td>:</td><td>ICRISAT, Hyderabad; ANGRAU, A.P respectively</td></tr>
<tr><td>5</td><td>Production system and thematic area</td><td>:</td><td>Rainfed; Crop production</td></tr>
<tr><td>6</td><td>Performance of the Technology with performance indicators</td><td>:</td><td>ICGV 91114<table><tr><td>No. of plants/ m2</td><td>28</td></tr><tr><td>No. of pods/ plant</td><td>20</td></tr><tr><td>BCR</td><td>2.02</td></tr></table></td></tr>
<tr><td>7</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td>:</td><td>The farmers felt the crop stand is good under water stress conditions besides its performance in yield than the check variety TMV – 7 and the technology option 3 (Kadiri 9)</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td>:</td><td>Groundnut variety ICGV 91114 may be recommended for cultivation under rainfed condition in Vellore district.</td></tr>
<tr><td>9</td><td>Constraints identified and feedback for research</td><td>:</td><td>-</td></tr>
<tr><td>10</td><td>Process of farmers participation and their reaction</td><td>:</td><td>At each trial plot, five farmers were invited and they were asked to list out the parameters which are highly important for the variety to be preferred. The parameters are then listed and asked them to give a score. The reaction of the farmers were, majority of the farmers prefer the drought tolerance is the key technology parameter.</td></tr>
</table>

On Farm Trial – 3

1	Title of Technology Assessed	:	Assessment of management techniques for iron chlorosis in Groundnut
2	Problem Definition	:	Iron deficiency leading to yield loss
3	Details of technologies selected for assessment	:	Spray of 0.5 per cent $FeSO_4$ + 0.02 per cent citric acid at 30, 40, 60 and 75 DAS
4	Source of technology	:	DGR, Gujarat, 2010
5	Production system and thematic area	:	Rainfed and Integrated nutrient management
6	Performance of the Technology with performance indicators	:	No. of pods/Plant: 28 Oil content %: 43.4 100 seed weight (g): 43.7 Total chlorophyll content (mg g-1 fresh wt) at 60 DAS: 1.97 Yield (q/ha.): 12.76 BCR: 2.04
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Farmers compared the crop stand with nearby fields and opined that they could not see any yellow coloured plant in their demo plots.
8	Final recommendation for micro level situation	:	Spraying of 0.5 per cent FeSO4 + 0.02 % citric acid at 30,40,60 and 75 DAS will recover the crop from iron deficiency setback prevailing in rainfed groundnut crop which obviously increase the chlorophyll content of leaf and sequentially the yield.
9	Constraints identified and feedback for research	:	Improper application leads to phytotoxicity
10	Process of farmers participation and their reaction	:	Farmers realized the yield loss due to nutrient deficiency, which was neglected during previous crops.

4.D1. Results of Technologies Refined

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

PART V - FRONTLINE DEMONSTRATIONS

5.A. Summary of FLDs implemented during 2013-14

S. 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													
1	Castor	Rainfed	Kharif' 2013	Castor	-	YRCH 1	Integrated crop management	Integrated crop management in castor hybrid YRCH1	6	6	-	15	15	-
2	Groundnut	Rainfed	Kharif, 2013	Groundnut	TMV Gn 13	-	Integrated crop management	Demonstration of groundnut variety TMV 13 & ICM practices	2	2	-	5	5	-
	Pulses					-								
3	Black gram	Irrigated	Kharif' 2013	Blackgram	VBN 6	-	Crop Protection	Demonstration of ICM practices in black gram VBN 6	3.2	2.6	1	6	7	Non availability of seed material
	Cereals													
4	Paddy	Irrigated	Kharif' 2013	Paddy	Anna 4	-	Crop Production	Demonstration of upland improved paddy variety Anna 4 and ICM practices	6	6	1	14	15	-
	Millets													
5	Sorghum	Irrigated	Kharif' 2013	Sorghum	-	TNAU sorghum hybrid CO5	Crop improvement	-	-	-	-	-	-	Due to non-availability of seeds
6	Maize	Rainfed	Kharif, 2013	Maize	-	TNAU maize hybrid CO 6	Crop improvement	Demonstration of TNAU Maize hybrid CO 6	6	6	1	14	15	-
	Vegetables													
7	Brinjal	Irrigated	Rabi' 2013	Brinjal	TNAU brinjal VRM 1	-	Crop Production	Integrated crop management practices in spiny brinjal	4	4	-	10	10	-
	Flowers													

	Ornamental													
	Fruit													
	Spices and condiments													
	Commercial													
	Medicinal and aromatic													
8	Fodder	Irrigated	Kharif 2013	Fodder Sorghum	Variety Co(Fs29)	-	Fodder Crop	Demonstration of multicut fodder Sorghum variety Co (Fs)29	6	6	-	15	15	-
	Plantation													
9	Coconut	Rainfed	Summer 2014	coconut	Tall	-	Drought management	Drought management techniques in coconut	6	6		15	15	-
	Fibre													
	Dairy													
	Poultry													
	Rabbitry													
	Pigerry													
	Sheep and													

	goat													
	Duckery													
	Common carps													
	Mussels													
	Ornamental fishes													
	Oyster mushroom													
	Button mushroom													
10	Milky mushroom	Irrigated	-	Milky Mushroom	Co(TG) 3		Allied Enterprise	Demonstration of *Tricholoma giganteum* Co (TG)3 mushroom	10 unit	10 unit		10	10	-
	Vermicompost													
	Sericulture													
	Apiculture													
	Implements													
11	Paddy	Irrigated	Rabi 2013	Paddy	ADT 37	-	Farm Mechanization	Direct paddy drum seeder	4	4	-	10	10	-
12	Blackgram	Limited Irrigation	Rabi 2013	Black gram	VBN 6	-	Farm Mechanization	Tractor Drawn Zerotill Ferti Seeddrill	4	4		10	10	-
	Others (specify)													

13	Integrated Farming System	-	2013 - 2014	Cumbu Napier Guinea Grass Velimasal Agathi Maize Goat Poultry	CO(CN) 4 CO(GG)3 Velimasal Agathi Thelicherry goat Namakkal Desi Chicken -1 TNAU maize hybrid Co6	-	Integrated farming System	Integrated farming System	3 units	3 units		3	3	Demonstrations are in progress

5.A. 1. Soil fertility status of FLDs plots during 2013-14

S. 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												
1	Groundnut	Rainfed	Kharif, 2013	Groundnut	TMVGn 13	-	Integrtaed crop management	Demonstration of groundnut variety TMV 13 & ICM practices	Kharif, 2013	High	Low	High	Groundnut
2	Castor	Rainfed	Kharif, 2013	Castor		YRCH1	Crop Production	Integrated crop management in castor hybrid YRCH1	Kharif, 2013	Low	Medium	High	Groundnut
	Pulses												
3	Black gram	Irrigated	Kharif 2013	Black gram	VBN 6		Crop Protection	Demonstration of ICM practices in blackgram VBN 6	Kharif, 2013	Medium	Low	High	Amaranth us
	Cereals												
4	Paddy	Irrigated	Kharif 2013	Paddy	Anna 4		Crop Production	Demonstration of upland improved paddy variety Anna 4 and ICM practices	Kharif, 2013	Low	Medium	High	Paddy
	Millets												
5	Sorghum	Irrigated	Kharif, 2013	Sorghum	-	TNAU sorghu m hybrid Co5	Demonstrati on of hybrids	-	-	-	-	-	-
6	Maize	Rainfed	Kharif, 2013	Maize		TNAU Maize hybrid CO 6	Introduction of hybrids	Demonstration of TNAU Maize hybrid CO 6	Kharif, 2013	High	Low	High	Ragi
	Vegetables												
7	Brinjal	Irrigated	Rabi 2013	Spiny brinjal	TNAU brinjal VRM 1	-	Integrated crop management	Integrated crop management practices in spiny brinjal	Rabi 2013	Low	Medium	High	Jasmine
	Flowers												
	Ornamental												

	Fruit												
	Spices and condiments												
	Commercial												
	Medicinal and aromatic												
8	Fodder	Irrigated	Kharif 2013	Sorghum	Co FS29	-	Fodder Crop	Demonstration of multicut fodder Sorghum variety Co (Fs)29	Kharif 2013	Low	Low	Medium	Groundnut
	Plantation												
9	Coconut	Rainfed	Rabi, 2014	Coconut	Tall	-	Drought management	Drought management techniques in coconut	Rabi, 2014	Low	High	Medium	Coconut
	Fibre												

5.B. Results of Frontline Demonstrations

5.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Oilseeds																			
Groundnut	Demonstration of groundnut variety TMV 13 & ICM practices	TMV Gn 13	-	Rainfed	05	2	20.1	12	15.03	10.79	39.3	36570	72557	35982	2.0	29120	49984	2064	1.7
Pulses																			
Black gram	Demonstration of ICM practices in black gram VBN 6	VBN6	-	Irrigated5	7	2.6	6.75	5.5	6.19	5.01	23.55	17886	36217	18331	2.03	16536	25036	8500	1.51
Cereals																			
Paddy	Demonstration of upland improved paddy variety Anna 4 and ICM practices	Anna 4	-	Irrigated	15	6	63.75	45.00	54.58	51.3	6.39	31737.93	81875	50137	2.58	31965.60	76910	44944.40	2.41
Millets																			
Maize	TNAU Maize hybrid CO 6; INM practices	-	TNAU Maize hybrid CO 6	Rainfed	15	6	68	49	56	54	3.7	35633	66340	30707	1.86	35975	64400	28425	1.8
Sorghum	Demonstration of TNAU sorghum hybrid Co5 in Vellore District	-	TNAU sorghum hybrid Co5	Irrigated	15	6	Demonstration not conducted												
Vegetables																			
Brinjal	Integrated crop management practices in spiny brinjal	TNAU brinjal VRM 1	-	Irrigated	10	4	396	305.5	350.75	294.25	19.2	89700	257401	167701	2.86	74550	147125	72575	1.97
Flowers																			
Ornamental																			
Fruit																			
Spices and condiments																			
Commercial																			

Fibre crops like cotton																			
Medicinal and aromatic																			
Fodder	Demonstration of Fodder Sorghum Co Fs29	Co(Fs) 29	-	Rainfed	15	6	1410.6	940.4	1175.5	912	28.8	32400	117550	85150	3.62	33200	91200	58000	2.74
Plantation																			
Coconut	Drought management techniques in Coconut	West coast Tall	-	Rainfed	15	6	Demonstration are in progress												
Fibre																			
Others (pl.specify)																			

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

** BCR= GROSS RETURN/GROSS COST

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

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

Demonstration of TMVGn 13 & ICM practices

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check (TMV 7)**
No. of pods / plant	19	15
No. of plants / m2	26	22

Demonstration of ICM practices in blackgram VBN 6

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check (T 9)**
YMV incidence (%)	**Nil**	**28**
No. of pods per plant	32	20

Demonstration of upland improved paddy variety Anna 4 and ICM practices

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check (ADT 36)**
No. of productive tillers/hill	45.17	32.85
1000 grain weight (gm)	24.73	18.35
Plant height(cm)	75.15	70.09

Demonstration of TNAU Maize hybrid CO 6

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check(Pioneer 3205)**
No. of grains / cob	510	503
No. of cobs/ m2	5	5

Integrated crop management practices in spiny brinjal

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
No. of fruits/plant	69	41

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																	
Milky mushroom	Demonstration of *Tricholoma giganteum* Co (TG3) mushroom	CO (TG)3	10	27	4.23	2.99	3.61	2.83	27.56	18944	50550	31606	2.66	18944	42450	23506	2.24
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
Others (pl.specify)	Integrated Farming System	Goat -Thelicherry Poultry- Namakkal Desi Chicken -1 Cumbu Napier CO(CN) 4 Guinea Grass CO(GG)3 Velimasal Agathi Hybrid Maize CO 6	3	3 units	-	-	-	-	Demonstrations are in progress								-

* 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

Demonstration of *Tricholoma giganteum* CO (TG)3 mushroom

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local (APK 2)**
Organoleptic quality (Appearance Taste Flavour Texture Acceptance) - Score index	3.91	3.21

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 Man days		% save	Savings in labour cost (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
Direct paddy drum seeder	4800	Direct paddy drum seeder	10	4.0	2	34	94.11	4890.12	32924	69187.5	36263.5	2.101	37814	65250	27436	1.725
Tractor Drawn Zerotill Ferti Seeddrill	45000	Zerotill Ferti Seeddrill in blackgram	10	4.0	2	16	87.50	1974	15560	32591.25	17031.25	2.094	17561	31050	13489	1.768

* 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.)
Direct paddy drum seeder

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Seed Rate (kg/ha)	29.50	75
Reduction in weed population in % after herbicide application	87.90	-
Time saving in % over check (%)	94.18	-

Zero till Ferti Seed drill in blackgram

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Seed Rate (kg/ha)	20	25
Time saving over check (%)	87.50	-

5.B.6. Extension and Training activities under FLD

S.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Field days	3	74	
2	Farmers Training	18	480	Training given on improved technologies in pulses and awareness created on newer varieties Improved production technologies in maize and Improved production technologies in groundnut
3	Media coverage	1	-	
4	Training for extension functionaries	1	50	
5	Others (Please specify)			

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	TNAU Maize hybrid CO 6 and INM practices	TNAU Maize hybrid CO 6	15	6	6.8	4.9	5.6	5.4	3.7	35633	66340	30707	1.86	35975	64400	28425	1.8
Paddy																	
Sorghum																	
Wheat																	
Others (pl.specify)																	
Total																	
Oilseeds																	
Castor	Integrated crop management in castor hybrid YRCH1	YRCH1	15	6	14.88	10.18	13.78	7.30	87.82	15224.6	45258.4	30033.8	2.97	14224.6	22490.6	8266.0	1.6
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																		
Others (pl.specify)																		
Total																		
Fodder crops																		
Maize (Fodder)																		
Sorghum (Fodder)																		
Others (pl.specify)																		
Total																		

H-High L-Low, A-Average

Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/ diseases etc.)
Demonstration of TNAU Maize hybrid CO 6

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
No. of grains / cob	510	503
No. of cobs/ m2	5	5

Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/ diseases etc.)
Integrated crop management in castor hybrid YRCH1

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check (Local)**
No. of racemes/plant	29.9	14.5
Shelling percentage	61.5	49.1

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

PART VII. TRAINING

7.A. Training of Farmers and Farm Women 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	2	43	5	48	2	-	2	45	5	50
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification	2	43	7	50	-	-	-	43	7	50
Integrated Farming	1	18	2	20	-	-	-	18	2	20
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	2	29	20	49	1	-	1	30	20	50
Soil and Water Conservation	4	83	27	110	28	18	46	111	45	156
Integrated Nutrient Management	1	21	3	24	1	-	1	22	3	25
Production of organic inputs										
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	7	109	53	162	68	50	118	177	103	280
Others (pl.specify) Cultivation of Vegetables	2	49	1	50	2	3	5	51	4	55
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	2	46	-	46	4	-	4	50	-	50
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	1	25	1	26	1	3	4	26	4	30
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	1	23	1	24	1	-	1	24	1	25
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	24	1	25	2	-	2	26	1	27
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										

Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance	3	57	9	66	6	2	8	63	11	74
Installation and maintenance of micro irrigation systems	1	-	11	11	6	5	11	6	16	22
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	3	14	36	50	2	13	15	16	49	65
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										

Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
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	3	25	48	73	2	5	7	27	53	80
Apiculture										
Others (Production of Spirulina)	1	21	4	25	-	-	-	21	4	25
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems	1	2	23	25	-	-	-	2	23	25
Others (Pl. specify)										
TOTAL	**38**	**632**	**252**	**884**	**126**	**99**	**225**	**758**	**351**	**1109**

7.B Training of Farmers and Farm Women 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										
Cropping Systems										
Crop Diversification										
Integrated Farming	1	11	10	21	1	3	4	12	13	25
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	1	11	10	21	-	4	4	11	14	25
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	1	18	6	24	1	-	1	19	6	25
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	1	33	2	35	3	14	17	36	16	52
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										
Design and development of low/minimum cost diet										

Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance	1	15	6	21	-	4	4	15	10	25
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	2	16	44	60	6	-	6	22	44	66
Integrated Disease Management										
Bio-control of pests and diseases	1	24	27	51	-	-	-	24	27	51
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										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**8**	**128**	**105**	**233**	**11**	**25**	**36**	**139**	**130**	**269**

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	1	15	8	23	2	1	3	17	9	26
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	1	16	6	22	2	1	3	18	7	25
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**2**	**31**	**14**	**45**	**4**	**2**	**6**	**35**	**16**	**51**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	1	15	-	15	9	1	10	24	1	25
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**1**	**15**	**-**	**15**	**9**	**1**	**10**	**24**	**1**	**25**

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	1	40	10	50	12	4	16	52	14	66
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify) Farm Mechanization in paddy cultivation	1	31	6	37	11	2	13	42	8	50
Application of solar energy in Agriculture	1	26	1	27	6	3	9	32	4	36
Total	**3**	**97**	**17**	**114**	**29**	**9**	**38**	**126**	**26**	**152**

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										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total										

7.G. Sponsored training programmes conducted

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	25	329	30	359	68	33	101	397	63	460
1.b.	Commercial production of vegetables										
2	**Production and value addition**										
2.a.	Fruit Plants										
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	**Soil health and fertility management**										
4	**Production of Inputs at site**										
5	**Methods of protective cultivation**										
6	**Others (pl.specify)**										
7	**Post harvest technology and value addition**										
7.a.	Processing and value addition										
7.b.	Others (NADP-PF farmers training)	4	134	15	149	39	2	41	173	17	190
	NADP-PF farmers training- Dept. of Agriculture and Horticulture	14	542	28	570	69	21	90	611	49	660
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	**Livestock and fisheries**										
10	**Livestock production and management**										
10.a	Animal Nutrition Management										
10.b	Animal Disease Management										
10.c	Fisheries Nutrition										
10.d	Fisheries Management										
10.e	Others (pl.specify)										
11.	**Home Science**										
11.a	Household nutritional security										
11.b	Economic empowerment of women										
11.c	Drudgery reduction of women										
11.d	Others (pl.specify)										
12	**Agricultural Extension**										
12.a	Capacity Building and Group Dynamics										
12.b	Others (pl.specify)										
	Total	**43**	**1005**	**73**	**1078**	**176**	**56**	**232**	**1181**	**129**	**1310**

Details of sponsoring agencies involved
1. Government of Tamilnadu

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.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	1	13	10	23	2	-	2	15	10	25
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.	1	23	-	23	2	-	2	25	-	25
4.c.	Repair and maintenance of farm machinery and implements										
4.d.	Rural Crafts										
4.e.	Seed production										
4.f.	Sericulture										
4.g.	Mushroom cultivation	2	48	7	55	22	25	47	70	32	102
4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	Others (pl.specify)										
5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	Grand Total	**4**	**84**	**17**	**101**	**26**	**25**	**51**	**110**	**42**	**152**

PART VIII – EXTENSION ACTIVITIES

Extension Programmes (including extension activities undertaken in FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	5	49	15	64	24	13	37	8	5	13
Kisan Mela	2	762	211	973	59	32	91	12	6	18
Kisan Ghosthi	-	-	-	-	-	-	-	-	-	-
Exhibition	5	1958	1160	3118	135	198	333	36	11	47
Film Show	12	251	38	289	68	17	85	13	3	16
Method Demonstrations	23	426	195	621	34	15	49	19	18	37
Farmers Seminar	3	159	38	197	44	25	69	7	5	12
Workshop	-	-	-	-	-	-	-	-	-	-
Group meetings	2	35	2	37	2	1	3	1	1	2
Lectures delivered as resource persons	45	659	328	987	156	191	347	38	19	57
Newspaper coverage	26	-	-	-	-	-	-	-	-	-
Radio talks	2	-	-	-	-	-	-	-	-	-
TV talks	7	Mass	Mass	Mass	Mass	Mass	Mass	Mass	Mass	Mass
Popular articles	1	-	-	-	-	-	-	-	-	
Extension Literature	4	-	-	-	-	-	-	-	-	960
Advisory Services	374	311	9	320	40	14	54	0	0	0
Scientific visit to farmers field	21	-	-	-	-	-	-	-	-	-
Farmers visit to KVK	602	561	17	578	23	1	24	0	0	0
Diagnostic visits	46	154	40	194	47	34	81	4	1	5
Exposure visits	4	38	11	49	17	9	26	7	1	8
Ex-trainees Sammelan	-	-	-	-	-	-	-	-	-	-
Soil health Camp	-	-	-	-	-	-	-	-	-	-
Animal Health Camp	-	-	-	-	-	-	-	-	-	-
Agri mobile clinic	-	-	-	-	-	-	-	-	-	-
Soil test campaigns	-	-	-	-	-	-	-	-	-	-
Farm Science Club Conveners meet	-	-	-	-	-	-	-	-	-	-
Self Help Group Conveners meetings	-	-	-	-	-	-	-	-	-	-
Mahila Mandals Conveners meetings	-	-	-	-	-	-	-	-	-	-
Farmers Field School (specify)	1	28	2	30	0	0	0	6	2	8
Any Other (Specify)	-	-	-	-	-	-	-	-	-	-
Total	**1185**	**5391**	**2165**	**7457**	**649**	**550**	**1199**	**151**	**72**	**1183**

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)						
Millets	Ragi	Co14		0.06345	158.625	
	Cumbu	Co9		0.05655	169.65	
	Sorghum	Co30		0.0657	492.75	
	Varagu	Co13		0.725	217.5	
	Thenai	Co7		0.0335	100.5	
Oilseeds						
Pulses						
	Blackgram	VBN 6		0.064	448	
	Blackgram	VBN 4		0.08	560	2
	Greengram	VRM (Gg 1)		0.161	1127	3
Commercial crops						
Vegetables	Brinjal	Spiny brinjal VRM 1		0.089	11570	41
	Annual moringa	PKM 1		0.0135	2025	5
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others (specify)						
Total				**1.3517**	**16869.025**	**51**

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	Annual moringa	PKM 1		15	150	3
Fruits						
Ornamental plants	Indoor plants			97	1410	45
Medicinal and Aromatic						
Plantation	Coconut			86	2580	6
Spices						
Tuber						
Fodder crop saplings	Fodder grass	Co 4		1500/setts	750	15
Forest Species						
Others(specify)						
Total				**1698**	**4890**	**69**

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others (specify)	Vermicompost	50 kg	300	4
Total				

9.D. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers	Vanaraja(egg)	225	675	22
Duals (broiler and layer)	Vanaraja	24	5883	20
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total		**249**	**6558**	**42**

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.)

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers			
Technical reports			
News letters			
Technical bulletins	Cultivation of milky mushroom	Sendhilvel, V. and Sridhar,P.	500
	Precision Farming	Sendhilvel, V., Paul Sebastin, A., Suganthi, A. and Sridhar, P	200
Popular articles			
Extension literature	Maintenance of Drip irrigation System	Sridhar. P. and Joshua Davidson, S.	300
	Training Manual on Technologies for Sustainable Sugarcane Cultivation	Joshua Davidson. S., Sridhar. P., Senthilvel. V. and Srinivasan	500
	Newer pesticide molecules for pest management	A.Suganthi, V.Sendhilvel and P.Sridhar	100
Others (Pl. specify)			
TOTAL			**1600**

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).

The Broad outline for the case study may be

1. Successful cultivation of papaya - an upcoming horticultural crop in Vellore Dt.

Background

The farmer Mr. M.Rajareddy, a retired teacher of Vellore Dt. cultivated papaya (Hybrid: Red lady) for the first time, after the intervention of KVK in 2010. Now he has emerged as one of the leading papaya grower in Vellore dt. He monitors his field closely and takes proper intervention measures then and there as per the advice of KVK. His involvement, proper monitoring and decision making efforts has made this low value crop, highly profitable. Nowadays, farmers are bee lining his farm to learn from his experience.

Interventions

Process: The farmer used to grow banana in his field till 2009. But when he burnt his hands because of repeated loss of banana crop due to nature's vagaries, he looked for some other alternate crop and approached KVK, Vellore.

Technology: The farmer was given training on package of practice and improved production technologies in papaya.

Application of 10 kg FYM, 1 kg Neem cake and *Pseudomonas* 40 g per plant, one prophylactic chemical spray after three months of planting to manage sucking pests, irrigation once in a week copiously and weed free condition (which may otherwise harbor sucking pests) resulted in better yield. When mealy bug problem raised, papaya mealy bug parasitoid *Acerophagus papayae* (400 nos) was released in his field. The farmer takes up planting in November month, so the peak harvest will coincide with summer season in Vellore Dt., during which time, the produce fetches maximum price.

Impact

Horizontal Spread: The proactive farmer, now shares his experience with fellow farmers during KVK training programmes. Farmers looking for a suitable alternative crop like papaya were taken for field visit / exposure visit to Mr. Rajareddy's field.

Taking his advice, farmers Ganesan and Kumaran of Vellore Dt. have cultivated papaya and now these growers together have decided to take their produce to Koyembedu market, Chennai instead of selling to local market

Economic gains: He harvests 200 kg of fruits/tree. On an average, he obtains a yield of 160 to 180 tonnes/ ha. His cultivation expenditure was Rs.75,000/acre. The farmer gets an income of Rs.2,60,000/ acre/ annum.

Employment Generation: The farmer after gaining confidence, now started producing hybrid papaya seedlings based on orders received from other farmers & fetches additional income.

2. Multicut fodder sorghum Co(FS) 29 – A boon to dairy enterprises during offseason

The youth farmer Mr.K.Kabilan, a diploma graduate of Vellore Dt. Cultivated fodder crop CO(Fs)29 for the first time, after the intervention of KVK during 2013 Kharif season. In the beginning, he was reluctant to use the fodder crop and after adopting the technology, the animal husbandry component was saved even in offseason time. Now he is emerging as one of the fodder seed producer.

Interventions

Process: The youth farmer Mr. Kabilan has visited this Kendra and had discussion with SMS. The special future and benefits of the fodder sorghum Co (Fs) 29 were explained and one exposure visit was made.

Technology: The fodder crop *viz.,* sorghum Co (Fs) 29 is a multicut crop demonstration.

Impact

The tillering capacity is ranged from 10-13 per hill. The obtained yield in his farm was 141.06 ton /ha. The milk yield in the demonstrated farm was 7.78 / day / cow and it was higher than the normal yield of 5.3 lit/cow/day. The yield was increased by 28.19 per cent when compared to other fodder sorghum.

Horizontal Spread: The youth farmer Mr. Kabilan has taken up the seed production. He is planning to sale the seed in the ensuing *kharif* 2014 season..

Economic gains: He harvests 141.06 ton / ha of green fodde. His cultivation expenditure was Rs.32400/ha. The farmer gets an income of Rs.1,41,060/ha/ annum.

Employment Generation: The farmer after gaining confidence now started producing seeds for other farmers & fetches as additional income. The Kendra will support him for seed production and sale of seed through PPPT mode.

3. Green Army – KVK trained rural youths transform custom hiring business in Vellore District

In Vellore District, paddy cultivation is severely affected with the problem of scarcity of labour in peak season, high labour wages, drudgery involved and more time for manual field operations. The proximity of Vellore District to Chennai and Bangalore and the NREGP has lead to dearth of labour for farm unit operations. For mitigating this labour problem and to increase the net income of the farmer, scientists from KVK, Vellore intervened farmers through front line demonstrations and trainings on self propelled paddy transplanters in an area of 100 acres at Arcot and Madhanur blocks during 2010 - 13. Farmers and extension functionaries were also sensitized through trainings and field demonstrations. This has resulted in increase in awareness and usage of mechanical paddy transplanters by Vellore farmers. During these interventions, farmers repeatedly queried the need for custom hiring service for raising tray nurseries and machine planting in paddy fields.

Based on the request of the farmers, one such pioneering effort to increase the rate of paddy mechanization was taken by imparting skill training on floating type paddy transplanter to sixteen unemployed rural youths. For conducting the skill training, the workshops and artisans of Department of Agricultural Engineering were also utilized to impart mechanical skills such as repairing and maintaining the paddy implements to rural youths. In order to encourage the KVK trained rural youths, the Collector of Vellore District recommended the Department of Agricultural Engineering to issue four floating type mechanical transplanter to start custom hiring services to the trained rural youths to offer service to paddy farmers of Vellore District.

KVK trained rural youths were further motivated to offer custom hiring services in 4 blocks viz, Walaja, Madhanur, Arcot and Timiri by repeated group meetings organized by KVK scientists. KVK inaugurated the first custom hiring service of trained youths to ATMA farmer at Durgam village in front of farmers and extension personnel from Department of Agriculture and Department of Agricultural Engineering and named them "Green Army". Green Army activities were also exhibited to farmers and extension functionaries in the KVK stall of Dinamalar Exhibition held at Fort ground in Vellore. In total, this green army headed by Mr. Sreenivasan has covered 480 acres of machine transplanting across Vellore District and earned a gross income of Rs. 14,40,000 during the financial year 2013-14. This custom hiring service on machine planting of paddy seedlings bring cheers to paddy farmers and pave road way for mechanizing paddy cultivation in Vellore District.

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

- Introduced "Taste and See" concept by involving farmers to operate farm Implements during the demonstrations
- Technologies in the form of video clippings disseminated through You Tube
- KVK Technology transfer activities disseminated to the public domain through face book

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

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

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

- Identification of courses for farmers/farm women
- Rural Youth
- Inservice personnel

10.G. Field activities

i. Number of villages adopted : 19
ii. No. of farm families selected : 128
iii. No. of survey/PRA conducted : 5

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : 24.09.2012

Year of establishment :
List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	Distillation unit	1	35000
2	KHAN SHAKER	1	20000
3	Hot air oven	1	17000
4.	Hot plate	1	7650
5	Willley mill	1	31500
6	Water bath rectangular	1	6970
7	Flame photometer	1	4350
8	Conductive meter	1	10890
9	Visible spectrophotometer	1	37600
10	Digital pH meter	1	5740
11	Hand held GPS	1	19965
12	Auto digestive system	1	107900
13	Automatic distillation system	1	175900
14	Portable water and soil analysis kit	1	53685
15	Multi parameter pocket tester	1	11250
16	Laboratory incubator	1	7900
Total		**16**	**553300**

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	20	20	20	1100
Water Samples	10	10	10	500
Plant samples	465	734	42	-
Manure samples	-	-	-	-
Others (specify)	-	-	-	-
Total	495	764	72	1600

Details of samples analyzed during the 2013-14 :

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	20	20	20	1100
Water Samples	10	10	10	500
Plant samples	-	-	-	-
Manure samples	-	-	-	-
Others (specify)	-	-	-	-
Total	30	30	30	1600

10.I. Technology Week celebration during 2013-14 : No

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 Practical's	-	-	-
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)
Skill training on floating type mechanical paddy transplanter to rural youths (Green Army)	16	90 %	-	2,40,000/ unit Total income – Rs. 14,40,000
Cultivation of Fodder sorghum Co (FS) 29	15	93 %	22918	41066
Improved crop production techniques in papaya	19	45%	65,000/ha	1,40,000/ha
Micronutrient application in banana	22	85%	410,000/ha	4,45000/ha

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

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

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

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
IIHR, Bangalore	Diagnostic field visit to Amla farmers field at Kaniyambadi
GOI, DoEE	Impact study on market led extension activities under MRIN.
Nehru Yuva Kendra, Vellore	Conducting training programme
Department of Agricultural Engineering, Vellore	Training cum demonstration
Department of Agriculture, Vellore	Uzlavar Peruvizha and Monthly Zonal Workshop
Dinamalar	Conducting exhibition
Indian Bank Self Help Group Training Institute, Indian Bank, Vellore	Orientation meeting to Rural Development Officers
Department of Horticulture, Vellore	Conducting training programme
Sree Annapoorani Trust, Thandalam	Organizing trainings and demonstrations
ARS, Pudokottai and CRS Veppankulam	Conducting the joint diagnosis in Oilpalm cultvation
Ismaoil College for womens	Conducting the Mushroom cultivation
Indian Bank – Regional Development Officers	Provided the orientation in Agricultural technologies.

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 Externally Funded Projects / schemes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Role of KVK	Date/ Month of initiation	Funding agency	Amount (Rs.)
NADP (RKVY) Scheme on Sustainable Sugarcane Initiatives: Training to beneficiary farmers during 2012-13 Phase II at DoEE with sub centres KVKs (Proceeding No.B1/NADP – SSI / 2012-13 dated 14.03.2013) Scheme Code M 28 BO	Providing training to 460 farmers from Vellore and Thiruvannamalai District	10.02.2013 to 9.01.2014 (Completed)	Government of TamilNadu	3,73,750
NADP (RKVY) Scheme on Sustainable Sugarcane Initiatives: Training to beneficiary farmers during 2013-14 Phase II at DEE, TNAU with sub centres KVKs (Proceeding No.B1/NADP – SSI /Admin sanction /12-14 dated 11.02.2014) Scheme code M28 CC	Providing training to 990 farmers from Vellore and Thiruvannamalai District	04.02.2014 to 3.02.2015 Not yet initiated	Government of TamilNadu	7,50,050
NADP Precision Farming Project : Training to beneficiary farmers of Agriculture Department. (Proceeding No. DEE/NADP-PF/2012-13/Training/Adm.Order/dated 07-05-2013.	Provided training to 280 farmers of Kancheepuram, Thiruvallur and Vellore Districts	01.04.2013 to 31.03.2014	Government of TamilNadu	2,34,500
Tamil Nadu Irrigated Agriculture Modernization and Water Bodies Restoration and Management Project (TN IAMWARM)	Implementing agency	12.07.2011	World Bank	5,21,70,000

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district: Yes

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

The participation of the Kendra for the preparation of SREP and other activities pertaining to ATMA in the district is given below:

1. Participation:

The Programme coordinator of KVK has participated as a council member and provided the technical inputs based on the need of the farming communities and emerging problem in the District.

2. ATMA FFS:

The KVK scientists have participated as a resource person for providing the technological backstops and also participated in the Farmers – Scientist interaction.

3. Commodity group formation:

In an Initiative for Nutritional Security through Intensive Millets Promotion (INSIMP) programme, the initiative was taken for the formation of the commodity group and linkages with Samai growers and self help group (SHGs) for value addition.

4. ATMA seed village concept:

The KVK scientists have participated in the implementation of Seed Village Concept through ATMA programme in Vellore, Kaniyampadi and Nemeli Blocks.

Coordination activities between KVK and ATMA during 2013-14

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**		7	1	
04	**Demonstrations**		4	1	
05	**Extension Programmes**				
	Kisan Mela				
	Technology Week				
	Exposure visit				
	Exhibition		2	2	
	Soil health camps				
	Animal Health Campaigns				
	Others (Pl. specify)				
06	**Publications**				
	Video Films		2	2	
	Books				

	Extension Literature		1	1	
	Pamphlets				
	Others (Pl. specify)				
07	**Other Activities** (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development				

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

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

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

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

12.F.Details of linkage with RKVY

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1.	NADP (RKVY) Scheme on Sustainable Sugarcane Initiatives: Training to beneficiary farmers during 2012-13 Phase II	Organizing training programmes and field visits through Department of Agriculture	3,73,750	3,73,750	Completed
2.	NADP (RKVY) Scheme on Sustainable Sugarcane Initiatives: Training to beneficiary farmers during 2013-14 Phase II	Organizing training programmes and field visits through Department of Agriculture	7,50,050	-	-

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 2013	5	540	-
May	7	540	-
June	5	540	-
July	5	540	-
August	-	-	-
September	-	-	-
October	-	-	-
November	-	-	-
December	-	-	-
January 2014	-	-	-
February	-	-	-
March 2014	-	-	-
Total for the year 2013-14	22	2160	-

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	

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

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

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	

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	

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)
March 2013	477	19	
April 2013	-	-	-
May 2013	-	-	-
June 2013	-	-	-
July 2013	-	-	-
August 2013	40	2	-
September 2013	-	-	-
October2013	-	-	-
November 2013	-	-	-
December 2013	300	12	-
January2014	220	8	-
February' 2014	80	4	-
March' 2014	460	15	-
April' 2014	-	-	-

13.F. Database management

S. No	Database target	Database created
1.	KVK Vellore web site	Created
2.	Entrepreneurship management system	Created
3.	District profile	Created
4.	Farmers database	In progress

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

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstrations	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	-	-	-	-	-	-	-
With KVK	State Bank of India	Poigai, Vellore District	07126	Savings account	11339961458	632002050	SBIN0007126

14.B. Utilization of KVK funds during the year 2013-14 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	7300000	8509442	9277993
2	**Traveling allowances**	150000		149928
3	**Contingencies- 1065000**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	170000		169999
B	POL, repair of vehicles, tractor and equipments	200000		200000
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	80000		79940
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	60000		60000
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	400000		350678
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	80000		58113
G	Training of extension functionaries	15000		15470
H	Maintenance of buildings	12000		12000
I	Extension Activities	13000		13000
J	Farmers 's Field School	30000		29971
K	Establishment of Soil, Plant & Water Testing Laboratory	0		0
L	Library	5000		5000
	TOTAL (A)	**8515000**		**10422092**
B. Non-Recurring Contingencies				
1	**Works**	-	-	-
2	**Equipments including SWTL & Furniture**	-	-	-
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	-	-	-
4	**Library** (Purchase of assets like books & journals)	-	-	-
TOTAL (B)		0	0	0
C. REVOLVING FUND		0	0	0
GRAND TOTAL (A+B+C)		**8515000**	**8509442**	**10422092**

14.C.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 2011 to March 2012	212935.37	138734	24953	326716.37
April 2012 to March 2013	326716.37	147316	21550	452482.37
April 2013 to March 2014	452482.37	140435	36620	556297.37

15. Details of HRD activities attended by KVK staff during 2013-14

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.M.Prasanthrajan	Assistant Professor (ENS)	International conference on "Agriculture and food engineering"	Batam, Indonesia	10.10.2013 to 11.10.2013
Dr.M. Senthilkumar	Assistant Professor (Ag. Extension)	Training on World bank procurement procedures under TN IAMWARM	Anna Institute of Management, Chennai	27.08.2013
Dr.M. Senthilkumar	Assistant Professor (Ag. Extension)	Training on Market led extension	DEE, TNAU, Coimbatore	11.09.2013 to13.09.2013
Dr.M. Senthilkumar	Assistant Professor (Ag. Extension)	Training programme on Participatory rural knowledge management held at NAARM, Hyderabad.	NAARM, Hyderabad,	30.09.2013 to 09.10.2013
Dr.M. Senthilkumar	Assistant Professor (Ag. Extension)	Fertilizer license sensitization Workshop	Directorate of crop management	18.10.2013
Dr.M. Senthilkumar	Assistant Professor (Ag. Extension)	Training programme on Leadership for Innovation in Agriculture.	NIAM, Jaipur	04.11.2013 to 07.11.2013
Dr.M. Senthilkumar	Assistant Professor (Ag. Extension)	National Groundwater conference	WTC, TNAU, Coimbatore	09.12.2013 to 10. 12.2013
Dr. V.Sendhilvel	Assistant Professor (Plant Pathology)	Training programme on Research Methods and Documentations for Extension personnel	MANAGE, Hyedrabad	02.12.2013 to 06.12.2013
Dr.A.Suganthi	Assistant Professor (Agrl.Entomology)	National symposium on "Emerging trends in eco friendly insect pest management"	Dept. of Agrl.Entomology, TNAU, Coimbatore.	22.01.2014 to 24.01.2014
Dr.A.Suganthi	Assistant Professor (Agrl.Entomology)	Sensitization programme on Castor development	TCRS, Yethapur	11.03.2014
Dr.T.Prabhu	Assistant Professor (Horticulture)	Training on "Economics and marketing value added foods"	DEE, TNAU, Coimbatore	13.02.2014 to 19.02.2014
Dr.S.Paul sebastian	Assistant Professor (ENS)	Capacity building programme on " Commodity futures market"	KVK, Virinjipuram	10.01.2013 to 11.01.2013
Dr.S.Paul sebastian	Assistant Professor (ENS)	Training programme on "World bank procurement"	Anna institute of management	27.08.2013
Dr.S.Paul sebastian	Assistant Professor (ENS)	Training on "Applications of remote sensing and GIS in Natural Resource Management	National Bureau of soil survey and land use planning (ICAR), Nagpur	12.11.2013 to 02.12.2013
Dr.S.Paul sebastian	Assistant Professor (ENS)	Training on " Data Analysis using SAS"	TNAU, Coimbatore	09.12.2013 to 14.12.2013
Dr.S.Paul sebastian	Assistant Professor (ENS)	"Study tour and Field visits to Anara Pradesh"	Water and Land management training and Research institute, Walamtari, Hydrabad.	18.02.2014 to 22.02.2014

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

SUMMARY FOR 2013-14

I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management	Groundnut	Assessment of groundnut varieties under rainfed conditions in vellore district	3
Varietal Evaluation			
Integrated Pest Management	Groundnut	Assessment of management techniques for iron chlorosis in Groundnut	5
Integrated Crop Management	Redgram	Assessment of biodrenching against wilt disease in transplanted redgram	5
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Others (Pl. specify)			
Total			**13**

Summary of technologies assessed under livestock

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

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

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	Crop production	Demonstration of upland improved paddy variety Anna 4 and ICM practices	1	15	6	54.58	51.3	6.39	45.17 (No.of productivity tiller / hill)	32.85	31737.93	81875	50137	2.58	31965.60	76910	44944.40	2.41
Millets																		
Maize	Crop improvement	TNAU maize hybrid CO 6 INM practices	1	15	6	5.6	5.4	3.5	510 (No.of grains/cob)	503	35633	66340	30707	1.86	35975	64400	28425	1.8
Sorghum	Crop management	Demonstration of TNAU sorghum hybrid Co5 in Vellore district	1	15	6	Demonstration not conducted												
Oilseeds																		
Pulses																		
Vegetables																		
Brinjal	Crop management	Integrated crop management practices in spiny brinjal VRM 1	1	15	6	396	294.25	19.20	69	41	89700	257401	167701	2.86	74550	147125	72575	1.97
Flowers																		
Ornamental																		
Fruit																		
Fibres like Cotton																		
Spices and condiments																		
Commercial																		
Medicinal and aromatic																		

Fodder	Nutrition management	Demonstration of Fodder Sorghum Co (Fs)29	1	15	6	117.55	91.2	28.19	-	-	32400	117550	85150	3.62	33200	91200	58000	2.74
Plantation																		
Coconut	Drought management	Drougnht management techniques in coconut	1	15	6	Demonstration is in progress at the most drought affected Natrampalli block of Vellore district												
Fibre																		
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

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
Milky mushrrom	Demonstration of Trcholoma giganteum Co(TG)3 mushroom	1	10	10	3.61	2.83	27.56 per cent increase of yield control	Organoleptic Quality test score-3.91	3.21	18944	50550	31606	2.66	18944	42450	23506	2.24
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									
Direct paddy drum seeder	Paddy	Direct paddy drum seeder with weedicide management	-	10	4	0.0625 (1/16)	0.00367 (1/272)	94.11 (Saving in man days in %)	32	-	-	-	4890	-	-	-
Tractor Drawn Zero till Ferti Seed drill	Blackgram	Zero till Ferti Seed drill in blackgram	-	10	4	0.0625 (1/16)	0.0078 (1/128)	87.50 (Saving in man days in %)	14	-	-	-	1974	-	-	-

* 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)			
				Demonstration	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Cereals										
Bajra										
Maize										
Rice										
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										
Others (pl.specify)										
Total										
Fodder crops										
Maize (Fodder)										
Sorghum (Fodder)										
Others (pl.specify)										
Total										

IV. Training Programme

Training for Farmers and Farm Women 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	2	43	5	48	2	-	2	45	5	50
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification	2	43	7	50	-	-	-	43	7	50
Integrated Farming	1	18	2	20	-	-	-	18	2	20
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	2	29	20	49	1	-	1	30	20	50
Soil and Water Conservation	4	83	27	110	28	18	46	111	45	156
Integrated Nutrient Management	1	21	3	24	1	-	1	22	3	25
Production of organic inputs										
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	7	109	53	162	68	50	118	177	103	280
Others (pl.specify) Cultivation of Vegetables	2	49	1	50	2	3	5	51	4	55
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	2	46	-	46	4	-	4	50	-	50
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	1	25	1	26	1	3	4	26	4	30
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	1	23	1	24	1	-	1	24	1	25
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	24	1	25	2	-	2	26	1	27
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										

Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance	3	57	9	66	6	2	8	63	11	74
Installation and maintenance of micro irrigation systems	1	-	11	11	6	5	11	6	16	22
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	3	14	36	50	2	13	15	16	49	65
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										

Bio-fertilizer production										
Vermi-compost production										
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	3	25	48	73	2	5	7	27	53	80
Apiculture										
Others (Production of Spirulina)	1	21	4	25	-	-	-	21	4	25
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems	1	2	23	25	-	-	-	2	23	25
Others (Pl. specify)										
TOTAL	**38**	**632**	**252**	**884**	**126**	**99**	**225**	**758**	**351**	**1109**

Training for Farmers and Farm Women 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										
Cropping Systems										
Crop Diversification										
Integrated Farming	1	11	10	21	1	3	4	12	13	25
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	1	11	10	21	-	4	4	11	14	25
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	1	18	6	24	1	-	1	19	6	25
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	1	33	2	35	3	14	17	36	16	52
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										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										

Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance	1	15	6	21	-	4	4	15	10	25
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	2	16	44	60	6	-	6	22	44	66
Integrated Disease Management										
Bio-control of pests and diseases	1	24	27	51	-	-	-	24	27	51
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										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**8**	**128**	**105**	**233**	**11**	**25**	**36**	**139**	**130**	**269**

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	1	15	8	23	2	1	3	17	9	26
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	1	16	6	22	2	1	3	18	7	25
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**2**	**31**	**14**	**45**	**4**	**2**	**6**	**35**	**16**	**51**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	1	15	-	15	9	1	10	24	1	25
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**1**	**15**	**-**	**15**	**9**	**1**	**10**	**24**	**1**	**25**

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	1	40	10	50	12	4	16	52	14	66
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify) Farm Mechanization in paddy cultivation	1	31	6	37	11	2	13	42	8	50
Application of solar energy in Agriculture	1	26	1	27	6	3	9	32	4	36
Total	**3**	**97**	**17**	**114**	**29**	**9**	**38**	**126**	**26**	**152**

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										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total										

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	25	329	30	359	68	33	101	397	63	460
1.b.	Commercial production of vegetables										
2	**Production and value addition**										
2.a.	Fruit Plants										
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	**Soil health and fertility management**										
4	**Production of Inputs at site**										
5	**Methods of protective cultivation**										
6	**Others (pl.specify)**										
7	**Post harvest technology and value addition**										
7.a.	Processing and value addition										
7.b.	Others (NADP-PF farmers training)	4	134	15	149	39	2	41	173	17	190
	NADP-PF farmers training- Dept. of Agriculture and Horticulture	14	542	28	570	69	21	90	611	49	660
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	**Livestock and fisheries**										
10	**Livestock production and management**										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c	Fisheries Nutrition										
10.d	Fisheries Management										
10.e.	Others (pl.specify)										
11.	**Home Science**										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	**Agricultural Extension**										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl.specify)										
	Total	**43**	**1005**	**73**	**1078**	**176**	**56**	**232**	**1181**	**129**	**1310**

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.f.	Others (pl.specify)										
2	**Post harvest technology and value addition**										
2.a.	Value addition										
2.b.	Others (pl.specify)										
3.	**Livestock and fisheries**										
3.a.	Dairy farming										
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing										
3.d.	Piggery										
3.e.	Poultry farming										
3.f.	Others (pl.specify)										
4.	**Income generation activities**										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery and implements										
4.d.	Rural Crafts										
4.e.	Seed production										
4.f.	Sericulture										
4.g.	Mushroom cultivation										
4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	Others (pl.specify)										
5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	Grand Total										

V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	374	374	0	374
Diagnostic visits	46	275	5	280
Field Day	5	101	13	114
Group discussions	2	40	2	42
Kisan Ghosthi	-	-	-	-
Film Show	12	374	16	390
Self -help groups	-	-	-	-
Kisan Mela	2	1064	18	1082
Exhibition	5	3451	47	3498
Scientists' visit to farmers field		21	21	21
Plant/animal health camps	-	-	-	-
Farm Science Club	-	-	-	-
Ex-trainees Sammelan	-	-	-	-
Farmers' seminar/workshop	-	266	12	278
Method Demonstrations	23	670	37	707
Celebration of important days	-	-	-	-
Special day celebration	-	-		-
Exposure visits	4	75	8	83
Others (pl.specify) Farmers Field School	1	30	8	38
Total	**474**	**6741**	**166**	**6907**

Details of other extension programmes

Particulars	Number
Electronic Media	-
Extension Literature	960
News Letter	-
News paper coverage	26
Technical Articles	-
Technical Bulletins	-
Technical Reports	-
Radio Talks	2
TV Talks	7
Animal health amps (Number of animals treated)	-
Others (pl.specify)	-
Total	**995**

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					
Millets	Ragi	Co14	0.06345	158.625	
	Cumbu	Co9	0.05655	169.65	
	Sorghum	Co30	0.0657	492.75	
	Varagu	Co13	0.725	217.5	
	Thenai	Co7	0.0335	100.5	
Oilseeds					
Pulses	Blackgram	VBN 6	0.064	448	2
	Blackgram	VBN 4	0.08	560	
	Greengram	VRM (Gg 1)	0.161	1127	3
Commercial crops	Brinjal	Spiny brinjal VRM 1	0.089	11570	41
Vegetables	Annual moringa	PKM 1	0.0135	2025	5
Flower crops					
Spices					
Fodder crop seeds					
Fiber crops					
Forest Species					
Others					
Total			**1.3517**	**16869.025**	**51**

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	Annual moringa	PKM 1	15	150	3
Fruits					
Ornamental plants	Indoor plants		97	1410	45
Medicinal and Aromatic					
Plantation	Coconut		86	2580	6
Spices					
Tuber					
Fodder crop saplings	Fodder grass	Co 4	1500/setts	750	15
Forest Species					
Others					
Total			**1698**	**4890**	**69**

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others	Vermicompost	50 kg	300	4
Total			**300**	**4**

Production of livestock and related enterprise materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers	Vanaraja(egg)	225	675	22
Duals (broiler and layer)	Vanaraja	24	5883	20
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total		**249**	**6558**	**42**

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2013-14

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	21	21	19	1100
Water	10	10	10	500
Plant	-	-	-	-
Manure	-	-	-	-
Others (pl.specify)	-	-	-	-
Total	**31**	**31**	**29**	**1600**

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted : 1

IX. NEWSLETTER

Number of issues of newsletter published				
S.No	**Malar**	**Month**	**Ithazh**	**No.of copies**
1	Seithi madal-Malar 13	Jan-March 2013	1	100
2	Seithi madal-Malar 13	April-Sep'2013	2	100

X.RESEARCH PAPER PUBLISHED

Number of research paper published

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

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

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