ANNUAL REPORT 2010-11

(APRIL 2010 to MARCH 2011)

KRISHI VIGYAN KENDRA
DHARMAPURI

Apr 2010 – Mar 2011

1. 20 action Photograph
2. 3 B This should tally with the thrust **areas given in Sl.No.2.7**
3. **3 B2 – landscape**
4. Total of 4.A.1 should tally with 4.B.1, 4.A.2 with 4.B.2, 4.A.3 with 4.B.3. and 4.A.4 with 4.B.4
5. Extension activity under celebrations for each important day, please insert separate rows and give appropriate data separately. Clubbing of data may be avoided.
6. Cover page should be same as given in the first page of the format.

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 Papparapatty 636 809 Dharmapuri District Tamil Nadu	04342-245860	04342-245860	kvkdpri@tnau.ac.in	www.tnau.ac.in

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		0422-6611521	dee@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	-	09442151096	pckvkpapa@rediffmail.com

1.4. Year of sanction: December 2006

1.5. Staff Position (as 31st March 2011)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. P. Sridhar	Assoc. Prof and Head	M	Agronomy	Ph.D.	37400 – 67000+ 9000 GP	47800	27.12.06	Permanent	OBC
2	SMS (Plant protection)	Dr.R.Jansirani	Assoc. Prof.	F	Agrl. Extension	Ph.D.	37400 – 67000+ 9000 GP	46400	10.08.09	Permanent	SC
3	SMS (Agril. Extension)	Tmt.P. Sudhamathi	Asst. Prof.	F	PB & G	M.Sc (Agri)	15600 – 39100 +7000 GP	31100	16.04.10	Permanent	OBC
4	SMS (Agril. Engineering)	Dr.N.A.Saravanan	Asst. Prof.	M	PB & G	Ph.D.	15600 – 39100 +6000 GP	25600	30.12.09	Permanent	OBC
5	SMS (Home Science)	Dr.K.Indhumathi	Asst. Prof.	F	Horticulture	Ph.D.	15600 – 39100 +6000 GP	25600	30.12.09	Permanent	OBC
6	SMS (Agro forestry)	Dr. P.S.Shanmugam	Asst. Prof.	M	Entomology	Ph.D.	15600 – 39100 +6000 GP	25600	15.02.10	Permanent	OBC
7	SMS (Horticulture)	Dr. M. Sangeetha	Asst. Prof.	F	Soil Science	Ph.D	15600 – 39100 +6000 GP	25600	09.07.10	Permanent	OBC
8	Programme Assistant	Ms. M. Swapna	Prog. Asst(T)	F	Agriculture	B.Sc., (Agri)	9300 – 34800 +4400 GP	16000	04.06.07	Permanent	OBC
9	Computer Programmer	Tmt.A.Pabitha	Prog. Asst (C)	F	Computer	M.Sc. (Horti), PGDCA	9300 – 34800 +4400 GP	15530	10.12.08	Permanent	OBC

10	Farm Manager	Th.R.Panneerselvam	Farm Manager	M	PB & G	M.Sc., (Agri)	9300 – 34800 +4400 GP	16000	04.06.07	Permanent	OBC
11	Accountant/Superintendent	Th. K.Udhaiyhanan	Asst Accounts Officer	M			9300 – 34800 +4900 GP	20060	01.09.09	Permanent	OBC
12	Stenographer	Th.R.Srinivasan	Typist	M			5200 – 20200 + 2400 GP	8870	31.12.08	Permanent	SC
13	Driver 1	Th.P. Loganayagam	Agricultural Foreman	M			9300 – 34800 +4200 GP	16600	01.06.10	Permanent	OBC
14	Driver 2	Th.P. Thirumoorthy	Jr. tractor Driver	M			5200 – 20200 + 2000 GP	10470	18.01.07	Permanent	OBC
15	Supporting staff 1	Th.K.V. Vediappan	PUSM	M			4800 – 10000 +1300 GP	8410	14.09.10	Permanent	OBC
16	Supporting staff 2	Th. C. Murugan	PUSM	M			4800 – 10000 +1300 GP	8410	28.01.11	Permanent	OBC

1.6. Total land with KVK (in ha) : 16.16 ha

S. No.	Item	Area (ha)
1	Under Buildings	0.15
2.	Under Demonstration Units	
	Mango Model Nursery	2 ha
	Others	0.5 ha
3.	Under Crops	
	Paddy	1 ha
	Horsegram	0.4ha
	Fodder cowpea	0.4ha
	Turmeric	1ha
	Brinjal	0.2ha
	Cafeteria of new varieties	0.1ha
	Fodder crop –	0.1 ha
4.	Orchard/Agro-forestry	
	Tamarind –	2 ha
5.	Others	
	Fallow	8.31ha

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	31.03.2009	548.24	54, 26, 000	19.05.08	-	Completed
2.	Farmers Hostel	ICAR	31.03.2009	300	32, 06,000	19.05.08	-	Completed
3.	Staff Quarters	ICAR	31.03.2009	400.00	39, 57, 000	19.05.08	-	Completed
4.	Demonstration Units						-	
	Slatted Floor Goat Rearing Unit	ICAR	15.03.2009	57.8 Sq.m	3, 10, 000	19.05.08	-	Goats have been purchased & reared
	Polyhouse (2 units)	NHM	-	1000 Sq.m	4,00,000	-	-	Rootstocks are being maintained
	Shadenet house (4 units)	NHM	-	2000 Sq.m	2,00,000	-	-	Rootstocks are being maintained
	4	-	-	-	-	-	-	-
5	Fencing	ICAR	20.03.2009	-	10, 00, 000	19.05.08	-	-
6	Rain Water harvesting system	ICAR			10, 00, 000			
7	Land leveling	ICAR	-	-	2,00,000	-	-	-
8	Borewell	ICAR	-	-	3,00,000	-	-	-
9	Threshing floor	-	-	-	-	-	-	-
10	Farm godown	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep (TN 29 AB 4127)	2007	4,82,329	107,279	Good condition
Two wheeler (TN 29 AB 3695)	2007	42804	39,278	Good condition
Two wheeler (TN 29 AB 3696)	2007	42804	40,893	Good condition
Tractor with trailer (TN 29 AB 5582)	2007	5,00,347	924	Good condition
Power tiller	2009	1,50,000	170	Good condition

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Computer accessories including LCD	2007	1,42,224	Good condition
OHP	2007	11,050	Good condition
Camera	2007	20,213	Good condition
Photocopier	2007	68,340	Good condition
Slide projector	2007	24,938	Good condition
Fax machine	2008	14,000	Good condition
Computer with accessories	2009	75,000	Good condition
Laser guided land leveler	2011	3,40,000	Good condition
Generator	2011	98,950	Good condition
PA system	2011	45,000	Good condition
EPABX System	2011	62,500	Good condition

1.8. Details SAC meeting conducted in 2010-11

Salient recommendations

Sl.No.	Date	No. of Participants	No. of absentees	Salient Recommendations	Action taken
1.	**05.01.2011**	28	25	Turmeric harvester may be demonstrated at larger scale	Included in the FLD
				Creating awareness among the Dharmapuri farmers on farm implements viz., Coconut & Palmyrah climber , Rotoary weeder and harvesting machineries	Work is in progess
				The purchase of laser guided land leveler should be sped up and demonstration has to be done on larger scale	Purchase of laser guided land leveler is in progress
				The KVK has to be involved in the formation of commodity based farmers group	Steps have been taken in organizing the farmers
				Awareness should be created to farmers on drip maintenance and importance of fertigation to preventing clogging of drip laterals	Training has been proposed in the Action plan 2011 - 12
				Awareness on using liquid biofertiliser and bio fungicide should be created among the farmers	Training has been proposed in the Action plan 2011 - 12
				Trainings may be conducted for introducing paddy transplanter to	Proposal for purchase of Paddy

				overcome the labour problems for paddy transplanting under Rajarajan 1000	transplanter has been sent to ZPD.
				Create awareness on green fodder/ proper cattle shed, maintenance many be given to the farmers.	Training has been proposed in the Action plan 2011 - 12
				Training may be given to the SHG's on preparation of value added products of banana like banana chips, banana powder	Training has been proposed in the Action plan 2011 - 12
				An OFT on management of white grub in sugarcane may be proposed	OFT has been proposed in the Action plan 2011 - 12

PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
A.	**Wetland**
1.	Paddy-Sugarcane
2.	Paddy-Banana
B.	**Garden land**
1.	Paddy- Pulses - Vegetables
2.	Paddy – Millets - Pulses
3.	Paddy - Turmeric
4.	Paddy - Cotton
5.	Vegetables
6.	Flowers
C.	**Dry land**
1.	Tapioca - Pulses
2.	Groundnut - Pulses (Horse gram)
3.	Ragi - Pulses (Greengram / Blackgram)
4.	Cotton - Gingelly
5.	Cholam / Cumbu - Pulses
6.	Fruit crops esp. Mango
7.	Dairy farming, Goat rearing & Agro forestry

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

S. No	Agro-climatic Zone	Characteristics
1.	North Western zone	This zone comprises of Dharmapuri, Krishnagiri, Namakkal and Salem districts. This zone is having the altitude of 200-600 meter MSL with the annual rainfall of 875 mm and annual PET of 1727 mm

S. No	Agro ecological situation	Characteristics
1.	More than 80 % of the area is under dry land agriculture	Crops were raised during the South West Monsoon and North East Monsoon periods in dry land areas

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Red loamy soil	The red or brown colour of the soil is attributed to the diffusion of iron content	3, 62,069
2.	Black loamy soil	The black clayey alluvium rich soil , known as black soil	19,983

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	17475	423.94	2426
2.	Sorghum	9606	62.34	649
3.	Pearl millet	867	10.02	1156
4.	Finger millet	22473	302.49	1346
5.	Maize	3046	-	-
6.	Samai	13012	73.91	568
7.	Redgram	5605	20.68	369
8.	Green gram	1462	6.20	424
9.	Black gram	7937	32.46	409
10.	Horse gram	18005	46.99	261
11.	Bengal gram	2251	3.11	138

12.	Cowpea	11672	24.39	209
13.	Groundnut	9479	127.59	1346
14.	Coconut (nut)	9685	46778113	5123
15.	Sunflower	1125	7.52	668
16.	Castor	955	3.27	342
17.	Sugarcane	22549	1247.19	5531
18.	Cotton	9130	18.35	201
19.	Tomato	4410	582.03	13198
20.	Chillies	611	6.18	1012
21.	Tapioca	23669	4813.33	20336
22.	Turmeric	5159	127.94	2480
23.	Coriander	239	0.69	290
24.	Mango	13200	962.28	7290
25.	Banana	1143	404.34	35375
26.	Tamarind	1362	46.98	3449

Source: Annual Report, 2009-10 of Statistical Department, Dharmapuri

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April 2010	38.9	34.5	24.0	-
May	146.2	36.8	25.8	-
June	82.4	35.4	26.0	-
July	124.6	35.7	25.4	-
August	180.0	30.0	24.4	70
September	31.3	31.0	22.5	71
October	192.2	31.1	22.1	75
November	273.0	28.2	21.1	86
December	18.6	27.3	19.0	
January 2011	-	29.6	16.6	
February	-	31.1	15.1	62
March	-	34.4	19.5	

Source: www.tawn.tnau.ac.in & www.imd.gov.in

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

Category	Population	Production	Productivity
Cattle			
Crossbred	**302798**	541200	
Indigenous			
Buffalo	**78758**	86185	
Sheep			
Crossbred	**201174**	5520	
Indigenous			
Goats	**184477**		
Pigs	**48756**	200	
Crossbred			
Indigenous			
Rabbits			
Poultry			
Hens	**2073892**	579500	
Desi			
Improved			
Ducks			
Turkey and others			

Category	Area	Production (t)	Productivity

Fish		-	-
Marine		-	-
Inland		1738.53	-
Prawn		-	-
Scampi		-	-
Shrimp		-	-

Source: Annual Report 2008-09 of Joint Director of Animal Husbandry and Assistant Director of Fisheries, Dharmapuri

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

2.8 Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Dharmapuri Pennagaram	Dharmapuri Pennagaram	Nallampalli, Jarugu, Balajangamana Halli, Esalpatti, Eriyur, Nagamarai	3	Black gram	1.Use of conventional varieties 2.Low yield due to flower drop	Introduction of new high yielding varieties with ICM practices
2.	Harur and Pennagaram	Harur and Pennagaram	Morappur, Mudugampatti, Thenkaraikottai Gopalapuram	2	Ragi	1.Use of local varieties 2. Inadequate Nutrient Management	Replacement of old with high yielding varieties like CO (Ra) 14 with INM
3.	Palacode	Palacode	Palacode, Pulikarai, Kammalapatti	3	Paddy	Low yield due to conventional method of transplanting without INM .	Introduction of SRI method of cultivation with CO (R)H 3
4.	Palacode	Palacode	Pulikarai Ernalli Thirumalvadi	4	Samai Ragi	Use of local varieties	Introduction of CO (Samai)4 and Ragi CO(Ra)14

5.	Palacode Pappireddipatty	Karimangalam Palacode Pappireddipatty	Adilam, Kiriyana Halli, Poolapatti Maranda Halli Moolyanoor	2	Tomato and gourds	Indiscriminate Use of pesticides	IPM module for control of leaf minor in gourds and leaf curl virus in tomato
6.	Pennagaram Harur	Pennagaram Harur	Morappur, Odasalpatti Gunsettipatti Athanur, Rangapuram	3	Sesame	1.Use of conventional varieties 2.Growing under rainfed condition without Micro nutrient application.	Introduction of new high yielding variety TMV(Sv)-7 with INM
7.	Pappireddipatty Harur	Pappireddipatty Harur	Thenkanikottai, kadathur, Bommidi Menaci Gopinathampatti	2	Tapioca	Low yield. With poor nutrient Management	Sett treatment to increase the tuber yield
8.	Dharmapuri	Dharmapuri	Dharmapuri, Velloli, Annasagaram, Venkatapuram	3	Turmeric	High incidence of Rhizome rot and heavy loss in PHT	Rhizome treatment for rhizome rot managemen t and use of improved TNAU turmeric boiler
9.	Palacode	Palacode	Karimangalam, Periyampatti, Matlampatti, Begara Halli	4	Tube Rose	1. low yielding variety 2. High incidence of Mealy bug	Introduction of variety Prajwal & IPM in Tube Rose
10.	Dharmapuri	Dharmapuri	Nallamballi, Thoppur Vellakkal Jarugu	4	Banana	Low quality for marketing	Use of banana bunch cover
11.	Pennagaram	Pennagaram	Eariyur, Neruppur, Sellamudi	4	Wheat	Introduction of new crop	Introduction of Wheat variety COW (W) 1
12.	Dharmapuri	Dharmapuri	Chinnapudur, Nallampatti Gundalpatti Laligam	2	Sunflower	1.Use of local varieties 2. Improper nutrient management	Identification of high yielding hybrid KBSH -44 Sunflower with INM
13.	Palacode	Palacode	Palacode Kattampatti Guddampatti Gollapatti	3	Groundnut	1.Low yielding variety 2.Inadequate Nutrient and indiscriminate use of pesticide	Introduction of high yielding variety VRI (Gn) 6 with INM and IPM

14.	Pennagaram	Pennagaram	Nagadasampatti B. Agraharam Papparapatti	3	Cumbu Napier Grass Guinea grass	Use of more concentrate and insufficient fodder supply	Introduction of High yielding CN hybrid CO (CN) 4 and shade tolerant guinea grass CO 3
15.	Pennagaram	Pennagaram	Gettur Balingira Halli Marukkarampatti	2	Brinjal	Low yielding variety Inadequate Nutrient and indiscriminate use of pesticide	Popularization of brinjal hybrid CO(BH) 2 and introduction of vegetable preservator
16.	Pappireddipatty Harur	Pappireddipatty Harur	Thenkanikottai, kadathur, Bommidi Menaci	2	Water management	Low yield. due to water scarcity	Use of digested coir pith for water conservation in PF
17.	Palacode	Palacode	Karimangalam Vellisandhai Dhabai	2	Horse gram Red gram	Low yielding variety	Introduction of high yielding horse gram variety Paiyur (Hg)2 and red gram CO (Rg) -7

2.9 Priority thrust areas

S. No	Thrust area
1.	SRI in paddy
2.	Assess the suitability of new varieties in Samai, Tube rose and Snakegourd
3.	Popularization of high yielding variety in Paddy, Wheat, Ragi, Red gram, Black gram, Groundnut, Sunflower, Sesame, Brinjal , Bhendi and forage crops
4.	INM in pulses, oilseeds and turmeric
5.	IPM in tube rose for mealybug management, leaf miner in gourds, Leaf curl virus in tomato
6.	Popularization of INM in banana
7.	Farm mechanization – Coir pith applicator
8.	Post harvest Technology – CRIDA vegetable preservator and TNAU improved Turmeric boiler
9.	Popularisation of *Casuarina junghuniana*
10.	Popularisation of mineral mixture for breeder cows and oral pellet vaccine for desi chicks

PART III - TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
10	8	60	50	17	16	156	146

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
125	114	5000	4259	30	27	300	258

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
40	35	30000	28355

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

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.	SRI in paddy & Popularization of high yielding variety in Paddy	Paddy	Low yield due to conventional method of transplanting without INM		Popularization of Paddy variety CO(R) H – 3 with SRI	5	5	1	Skill demonstration & Field day	0.3				32
2.	Assess the suitability of new varieties in Tube rose	Tuberose	Low yield due to local varieties Incidence of mealy bug is very high		Popularization of ICM in Tuberose	2	1	1	Skill demonstration & Field day	2 (Bulbs)				
3.	Assess the suitability of new varieties in Snakegourd	Snakegourd	Assessment of new varieties in Snakegourd		To assess the performance of Snakegourd variety PLR(Sg) 2 in Dharmapuri district	2	2	-	Seminar & Training	4.5 kg				

4.	Popularization of high yielding variety in Wheat	Wheat	Introduction of varieties suitable for plain		Introduction of new Wheat variety COW (W) 1	2	2	1	Skill demonstration & Field day	1.2				
5.	Popularization of high yielding variety in Ragi	Ragi	Use of conventional varieties		Popularization of Ragi variety CO(Ra) 14 under rainfed condition	2	1	-	Training	0.30				
6.	Popularization of high yielding variety in Red gram	Redgram	Use of conventional varieties		Popularization of Redgram CO (Rg) 7	1	1	-	Training	0.20				
7.	Popularization of high yielding variety in Sesame	Sesame	Use of conventional varieties		Popularization of HYV and ICM practices in Sesame var .TMV (Sv)7	2	1	1	Training	0.20				35
8.	Popularization of high yielding variety in Brinjal	Brinjal	Low productivity		Popularization of Brinjal hybrid– CO(B)H-2	2	2	1	Seminar & Training	500gms				
9.	Popularization of high yielding variety in forage crops	Cumbu Napier hybrid	Lack of awareness on high yielding grasses		Popularization of Cumbu Napier Hybrid Grass CO (CN) 4	1	1	1			28355nos			

10.	INM in pulses	Blackgram	Flower drop and low yield	To assess the management of flower drop by using TNAU pulse wonder in Black gram		1	1	1	Skill demonstration & Field day					
11.	INM in oilseeds	Groundnut	Improper nutrient management	To assess the management of flower drop by using TNAU groundnut rich		1	1	1	Skill demonstration & Field day					
12.	INM in turmeric	Turmeric	Improper nutrient management		ICM in Turmeric	2	1	1	Skill demonstration & Field day					90
13.	IPM for leaf miner in gourds	Bitter gourd Ribbed gourd Snakegourd	Low yield due to high incidence of leaf miner in the early stages	Leaf miner management in Gourds		1	1	-	Skill demonstration & Field day					
14.	IPM for leaf curl virus in tomato	Tomato	Low yield due to high incidence of leaf curl virus		Management of Tomato Leaf Curl Virus following Integrated Pest Management Modules	1	1	-	Skill demonstration & Field day					10 kg
15.	INM in banana	Banana	Improper nutrient management		ICM in Banana	2	2	1	Skill demonstration & Field day					

16.	Farm mechanization – Coir pith applicator		Irrigation water management		Popularization of use of digested coir pith for water conservation in Precision farming vegetables	2	2	1	Skill demonstration & Field day					
17.	Post harvest Technology –CRIDA vegetable preservator	Vegetables	Improper post harvest handling		Introducing vegetable preservator (CRIDA model)	2	2	1	Skill demonstration					
18.	Post harvest Technology – Turmeric boiler	Turmeric	Improper post harvest handling			2	2	1	Seminar, Skill demonstration & Field day					
19.	Popularisation of *Casuarina junghuniana*	*Casuarina junghuniana*	Agro forestry component		Popularisation of *Casuarina junghuniana*	1	1	1	Seminar		6000 nos of clones			
20.	Popularisation of mineral mixture for breeder cows	Breeder cows	Mineral deficiency in breeder cows leads to infertility		Supplementation of mineral mixture in repeat breeder cows	2	2	1	Training					
21.	Popularisation of oral pellet vaccine for chicks	Chicks	Prevalence of Raniket diseases	Oral pellet vaccine for control of raniket disease in desi birds		2	2	1	Training					

22.	Management of Pseudostem weevil in Banana	Banana	Yield loss due to severe infestation	Management of Pseudostem weevil in Banana		2	2	1	Skill demonstration					20

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.	Assessment of suitable samai variety for Dharmapuri district	TNAU	Samai	5			
2.	To assess the management of flower drop by using TNAU pulse wonder in Black gram	TNAU	Blackgram	5		3	
3.	Assessment of Suitable foliar spray in Groundnut	TNAU	Groundnut	5		3	
4.	To assess the performance of Snakegourd variety PLR(Sg) 2 in Dharmapuri district	TNAU	Snakegourd	10		4	
5.	Assessment of transplanting in red gram	TNAU	Redgram	5			
6.	Assessment the performance of Horse gram variety CRIDA 18 in Dharmapuri District	CRIDA	Horsegram	5		2	
7.	Assessment Oral pellet vaccine for control of raniket disease in desi birds	TANUVAS	Desi chickens	15		5	
8.	Supplementation of mineral mixture in repeat breeder cows	TANUVAS	Cows	10		5	
9.	Assessment of seed production techniques in CO(R)H 3 paddy	TNAU	Paddy	5			
10.	Management of Pseudo stem weevil of banana	TNAU/ NRCB	Banana	10		5	
11.	Popularization of Paddy Hybrid CO (R) H 3 under SRI	TNAU	Paddy		10	11	
12.	Introduction of new wheat variety COW (W) 1	TNAU	Wheat		10	5	
13.	Popularization of Finger milllet variety Co (Ra) 14 under rainfed condition	TNAU	Ragi		5	3	
14.	Popularization of Redgram CO (Rg) 7	TNAU	Redgram		5	2	
15.	Popularization of HYV and ICM practices in Sesame var TMV (Sv)7	TNAU	Sesame		10	4	
16.	Popularization of Sunflower Hybrid KBSH 44 with INM	UAS	Sunflower		10		
17.	Popularization of Brinjal hybrid CO(B)H-2	TNAU	Brinjal		15	5	
18.	Popularization of ICM in rainfed Tapioca	TNAU	Tapioca		10		
19.	Popularization of ICM in Banana	TNAU/ NRCB	Banana		10	5	
20.	Popularization of ICM in Turmeric	TNAU	Turmeric		10	4	
21.	Popularization of ICM in Tuberose	TNAU	Tuberose		8		

22.	Popularization of use of digested coir pith for water conservation in Precision farming vegetables	TNAU	Vegetables		20	5	
23.	Introducing vegetable preservator (CRIDA model)	CRIDA	Vegetables		5	5	
24.	Management of Tomato Leaf Curl Virus following Integrated Pest Management Modules	TNAU	Tomato		10	2	
25.	Leaf miner management in Gourds	TNAU	Gourds		10	2	
26.	Popularization of *Casuarina junghuhniana*	TNAU	*Casuarina junghuhniana*		3	3	
				80	**151**	**17**	

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**
77	9	1	2	119	18	13	6	196	27	14	8				

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

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

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

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

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management	1					**1**
Disease of Management		1				**1**
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL	**1**	**1**				**2**

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

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

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management	Black gram	To assess the management of flower drop by using TNAU pulse wonder in Black gram	10	10	4
	Groundnut	Assessment of Suitable foliar spray in Groundnut	10	10	4
Varietal evaluation	Samai	Assessment of suitable samai variety for Dharmapuri district	5	5	5
	Horsegram	Assessment the performance of Horse gram variety CRIDA 18 in Dharmapuri District	5	5	2
	Snakegourd	To assess the performance of Snakegourd variety PLR(Sg) 2 in Dharmapuri district	10	10	1.4
Integrated Pest Management	Banana	Management of Pseudo stem weevil of banana	10	10	2.5
Integrated Crop Management	Paddy	Assessment of seed production techniques in CO(R)H 3 paddy	4	4	2
	Redgram	Assessment of transplanting in red gram	5	5	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					
Mushroom cultivation					
Total	**8**		**59**	**59**	**25.90**

4.B.2. Technologies Refined under various Crops - NIL

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management					
Varietal Evaluation					
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total					

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

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management	Breeder cows	Supplementation of mineral mixture in repeat breeder cows	10	10
Disease management	Desi chicken	Assessment Oral pellet vaccine for control of raniket disease in desi birds	15	15
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

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

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

4.C1. Results of Technologies Assessed

Results of On Farm Trial

OFT 1 - Assessment of suitable samai variety for Dharmapuri district

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
Samai	Irrigated	Use of local varieties results in lower yield	**Assessment of suitable samai variety for Dharmapuri district**	5	Performance of Co(Samai) 4	Yield/ha	8.7 q/ha	Co(Samai)4 performed better than the local variety	This variety will serve as a alternative to the local variety	-	-

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)	Local	6.72	Q/ha	1800	1.31
Technology option 2 Paiyur 2	TNAU	8.2	Q/ha	2100	1.67
Technology option 3 Co(Samai)4	TNAU	8.7	Q/ha	2300	1.84

OFT 2 - Assess the performance of Horse gram variety CRIDA 18 in Dharmapuri District

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
Horsegram	Rainfed	Low yielding varieties	Assessment the performance of Horse gram variety CRIDA 18 in Dharmapuri District	5	Horse gram variety CRIDA 18	Yield/ha	8.6q/ha	Horsegram Variety CRIDA 18 performs well in Dharmapuri district	Demonstration is required for large scale adoption	-	-

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) Local	-	6.2	Q/ha	1500	1.29
Technology option 2 Paiyur 2	TNAU	6.8	Q/ha	2400	1.68
Technology option 3 CRIDA 18R	CRIDA	8.02	Q/ha	2600	1.76

OFT 3 - To assess the performance of Snakegourd variety PLR(Sg) 2 in Dharmapuri district

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
Snake gourd	Irrigated	Low yielding varieties	To assess the performance of Snakegourd variety PLR(Sg) 2 in Dharmapuri district	10	Performance of CO 2 & PLR 2	No. of fruits per plant Fruit weight Fruit length Yield	Fruit no. per plant – 20 no. Fruit weight – 450 g Fruit length – 25 – 30cm Yield – 282 q/ha	PLR 2 performed better that CO2 PLR 2 gave 9.1 % higher yield than CO 2 Fruit quality is good (fibre content is low)	PLR 2 is suitable for Dharmapuri district Market is good due to short size fruits	-	

Contd..

Technology Assessed	Source of Technology	Production (q/ha)	Please give the unit (q/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	-	-	-	-
Technology option 2 – CO 2	TNAU	250	250	145000	4.83
Technology option 3 – PLR 2	TNAU	282	282	167400	5.58

OFT 4 - Assessment of seed production techniques in CO(R)H 3 paddy

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
Supply orders have been placed for the R, A and B lines. The assessment will be done in the ensuing year without any financial commitment to the ICAR											

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)					
Technology option 2					
Technology option 3					

OFT 5 - Assessment of transplanting in red gram

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
Due to very high labour intensive and high cost (Polythene bags) involved farmers were not ready to take even as OFT Hence in the ensuing Kharif 2011 season the above OFT will be taken at KVK Dharmapuri farm to assess the extent labour requirement and BC ratio											

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)					
Technology option 2					
Technology option 3					

OFT 6 - To assess the management of flower drop by using TNAU pulse wonder in Black gram

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
Blackgram	Rainfed	Flower drop	To assess the management of flower drop by using TNAU pulse wonder in Black gram	5	Foliar spray of **TNAU Pulse Wonder** – 2.5 Kg / acre at peak flowering stage	Yield per ha No. of pods per plant Average pod length	Yield per ha – 8.25 q No. of pods per plant - 38 Average pod length – 5.8 cm	Flower drop reduced by pulse wonder spray	Pulse wonder spray results in good flower retention Due to showers flower drop was more which was managed by pulse wonder spray	-	-

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) - Foliar spray of 2% DAP at 50% flowering	-	6.78	q/ha	17230	2.6
Technology option 2 - Foliar spray of 2% DAP + 40 ppm NAA at 50% flowering	TNAU	7.40	q/ha	18900	2.7
Technology option 3 - Foliar spray of TNAU Pulse Wonder – 2.5 Kg / acre at peak flowering stage	TNAU	8.25	q/ha	21875	3.1

OFT 7 - Assessment of Suitable foliar spray in Groundnut

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
Ground nut	Irrigated	Low yield due to poor nutrient management	Assessment of Suitable foliar spray in Groundnut	5	Combined Nutrient Spray (DAP + $NH_4(SO_4)_2$ + Borax + Planofix) Foliar spray of TNAU Groundnut Rich at peak flowering stage	Yield / ha (Pod weight) No. of pods / plant	Yield / ha (Pod weight) – 1480 kg No. of pods / plant – 22	Comparative yield increase is observed due to TNAU groundnut rich spray	Spraying of groundnut rich is easy compared to DAP spray and also increase the pod set	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 – No spray (Farmer's practice)	-	9.0	q/ha	12300	2.6
Technology option 2 - Combined Nutrient Spray (DAP + $NH_4(SO_4)_2$ + Borax + Planofix)	TNAU	10.2	q/ha	14440	2.8
Technology option 3 - Foliar spray of **TNAU Groundnut Rich** at peak flowering stage	TNAU	10.8	q/ha	15760	2.9

OFT 8 - Management of Pseudo stem weevil of banana

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
Banana	Irrigated	Yield loss due to severe infestation of pseudostem weevil	Management of Pseudo stem weevil of banana	5	Application of *Beauveria bassiana* 25 gm in the pseudostem of the banana and placing in the ground soil.	% reduction of infestation	66.6 %	Pseudo stem trap with *Beauveria bassiana* reduces the incidence on par with the other treatments	The pseudo stem trap is highly useful to manage the weevil incidence This technique will helpful to produce residue free banana	-	-

Contd..

Technology Assessed	Source of Technology	Production (q/ha)	Please give the unit (q/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) Spraying of Monocrotophos @ 3ml/lit.		320	(q/ha)	246000	5.7
TO 2 Injection of Monocrotophos 36 WSC @ 4 ml (54 ml of Monocrotophos 36 WSC with 350 ml of water) at two heights *viz*., 45 and 150 cm in the pseudostem at monthly interval from 5^{th} to 8^{th} month	TNAU	390	(q/ha)	332000	6.7
TO 3 Injecting Azadirachtin 10000 ppm (1:4 ratio) @ 2ml/plant at heights viz., 45 cm & 150 cm in the pseudostem at monthly interval from 5^{th} to 8^{th} month	TNAU	360	(q/ha)	306000	6.6
TO 4 Application of *Beauveria bassiana* 25 gm in the pseudostem of the banana and placing in the ground soil.	NRCB	390	(q/ha)	338000	7.5

OFT 9 - Assessment of Oral pellet vaccine for control of raniket disease in desi birds

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
Desi chicks	-	Loss due to improper disease management	Assessment ofOral pellet vaccine for control of raniket disease in desi birds	10	Performance of oral pellet vaccine for control of raniket disease in desi birds	The trial is in progress					

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Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) No vaccination Or Vaccination at 8th to 10th week with RDVK vaccine at Veterinary Dispensaries		The first dose of oral pellet vaccine was given to the desi birds. The serum samples will be collected and sent to KVK, Namakkal after 8 weeks.			
Technology option 2 1.RDVF vaccine – Eye drops -7th and 14th day 2.RDVK -Subcutaneous 8th and 16th week	TANUVAS				
Technology option 3 1.Oral Pellet Ranikhet Vaccine on the 7th to 14 th day 2.RDVK–subcutaneous 8th & 16th week	TANUVAS				

OFT 10 - Supplementation of mineral mixture in repeat breeder cows

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
Livestock	-	Irregular mineral nutrition	Supplementation of mineral mixture in repeat breeder cows	10	Supplementation of mineral mixture	Milk yield Onset of first oestrum after calving No. of insemination needed for conception Incidence of metabolic diseases	Milk yield – 12.1 l/day Onset of first oestrum after calving – 75 days No. of insemination needed for conception - 2 Incidence of metabolic diseases - reduced	Supplementation of location specific mineral mixture recorded higher milk yield and reduced incidence of metabolic diseases	Location specific mineral mixture has considerable effect on milk yield & incidence	-	-

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. / day	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) - No / Irregular Mineral supplementation	-	11.0	Litres /day	198.00	1.88
Technology option 2 - Mineral mixture 30-50g/day continuously for one year from the first day after calving	TANUVAS	11.5	Litres /day	207.90	1.97
Technology option 3 - Area specific mineral mixture 30 to 50 g/day continuously for one year from the first day after calving	TANUVAS	12.1	Litres /day	217.80	2.07

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

OFT 1 - Assessment of suitable samai variety for Dharmapuri district

1. Title of Technology Assessed : **Assessment of suitable samai variety for Dharmapuri district**
2. Problem Definition : Use of local varieties results in lower yield
3. Details of technologies selected for assessment : Co(Samai) 4
4. Source of technology : TNAU
5. Production system and thematic area : Irrigated
6. Performance of the Technology with performance indicators : Yield/ha

Technology options	Yield/ha (Q)
Farmers practice	6.72
Paiyur 2	8.2
Co(Samai)4	8.7

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : Co(Samai)4 variety will serve as a alternative to the local variety
8. Final recommendation for micro level situation : Co(Samai)4 performs better than the local varieties. Hence this can be used as alternative the low yielding traditional varieties.
9. Constraints identified and feedback for research : -
10. Process of farmers participation and their reaction : Farmers are ready to accept new high yielding varieties

OFT 2 - Assessment the performance of Horse gram variety CRIDA 18 in Dharmapuri District

1. Title of Technology Assessed : Assessment the performance of Horse gram variety CRIDA 18 in Dharmapuri District
2. Problem Definition : Low yielding varieties
3. Details of technologies selected for assessment : CRIDA 18R
4. Source of technology : CRIDA
5. Production system and thematic area : Rainfed
6. Performance of the Technology with performance indicators :

Technology options	Yield/ha (Q)	No of pods
Farmers practice	6.2	37
Paiyur 2	6.8	45
CRIDA 18R	8.02	52

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : CRIDA 18R is found suitable for rainfed conditions
8. Final recommendation for micro level situation : Both CRIDA 18R and Paiyur 2 can be recommended for cultivation
9. Constraints identified and feedback for research : -
10. Process of farmers participation and their reaction : Farmers require more demonstration for large scale adoption. Seed availability is the major concern in case of new varieties

OFT 3 - To assess the performance of Snakegourd variety PLR(Sg) 2 in Dharmapuri district

1. Title of Technology Assessed : To assess the performance of Snakegourd variety PLR(Sg) 2 in Dharmapuri district
2. Problem Definition : Low yielding varieties
3. Details of technologies selected for assessment :
   a) CO 2
   b) PLR 2
4. Source of technology : TNAU
5. Production system and thematic area : Irrigated ICM
6. Performance of the Technology with performance indicators :

Technology options	No. of fruits per plant	Yield (q /ha)
CO 2	17	250
PLR 2	20	282

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : PLR 2 is suitable for Dharmapuri district

   Market is good due to short size fruits
8. Final recommendation for micro level situation : PLR 2 can be demonstrated for adoption in Dharmapuri district
9. Constraints identified and feedback for research : -
10. Process of farmers participation and their reaction : Farmers are ready to accept the variety as the demand in market is good for short varieties

OFT 4 - Assessment of seed production techniques in CO(R)H 3 paddy

1.	Title of Technology Assessed	:	Assessment of seed production techniques in CO(R)H 3 paddy
2.	Problem Definition	:	To assess the seed production techniques
3.	Details of technologies selected for assessment	:	
4.	Source of technology	:	TNAU
5.	Production system and thematic area	:	
6.	Performance of the Technology with performance indicators	:	The assessment will be done in the ensuing year without any financial commitment to the ICAR

Technology options		

7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:
8.	Final recommendation for micro level situation	:
9.	Constraints identified and feedback for research	:
10.	Process of farmers participation and their reaction	:

OFT 5 - Assessment of transplanting in red gram

1.	Title of Technology Assessed	:	Assessment of transplanting in red gram
2.	Problem Definition	:	
3.	Details of technologies selected for assessment	:	
4.	Source of technology	:	
5.	Production system and thematic area	:	
6.	Performance of the Technology with performance indicators	:	Due to very high labour intensive and high cost (Polythene bags) involved farmers were not ready to take even as OFT Hence in the ensuing Kharif 2011 season the above OFT will be taken at KVK Dharmapuri farm to assess the extent labour requirement and BC ratio

Technology options		

7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:
8.	Final recommendation for micro level situation	:
9.	Constraints identified and feedback for research	:
10.	Process of farmers participation and their reaction	:

OFT 6 - To assess the management of flower drop by using TNAU pulse wonder in Black gram

1. Title of Technology Assessed : To assess the management of flower drop by using TNAU pulse wonder in Black gram
2. Problem Definition : Flower drop
3. Details of technologies selected for assessment :
   a) Framers practice – Foliar spray of 2% DAP
   b) Foliar spray of 2% DAP + 40 ppm NAA
   c) Foliar spray of **TNAU Pulse Wonder** – 2.5 Kg / acre at peak flowering stage
4. Source of technology : TNAU
5. Production system and thematic area : Rainfed
   INM
6. Performance of the Technology with performance indicators :

Technology options	No. of pods per plant	Yield (q/ha)
Farmer's practice - Foliar spray of 2% DAP	22	6.78
Foliar spray of 2% DAP + 40 ppm NAA	33	7.40
Foliar spray of TNAU Pulse Wonder – 2.5 Kg / acre at peak flowering stage	38	8.25

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : Pulse wonder spray results in good flower retention
   Due to showers flower drop was more which was managed by pulse wonder spray
8. Final recommendation for micro level situation : Foliar spray of **TNAU Pulse Wonder** – 2.5 Kg / acre at peak flowering stage can be used instead of DAP @2% spray
9. Constraints identified and feedback for research : -
10. Process of farmers participation and their reaction : The pulse wonder spray gives market difference in the growth and flower retention.

OFT 7 - Assessment of Suitable foliar spray in Groundnut

1.	Title of Technology Assessed	:	Assessment of Suitable foliar spray in Groundnut
2.	Problem Definition	:	Low yield due to poor nutrient management
3.	Details of technologies selected for assessment	:	a) No spray (Farmer's practice) b) Combined Nutrient Spray (DAP + $NH_4(SO_4)_2$ + Borax + Planofix) c) Foliar spray of TNAU Groundnut Rich at peak flowering stage
4.	Source of technology	:	TNAU
5.	Production system and thematic area	:	Irrigated INM
6.	Performance of the Technology with performance indicators	:	

Technology options	No. of pods per plant	Yield (q/ha)
Technology option 1 – No spray (Farmer's practice)	17	9.0
Technology option 2 - Combined Nutrient Spray (DAP + $NH_4(SO_4)_2$ + Borax + Planofix)	20	10.2
Technology option 3 - Foliar spray of **TNAU Groundnut Rich** at peak flowering stage	22	10.8

7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Spraying of groundnut rich is easy compared to DAP spray and also increase the pod set
8.	Final recommendation for micro level situation	:	Groundnut rich spray will be demonstrated for large scale adoption
9.	Constraints identified and feedback for research	:	-
10.	Process of farmers participation and their reaction	:	The percentage of yield increase and the number of pods are not significantly different than the DAP spray. Hence the farmers need demonstration for further confirmation.

OFT 8 - Management of Pseudo stem weevil of banana

1.	Title of Technology Assessed	:	Management of Pseudo stem weevil of banana
2.	Problem Definition	:	Yield loss due to severe infestation
3.	Details of technologies selected for assessment	:	a) Spraying of Monocrotophos @ 3ml/lit. b) Injection of Monocrotophos 36 WSC @ 4 ml (54 ml of Monocrotophos 36 WSC with 350 ml of water) at two heights *viz*., 45 and 150 cm in the pseudostem at monthly interval from 5th to 8th month c) Injecting Azadirachtin 10000 ppm (1:4 ratio) @ 2ml/plant at heights viz., 45 cm & 150 cm in the pseudostem at monthly interval from 5th to 8th month d) Application of *Beauveria bassiana* 25 gm in the pseudostem of the banana and placing in the ground soil.
4.	Source of technology	:	TNAU
5.	Production system and thematic area	:	Irrigated IPM
6.	Performance of the Technology with performance indicators	:	

Technology options	% reduction of infestation	Yield (q/ha)
Spraying of Monocrotophos @ 3ml/lit.	53.3	320
Injection of Monocrotophos 36 WSC @ 4 ml (54 ml of Monocrotophos 36 WSC with 350 ml of water) at two heights *viz*., 45 and 150 cm in the pseudostem at monthly interval from 5th to 8th month	72.3	390
Injecting Azadirachtin 10000 ppm (1:4 ratio) @ 2ml/plant at heights viz., 45 cm & 150 cm in the pseudostem at monthly interval from 5th to 8th month	64.3	360
Application of *Beauveria bassiana* 25 gm in the pseudostem of the banana and placing in the ground soil.	66.6	390

7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	The pseudo stem trap is highly useful to manage the weevil incidence This technique will helpful to produce residue free banana
8.	Final recommendation for micro level situation	:	Pseudo stem trap will be recommended to monitor the weevil incidence
9.	Constraints identified and feedback for research	:	-
10.	Process of farmers participation and their reaction	:	As the traps attract weevils the farmers are ready to use this trap to monitor the incidence. They feel that this technology is a viable option in the organic pest management.

OFT 9 - Assessment Oral pellet vaccine for control of raniket disease in desi birds

1.	Title of Technology Assessed	:	Assessment Oral pellet vaccine for control of raniket disease in desi birds
2.	Problem Definition	:	Loss due to improper disease management
3.	Details of technologies selected for assessment	:	
4.	Source of technology	:	TANUVAS
5.	Production system and thematic area	:	
6.	Performance of the Technology with performance indicators	:	The samples will be collected and send to the KVK, Namakal for further analysis.

Technology options		

7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	
8.	Final recommendation for micro level situation	:	
9.	Constraints identified and feedback for research	:	
10.	Process of farmers participation and their reaction	:	Easy uptake of oral pellet vaccine by the birds

OFT 10 - Supplementation of mineral mixture in repeat breeder cows

1.	Title of Technology Assessed	:	Supplementation of mineral mixture in repeat breeder cows
2.	Problem Definition	:	Irregular mineral nutrition
3.	Details of technologies selected for assessment	:	a) No / Irregular Mineral supplementation b) Mineral mixture - 30-50g/day continuously for one year from the first day after calving c)Area specific mineral mixture 30 to 50 g/day continuously for one year from the first day after calving
4.	Source of technology	:	TANUVAS
5.	Production system and thematic area	:	Livestock
6.	Performance of the Technology with performance indicators	:	

Technology options	Milk yield (litres/day)	No. of inseminations for conception
Technology option 1 (Farmer's practice) - No / Irregular Mineral supplementation	11.0	3
Technology option 2 - Mineral mixture 30-50g/day continuously for one year from the first day after calving	11.5	2
Technology option 3 - Area specific mineral mixture 30 to 50 g/day continuously for one year from the first day after calving	12.1	2

7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Farmers themselves observed milk yield variation in morning and evening. Number of insemination for conception is reduced. the farmers expressed local specific mineral mixture required for large scale demonstation during local animal health camp at village.
8.	Final recommendation for micro level situation	:	Supplementation of location specific mineral mixture is effective
9.	Constraints identified and feedback for research	:	-
10.	Process of farmers participation and their reaction	:	The farmers nearby readily adopt this technology in the district

4.D1. Results of Technologies Refined - NIL

Results of On Farm Trial

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

Contd..

Technology 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)					

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

NIL

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

PART V - FRONTLINE DEMONSTRATIONS

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

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
	Oilseeds	Rainfed	Rabi 10-11	Sesame	TMV (Sv) 7		HYV	ICM	4	4	3	7	10	
				Sunflower		KBSH44	HYV	ICM	4	4	2	8	10	
	Pulses	Rainfed		Redgram	CO (Rg) 7		HYV	ICM	5	5	1	9	10	
	Cereals	Irrigated	Kharif 10-11	Paddy		CO (R) H3	HYV	ICM	4	4	2	8	10	
		Irrigated	Rabi 10-11	Wheat	CO W (W) 1		HYV	ICM	1	4	1	4	5	
	Millets	Rainfed	Kharif 10-11	Finger millet	CO (Ra) 14		HYV	ICM	5	5	1	11	12	
	Vegetables	Irrigated	Kharif 10-11	Vegetables	-	-	ICM	Irrigation water conservation						
		Irrigated	Kharif 10-11	Brinjal		CO(BH) 2	HYV	ICM	2	2	-	5	5	
		Irrigated	Kharif 10-11	Tomato	-	-	IPM	IPM	4	4	3	7	10	
		Irrigated	Rabi 10-11	Gourds	-	-	IPM	IPM	4	4	1	9	10	
		Rainfed	Rabi 10-11	Tapioca	-	-	ICM	INM	5	5	2	8	10	
	Flowers	Irrigated	Kharif 10-11	Tuberose	-	Prajwal	HYV	ICM	2	2	1	7	8	
	Ornamental													
	Fruit	Irrigated	Rabi 10-11	Banana	-	-	ICM	ICM	5	5	2	8	10	
	Spices and condiments	Irrigated	Kharif 10-11	Turmeric	-	-	ICM	ICM	10	10	1	9	10	

	Commercial		Rabi 10-11	*Casuarina junghuhniana*	-	-	-	Agroforestry	1.2	1.2	-	3	3	
	Medicinal and aromatic													
	Fodder													
	Plantation													
	Fibre													
	Dairy													
	Poultry													
	Rabbitry													
	Pigerry													
	Sheep and goat													
	Duckery													
	Common carps													
	Mussels													
	Ornamental fishes													
	Oyster mushroom													
	Button mushroom													
	Vermicompost													
	Sericulture													
	Apiculture													
	Implements	-	-	CRIDA vegetable preservator	-	-	PHT	PHT						
				Turmeric boiler			PHT	PHT						
				Chaff cutter										
	Others (specify)													

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

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
	Oilseeds	Rainfed	Rabi 10-11	Sesame	TMV (Sv) 7		HYV	ICM	Rabi 10-11	L	L	M	Tomato
				Sunflower		KBSH44	HYV	ICM	Rabi 10-11	L	L	M	Brinjal
	Pulses	Rainfed	Kharif 10-11	Redgram	CO (Rg) 7		HYV	ICM	Kharif 10-11	L	L	M	Sorghum
	Cereals	Irrigated	Kharif 10-11	Paddy		CO (R) H3	HYV	ICM	Kharif 10-11	L	M	M	Groundnut
		Irrigated	Rabi 10-11	Wheat	CO W (W) 1		HYV	ICM	Rabi 10-11	L	L	M	Ragi
	Millets	Rainfed	Kharif 10-11	Finger millet	CO (Ra) 14		HYV	ICM	Kharif 10-11	L	L	M	Sorghum
	Vegetables	Irrigated	Kharif 10-11	Vegetables	-	-	ICM	Irrigation water conservation	Kharif 10-11				Turmeric
		Irrigated	Kharif 10-11	Brinjal		CO(BH) 2	HYV	ICM	Kharif 10-11	L	M	M	Lablab
		Irrigated	Kharif 10-11	Tomato	-	-	IPM	IPM	Kharif 10-11	L	M	M	Sunflower
		Irrigated	Rabi 10-11	Gourds	-	-	IPM	IPM	Rabi 10-11	L	L	M	Tapioca
		Rainfed	Rabi 10-11	Tapioca	-	-	ICM	INM	Rabi 10-11	L	L	M	Redgram
	Flowers	Irrigated	Kharif 10-11	Tuberose	-	Prajwal	HYV	ICM	Kharif 10-11	L	M	M	Tuberose
	Ornamental												
	Fruit	Irrigated	Rabi 10-11	Banana	-	-	ICM	ICM	Rabi 10-11	L	M	M	Turmeric
	Spices and	Irrigated	Kharif	Turmeric	-	-	ICM	ICM	Kharif	L	M	M	Sugarcane

	condiments		10-11						10-11				
	Commercial		Kharif 10-11	*Casuarina junghuhniana*	-	-	-	Agroforestry	Kharif 10-11	L	L	M	
	Medicinal and aromatic												
	Fodder												
	Plantation												
	Fibre												

5.B. Results of Frontline Demonstrations

5.B.1. Crops

FLD 1 – Popularization of Paddy Hybrid CO (R) H 3 under SRI

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										
Paddy	Introduction of CO (R) H 3 under SRI		CO (R) H 3	Irrigated	10	4	75	63	69	55	20	27000	69000	42000	2.56	27000	55000	28000	2.03

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Leaf folder	18	28
Stem borer	5	12

FLD 2 – Introduction of new wheat variety COW (W) 1

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										
Wheat	Introduction of new variety COW (W) 1	COW (W) 1	-	Irrigated	5	1	27	20	23.5	-	-	23000	38000	15000	1.65	-	-	-	-

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Termite incidence	22%	**-**
Ash weevil	12%	-

FLD 3 - Popularization of Finger millet variety Co (Ra) 14 under rainfed condition

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										
Finger millet	Introduction of new variety CO(Ra) 14	CO(Ra) 14		Rainfed	12	5	17.5	11.4	14.5	9.4	64.4	5600	14400	8800	2.60	4500	8450	3950	1.87

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Blast	13.3	26.22

FLD 4 – Popularization of Redgram CO (Rg) 7

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										
Redgram	Redgram variety CO (Rg) 7 *T. Viride*, Rhizobium & Phosphobacteria TNAU Pulse wonder	CO (Rg) 7		Irrigated	10	5	9.8	8.2	9.0	8.0	12.5	15400	36000	20600	2.33	13000	28000	15000	2.15

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Flower drop	8.00%	24.00%
Pod borer incidence	12.33%	20.6%

FLD 5 – Popularization of use of digested coir pith for water conservation in Precision farming vegetables

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										
Bitter gourd	Use of digested coir pith for water conservation		East coast tall	Irrigated	5	2					Trial is in progress								

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Trial is in progress		

FLD 6 – Popularization of ICM in Tuberose

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										
Tuberose	NPK 200:200:200 kg/ha		Prajwal	Irrigated	8	2	62	41	51.5	24	53.4	54000	206000	152000	3.8	31000	96000	65000	3.1

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Percentage of mealy bug infestation	22 %	19 %
Alternaria leafspot incidence percentage	17%	12%

FLD 7 – Popularization of ICM in rainfed Tapioca

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										
Tapioca	Sett treatment with Sett treatment in 0.5 % Potassium chloride (KCl) + $ZnSO_4$ + $FeSO_4$ each for 20 minutes INM	Sri Prakash		Rainfed	10	5	220	160	190	145	31.0	24000	95000	71000	3.9	21000	72500	51500	3.5

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Increase in plant population due to drought resistance	**10 %**	**-**

FLD 8 – Popularization of Brinjal hybrid– Co(B)H-2

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										
Brinjal	Popularization of Brinjal hybrid– Co(B)H-2		Co(B)H-2	Irrigated	5	2	718	686	702	643	9.1	42250	645840	603590	15.3	31750	421850	390100	13.2

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Shoot&fruit borer incidence	18%	27%

FLD 9 – Introducing vegetable preservator (CRIDA model)

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Days				% 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										
Tomato	CRIDA vegetable preservator	-	-	-	The trial is in progress														

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

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

FLD 10 – Popularization of ICM in Banana

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										
Banana	Banana sakthi spray 2 % - 4, 5, 6th month Banana bunch cover	Grand Naine		Irrigated	10	5					Trial is in Progress								

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Trial is in Progress		

FLD 11 – Popularization of ICM in Turmeric

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha) Dry rhizome				% 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										
Turmeric	Rhizome treatment – COC – 0.3 Phasalone 0.1 % Pseudomonas 1 % INM NPK – 150:60:100 kg/ha Foliar spray of micronutrients twice at 25 days interval PHT – TNAU Improved turmeric boiler	BSR 2		Irrigated	10	10	80	50	65	48	22	60000	650000	590000	10.8	50000	480000	430000	9.6

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
% of micronutrient deficiency incidence	-	50

FLD 12 – Management of Tomato Leaf Curl Virus following Integrated Pest Management Modules

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										
Tomato	Treating the seedlings with *Pseudomonas fluorescens* 4gm/lt before planting Yellow sticky trap Spraying of Neem oil @ 3 ml/ lit at monthly intervals Alternate spraying of Imidacloprid@ 0.5ml/lt & Triazophos @2ml/lt whenever the incidence level crosses ETL		US 618 hybrid	Irrigated	10	4	1100	800	950	800	18.0	50000	285000	235000	5.7	47000	224000	177000	4.7

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
LCV incidence percentage	22	33
Whitefly incidence percentage	13	22

FLD 13 – Leaf miner management in Gourds

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										
Bitter gourd	Seed treatment with Imidacloprid @ 10 gm/Kg of seed Spraying of Neem seed Kernel Extract 3% at weekly intervals alternate with Pungam oil 3% spray Spraying of Thiocloprid @ 1ml/lt whenever the incidence level crosses ETL		Private hybrid	Irrigated	10	4	340	280	310	280	10.7	45000	217000	172000	4.8	43000	196000	153000	4.5
Ribbed gourd							285	268	276	258	7.0	42000	193200	151200	4.6	40000	180600	140600	4.5
Snake gourd							310	282	296	276	7.2	39000	148000	109000	3.8	37000	138000	111000	3.7

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Leafminer incidence percentage	14	26
Boron deficiency	12	24

FLD 14 – Popularization of *Casuarina junghuhniana*

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										
Casuarina	Popularization of *Casuarina junghuhniana*	-	-		3	1.2	-	-	-	-	Trial is in progress								

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Trial is in progress		

FLD 15 – Popularization of HYV and ICM practices in Sesame var .TMV (Sv)7

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										
Sesame	HYV & ICM	TMV (Sv) 7		Irrigated	10	4	10	7	8.5	5	41.17	11000	25000	14000	2.27	9500	18400	8900	1.93

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Phyllody incidence	12	18

FLD 16 – Popularization of Sunflower Hybrid KBSH 44 with INM

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase
							Demo			Check	
							H	L	A		
Sunflower	HYV&INM		KBSH44	Irrigated	10	4	16.23	13.14	14.69	9.45	35.67

*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
16500	35000	18500	2.12	13000	21000	8000	1.61

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Incidence of Helicoverpa	**22%**	**15%**

5.B.2. Livestock and related enterprises – NIL

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 - NIL

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 - NIL

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

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

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

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

5.B.5. Farm implements and machinery

Name of the implement	Cost of the implement in Rs.	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha	Labour requirement in Mandays		% save	Savings in labour (Rs./ha)	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check			Gross cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
CRIDA vegetable preservator	3600	Vegetable preservation	12	5	Energy conservation											

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

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

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

5.B.6. Cotton

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

Sl. No.	Category	Technology Demonstrated	Variety/ Hybrid	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Production Technology	• Soil application of micronutrients • Fertilizer recommendation i.e NPK were done based on the soil health card for each fields. • Foliar spray of DAP, Urea , ZnSO4 Borax and MgSO4 • Done top dressing of N through urea	Malika Bt Varalaxmi Bt and Bunny Bt	Rabi 2010-11	10	10	6	19	25	-------
2	IPM	• Recommended space. • Maintained optimum population in the field. • Application of Trichoderma viridi and Pseudomonas fluorescence before sowing to manage the diseases. • Advised farmers to grow castor along the border and bunds as tarp crop for control of Spodoptera. • Placed yellow sticky trap @12 no/ha for monitoring the sucking pests incidences. • Application of Imidacloprid 70WS for controlling of sucking pests								
3	Farm Implements	• Rotovator								

5.B.6.2 Production technology demonstrations

Performance of demonstrations

Name of the village	Components of FLD	Farming situation	Varieties/Hybrid		Farmer No.	Area (ac)	Av .seed cotton yield (q/ha)		% Increase in yield	Cost of cultivation (ha)		C:B Ratio For Demo
			Demo	Local check			Demo	Local check		Demo	Local check	
Pallavadi	INM , IPM	Rainfed	Malika Bt	Malika Bt	2	2	28.25	25.62	10.26	40312	37312	4.40
Pappinayakanhalli	INM,IPM	Irrigated	Bunny Bt	Bunny Bt	1	1	30.00	22.25	34.83	41875	38875	4.29
Setrapatty	INM , IPM	Rainfed	Varalaxmi bt	Varalaxmi bt	1	1	16.25	13.50	20.37	41250	38250	2.78
Kittanur	INM , IPM	Rainfed	Malika Bt	Malika Bt	1	1	27.50	20.75	32.53	43750	40750	3.90
Panamaruthupatty	INM , IPM	Irrigated	Bunny Bt	Bunny Bt	4	4	24.88	21.72	14.39	41562	38562	3.89
Mangarai	INM , IPM	Irrigated	Bunny Bt	Bunny Bt	1	1	18.25	16.25	12.30	40250	37250	2.85
Papparapatty	INM , IPM	Rainfed	Bunny Bt	Bunny Bt	1	1	25.75	23.50	09.57	43500	40500	4.08
			Bunny Bt	Bunny Bt	1	1	16.25	13.25	22.64	43750	40750	2.96
Bayranatham	INM , IPM	Irrigated	Varalaxmi bt	Varalaxmi bt	2	2	17.87	14..38	24.26	42625	39625	2.87
Thonganoor	INM , IPM	Rainfed	Varalaxmi bt	Varalaxmi bt	5	5	11.10	08.97	23.74	39350	36450	2.55
Ogelly	INM , IPM	Rainfed	Malika Bt	Malika Bt	1	1	20.00	17.75	26.76	40250	37250	4.40
K.Chettihalli	INM , IPM	Irrigated	Bunny Bt	Bunny Bt	2	2	23.43	20.30	15.41	40125	37125	4.21
Erraapatty	INM , IPM	Irrigated	Malika Bt	Malika Bt	1	1	18.13	17.12	05.89	38867	35687	3.04
Bothakadu	INM , IPM	Irrigated	Bunny Bt	Bunny Bt	1	1	19.75	15.50	27.41	41875	38875	3.01
Pachanapatty	INM , IPM	Irrigated	Bunny Bt	Bunny Bt	1	1	23.75	21.00	13.09	39500	36500	3.39

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

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

HXH Hybrids																	
Herbacium Varieties																	
Hirsutum Varieties																	
Arboreum Varieties																	

5.B.6.3 Integrated pest management demonstrations

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

5.B.6.4 Demonstrations on farm implements

Name of the implement	Area (Ha)	No. of Demo.	Name of the technology demonstrated	Labour requirement for operation (Rs./ha)		
				Demo	Local check	% change
Rotovator	10	25	Soil mulching	750.00	1500.00	20%

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

Extension activity	No. of Programmes	Participants			SC/ST		
		Male	Female	Total	Male	Female	Total
Consultancy	2	23	8	31	6	2	8
Conventions	3	18	5	23	2	1	3
Demonstrations	6	28	12	40	7	1	8
Diagnostic surveys	3	16	5	21	1	1	2
Exhibition							
Farmer study tours							
Farmers Field school							
Field Days							
Field visits							
Gram sabha							
Group discussions	3	25	7	32	3	1	4
Kisan Gosthi							
Kisan Mela	4	36	4	40	8	2	10
Training for Extension Functionaries	3	33	2	35	2	-	2
Training for farmers	3	32	4	36	1	1	2
Viedo show							
Newspaper coverage							
Popular articles							
Publication							
Radio talks							
T.V. Programme							
Others (Pl.specify)							
TOTAL	**27**	**188**	**39**	**227**	**24**	**7**	**31**

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

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1.	Paddy	Popularization of Paddy Hybrid CO (R) H 3 under SRI	Hybrid perform well in the SRI
2.	Wheat	Introduction of new wheat variety COW (W) 1	Performance of late sown crop is poor
3.	Ragi	Popularization of Finger millet variety Co (Ra) 14 under rainfed condition	Better returns compared to local varieties
4.	Redgram	Popularization of Redgram CO (Rg) 7	Comparatively yield is remunerative
5.	Vegetables	Popularization of use of digested coir pith for water conservation in Precision farming vegetables	Trial is in progress
6.	Tuberose	Popularization of ICM in Tuberose	Responds well to nutrient application and yield is high
7.	Tapioca	Popularization of ICM in rainfed Tapioca	Drought tolerance is increased
8.	Brinjal	Popularization of Brinjal hybrid– Co(B)H-2	Better performance with good market preference
9.	Vegetables	Introducing vegetable preservator (CRIDA model)	Shelf life of vegetables increased with zero energy
10.	Banana	Popularization of ICM in Banana	Trial is in progress
11.	Turmeric	Popularization of ICM in Turmeric	Comparative yield increase and incidence of rhizome rot is controlled
12.	Tomato	Management of Tomato Leaf Curl Virus following Integrated Pest Management Modules	Removal of virus affected plants is the best option before spraying for the management of this disease
13.	Gourds	Leaf miner management in Gourds	Prophylactic spray is effective
14.	Casuarina	Popularization of *Casuarina junghuhniana*	Trial is in progress
15.	Sesame	Popularization of HYV and ICM practices in Sesame var .TMV (Sv)7	Performance is better than the check
16.	Sunflower	Popularization of Sunflower Hybrid KBSH 44 with INM	Performa as that of the prevailing hybrids

5.B.6.7 Farmers' reactions on specific technologies

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Livestock's	Location specific Mineral Mixtures for breeder cows	• Milk yield increased from 500-750 ml /daily comparatively check • Conceiving in timely and active comparatively check
2	Vegetables	Vegetable preservator	• Economic • Easy management • Electricity savings
	Poultry	Oral pellet vaccine for control of raniket diseases	• Effectively controlling the disease

5.B.6.8 Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	10	400	
2	Farmers Training	15	160	
3	Media coverage	2	-	
4	Training for extension functionaries	2	60	

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																	
Paddy																	
Sorghum																	
Wheat																	
Others (pl.specify)																	
Total																	
Oilseeds																	
Castor																	
Mustard																	
Safflower																	
Sesame																	
Sunflower	ICM	KBSH44	10	4	16.23	13.14	14.69	9.45	35.67	16500	35000	18500	2.12	13000	21000	8000	1.61
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	Popularization	Co (BH) 2	5	2	718	686	702	643	9.1	42250	645840	603590	15.3	31750	421850	390100	13.2
Okra																	
Onion																	
Potato																	
Field bean																	
Others (pl.specify)																	
Total																	
Commercial crops																	
Sugarcane																	
Coconut																	
Others (pl.specify)																	
Total																	
Fodder crops																	
Maize (Fodder)																	
Sorghum (Fodder)																	
Tuberose	Popularization	Prajwal	8	2	62	41	51.5	24	53.4	54000	206000	152000	3.8	31000	96000	65000	3.1
Total																	

H-High L-Low, A-Average

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

PART VII. TRAINING

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems	01	25	10	35	04	03	07	29	13	32
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production	04	85	35	120	18	12	30	103	47	150
Nursery management	03	78	25	103	15	-	15	93	25	118
Integrated Crop Management	04	91	28	119	10	05	15	101	33	134
Soil and Water Conservation										
Integrated Nutrient Management	02	40	25	68	02	02	04	42	27	69
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	02	48	25	73	04	02	06	52	27	79
Protective cultivation										

Others (pl.specify) Precision farming	12	434	10	444	31	05	36	465	15	480
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										

Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management	01	30	06	36	-	-	-	30	06	36
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										
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	04	92	25	117	07	05	12	99	30	129
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	12	250	86	336	18	15	33	268	101	369
Integrated Disease Management	10	188	95	283	25	20	45	213	115	328
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides	02	45	10	55	02	02	04	47	12	59

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	**57**	**1406**	**380**	**1789**	**136**	**71**	**207**	**1542**	**451**	**1983**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems	01	38	05	43	-	-	-	38	05	43
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production	01	32	12	44	05	01	06	37	13	50
Nursery management										
Integrated Crop Management	02	52	06	58	-	-	-	52	06	58
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify) Turmeric harvester demonstration	02	62	-	62	5	-	5	67	-	67
Others (pl.specify) Turmeric boiler demonstration	02	56	-	56	10	-	10	66	-	66
Others (pl.specify) Precision farming	05	172	-	172	28	-	28	200	-	200
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										

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

Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										

Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
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										
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	02	68	32	100	10	4	14	78	36	114
Integrated Disease Management	01	32	4	36	2	-	2	34	4	38
Bio-control of pests and diseases	01	30	4	34	8	2	10	38	6	44

Production of bio control agents and bio pesticides										
Others – Sericulture	02	84	-	84	16	-	16	100	-	100
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	**19**	**626**	**63**	**689**	**84**	**7**	**91**	**710**	**70**	**780**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production	02	62	05	67	10	02	12	72	07	79
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	02	59	12	71	05	-	5	64	12	76
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	02	60	08	68	05	04	09	65	12	77
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	**06**	**181**	**25**	**206**	**20**	**06**	**26**	**201**	**31**	**232**

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										
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										

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	02	85	10	95	-	-	-	85	10	95
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	01	40	07	47	02	01	03	42	08	50
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify) Quality seed Production Technology	02	78	12	90	02	-	02	80	12	92
Total	**05**	**203**	**29**	**232**	**04**	**01**	**05**	**207**	**30**	**237**

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

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Increasing production and productivity of crops										
1.b.	Commercial production of vegetables-NADP Precision farming	17	606	10	616	59	05	64	665	15	680
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 (pl.specify)										
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	**17**	**606**	**10**	**616**	**59**	**05**	**64**	**665**	**15**	**680**

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	04	150	-	150	10	-	10	160	-	160
1.e.	Organic farming										
1.f.	Others (pl.specify)										
2	**Post harvest technology and value addition**										
2.a.	Value addition	02	-	52	52	-	08	08	-	60	60
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	04	118	35	153	04	10	14	122	45	167
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	**10**	**268**	**87**	**355**	**14**	**18**	**32**	**272**	**105**	**387**

PART VIII – EXTENSION ACTIVITIES

Extension Programmes (including activities of FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	8	324	64	388	38	12	50	16	4	20
Kisan Mela	2	423	124	547	43	35	78	10	3	13
Kisan Ghosthi				0			0			0
Exhibition	5	575	225	800	45	22	67	15	6	21
Film Show	34	1425	224	1649	312	32	344	25	9	34
Method Demonstrations	15	189	135	324	55	23	78	16	2	18
Farmers Seminar	2	76	12	88	8	4	12	2	0	2
Workshop				0			0			0
Group meetings	12	422	32	454	24	13	37	4	2	6
Lectures delivered as resource persons	65	1876	325	2201	256	50	306	75	12	87
Newspaper coverage	12									0
Radio talks	2									0
TV talks	1									0
Popular articles	2									0
Extension Literature	6									0
Advisory Services	716	654	15	669	45	2	47	10	-	10
Scientific visit to farmers field	424	382	18	400	28	14	42			0
Farmers visit to KVK	1133	785	258	1043	78	12	90			0
Diagnostic visits	424	382	18	400	28	14	42			0
Exposure visits										
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										
Celebration of important days (specify)										
Any Other (Specify)										
Total	2863	7513	1450	8963	960	233	1193	173	38	211

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9.A. Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)	Paddy	Co49, IWP, ADT 39, Co 50		25	55000	
Oilseeds						
Pulses	Horse gram	Paiyur 2		10	35000	
Commercial crops						
Vegetables						
Flower crops						
Spices	Turmeric	BSR2		25	150000	
		BSR1		10	60000	
		Roma		0.3	18000	
Fodder crop seeds	Hedge lucerne			0.02	1000	
Fiber crops						
Forest Species						
Others (specify)						
Total						

9.B. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial						
Vegetable seedlings						
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings	Cumbu Napier		CO (CN) 4	28955	12760	
Forest Species						
Others(specify)						
Total						

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	Mealy bug parasitoid	2000	-	40
Others (specify)				
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				
Goats				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

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

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

(A) KVK News Letter

Date of start	Periodicity	Number of copies distributed
2009	Quarterly	2000

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	Evaluation of antioxidant activity of plant parts of *Aegle marmelos*	Dr. K. Indhumathi Dr. E. Vadivel Dr. K. Rajamani	1
	Papaya Mealy bug (*Paracoccus marginatus*) and Phomopsis leaf fall (*Phomopsis* sp) in Tapioca – Krishi Vigyan Kendra, Dharmapuri intervention to it's management	Dr. P.S. Shanmugam Dr. K. Indhumathi Dr. P. Sridhar	1
Technical reports	• Action Plan Report • Action plan and Annual report for FLD cotton, Oilseeds and pulses. • Annual Report • SAC Reports • Export Committee Reports • NHM Report • NADP Reports		
News letters	KVK Newsletter	P. Sridhar R.Jansirani K. Indhumathi Dr. P.S. Shanmugam N.A. Saravanan	4
Technical bulletins	Turmeric cultivation technology (Tamil)	Dr. K. Indhumathi Dr. P.S. Shanmugam Dr. P. Sridhar	1
Popular articles	New problems in Turmeric cultivation (Tamil)	Dr. P.S. Shanmugam Dr. K. Indhumathi Dr. P. Sridhar	1
Extension literature			
Booklets	ICM in Blackgram	R.Jansirani P. Sridhar K.Kumutha	500
	INM in Gingelly	R.Jansirani P. Sridhar P.S.Shanmugam	500
	IPM & INM in Groundnut	R.Jansirani P. Sridhar K. Indhumathi	500
	ICM in Sunflower	R.Jansirani P. Sridhar N.A. Saravanan	500
Others (Pl. specify)			
TOTAL			

10.B. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
1.	DVD	Precision Framing In Vegetables Crops recorded by The Pothigai (Doordarsan), Chennai	100

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

a. **Title of the Case Study** : **A successful cluster approach on vegetable cultivation – a case study**

b. **Situation / Back Ground :**

In Moolayanur village, Pappiredipatty block, Dharmapuri district many farmers are cultivating vegetables viz., bitter gourd, snake gourd, musk melon and ribbed gourd individually and they sale their produces either in local markets or through local merchants . They are not getting proper price for their produce and so the intensity of cultivation gets reduced. The non availability of proper marketing channels is the major cause. In this circumstances, Mr.Samikannu, an active farmer of that village contacted the KVK, Papparapatty for the technical guidance to improve the cultivation and marketing .By listening his views, the KVK felt the need to impart training on improved cultivation aspects and innovative marketing to the farmers of that village and organized training programme on these aspects. Apart from this, the need of group cultivation is also emphasized.

c. **Interventions (Process & Technology)**

The training programmes were arranged on precision farming technologies. The group approach in the precision farming will give better market for the produce.The interested farmers joined and started a group called “Kavinghar Kannathasan farmers Group” and registered under District Registrar, Dharmapuri (Reg. No.64/2010).They are getting financial assistance from NABARD for their interactive meetings and other activities related to the association

The improved management practices *viz*., seed treatment, fertigation, weed management, Integrated Pest and Nutrient Management etc. were followed as per the advice of KVK, Dharmapuri . The paradigm shift created interest among the growers and they followed all the activities as per the schedule. The exposure visit to other districts motivated them to create a new system of structures using nylon nets (cost effective)for gourds instead of growing in pandal systems using G.I wires. This reduces the cost of production , yield loss and improved the quality. It is a semi permanent system for growing gourds. The adoption of improved cultivation practices gave good yield.

One interesting aspect of this group is the cultivation of different vegetables viz., bitter gourd, ribbed gourd, snake gourd, brinjal, bhendi and tomato. This avoids the bulk marketing. Since they are taking different types of vegetables to the market, they are able to get better price rather than taking a single vegetable in bulk quantity. Every farmer of the group has registered in the DMI (Dynamic market intelligence) through mobile for each vegetable. So they are getting the information on the market price for all the vegetables which facilitate them to select the better market. Also the KVK has imparted them with market intelligence training. Now the

farmers were adopting the cluster approach in cultivation practices and marketing. Through this they are getting 90 % uniform produce, this ultimately fetches good market.

Further, the group members make an informal discussion every evening regarding their day to day activities. This helps them in improving their activities besides solving and managing their field problems. Frequently they contact the KVK scientists for their field problems.

d. Impact (Horizontal spread, Economic gains & Employment generation):

Adoption of precision farming techniques is increased the area under each crop from 0.5 acre to 1.0 acre. Out of 15 farmers in a group, 60% of farmers (More or less – 8) have increased their area. Total area under vegetable cultivation has also increased from 200-300 acre at present in that block . This shows the horizontal spread of the technology . Adoption of improved management practices increased the production as well as productivity. The yield is significantly increased from 15 tons per acre to 25-27 tons per acre. The CB ratio was as 1: 6, which shows the economic benefit of the farmers. The success of this group's approach towards cultivation of vegetables and marketing, serve as a model for that village and also to the neighboring villages.

The improved cultivation system of growing vegetables in Precision farming had lead to tremendous influence in the village. Yield increase in to the tune of 100-150 % than the traditional cultivation practices made the farmers highly satisfied. The quality of vegetables such as size, shape, colour, and self life are also improved.

The training imparted to them increased their ability to search better marketing places and collectively sale their produces. During offseason also they are able to harvest good produce and returns. This creates confidence among the farmers and they are now in a position to train the neighboring nuclear farmer's to adopt the group approach.

As a result, they serve as role model in the particular village. Even the unemployed youth of this village was also motivated to join this group. Mr. Gowrishankar, S/o Mari age of 22 years has involved himself in cultivation of vegetables based on the interest he got through Kavinghar Kannathasan farmers Group. This is the good sign for involving youth in farming activities. Yet another four groups are coming up in this village based on the growth and development of this group.

Case II

Title: Precision Farming: Exorbitant yield in Turmeric

Mr. P. Karthrivel
S/o P.Palani,Palavadi (Po)
Pennagaram (Tk) Dharmapuri (Dt)

Background

Mr. P. Karthirvel is an active farmer, holding 4.25 ac of land having irrigation source from open well with 40 feet water in Palavadi village. He first started Precision Farming in Palavadi village.He formed Sivasubramanian Precision Farming Association in Dharmapuri District. He has organized the commodity groups for Tomato and Brinjal in Palavadi village.He regularly attends all meetings and as well as Training Programmes organized by Krishi Vigyan Kendra, Papparapatty and also made arrangements for organizing FFS by the scientists of Krishi Vigyan Kendra, Papparapatty in Palavadi village.

Interventions

He is interested to give his land area for taking up OFT and FLDs by the University and the Department. He cultivated BSR 2 Turmeric in 1.00 ha and obtained 9 tonnes/ hectare cured rhizome and earned about Rs.12.60 lakhs during the year 2009-10. Whenever pest and disease attack was noticed plant protection measures were taken as per the advice of KVK scientists

Impact

He is giving technical advices to the Farmers of the village regarding the crops to be cultivated, important cultivation and management practices to be followed as well as marketing. He created awareness among the Farmers about the IPM in vegetables and SRI system of paddy cultivation. Many Farmers of neighboring districts viz., Karur, Trichy and Madurai are brought to his field by the Government and Non government officials to see the fertigation in onion as well as the cultivation of BSR 1 and BSR 2 Turmeric under Precision farming. Apart from Turmeric cultivation ,he is cultivating tube rose in 0.5 ac every year and developed the commodity group though which, he is sending flowers to Bangalore and Hosur Markets regularly.He is promoting Women SHG's and arranging for the loans in Banks.

Cost of cultivation

S.No	Particulars	Expenditure (Rs)
1	Land preparation	6000
2	Fertilizers and manures	3000
3	Fertigation	25000
4	Weeding	8000
	Plant protection measures	5500
5	Harvesting and preservation	52000
6	Total	107500
7	Income /profit (Rs.17000/qtl	15,30,000
8	Net Returns	14,22,500

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

- Commodity based Group approach

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Mango	Toddy trap for fruitfly attraction	To manage fruit fly attraction
2	Gourds	Dryfish trap for fruitfly attraction	To manage fruit fly attraction

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

Identification of courses for farmers/ farm women	SMS through mobile
Rural Youth	Group approach
In-service personnel	Brainstorming

10.G. Field activities

i. Number of villages adopted - 63
ii. No. of farm families selected - 386
iii. No. of survey/PRA conducted - 7

10.H. Activities of Soil and Water Testing Laboratory - NIL

Status of establishment of Lab :
1. Year of establishment :
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1			
2			
3			
Total			

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				
Water Samples				
Plant samples				
Manure samples				
Others (specify)				
Total				

Details of samples analyzed during the 2010-11 :

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

10.I. Technology Week celebration

Period of observing Technology Week: From 29.07.2010 to 02.08.2010
Total number of farmers visited : 1350
Total number of agencies involved : 23
Number of demonstrations visited by the farmers within KVK campus : 12

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized	17		

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Exhibition	24 (stalls from different		
Film show	5		
Fair	4		
Farm Visit	14		
Diagnostic Practicals	17		
Supply of Literature (No.)	6		
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	1350		

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)
Precision Farming – Turmeric	100	70	1,80000	3,40,000

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

Pretest was conducted before main survey. The structured interview schedule was prepared and interview with farmers randomly among the turmeric growers . After collected data was analyzed by using simple percentage analysis

PART XII - LINKAGES

12.A. Functional linkage with different organizations

S.No	Name of organization	Nature of linkage
1.	National Horticulture Mission	Conducting training on model nursery in Mango and exposure visits
2.	ATMA	Participation in meeting, conducting training programmes and FLD & OFT
3.	AME Foundation	Conducting training programmes and demonstrations.
4.	State Agricultural Departments and Horticulture	Joint diagnostic survey, joint implementation, participation in meeting, conducting training programmes of various schemes, FFS and demonstrations at reached unreached areas
5.	National Institute of Agrl marketing ,Jaipur	Market intelligence and Market –led extension
6.	Surabi-NGOs	Participating in demonstrations and trainings to SHGs
7.	DEEPS, Dharmapuri	Trainings and demonstrations
8.	State PWD department	IAMWARM Activities
9.	Department of Sericulture	Trainings and demonstrations
10.	VUTRC- Chennai and Dharmapuri & State Animal Husbandry Department	Technical advice on animal husbandry & coordination to carry out OFT & FLD programmes

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

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
National Agriculture Development Programme	November 2010	GOI	Rs.

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?

S. No.	Programme	Nature of linkage	Remarks
1.	Farm schools and Researchable Issues trials (OFT) on various crop production technologies	To conduct Farm Schools and OFT in Tuberose, Tapioca Watermelon and Sesame crops	• To conduct on Farm schools on ICM in Tuberose, Tapioca Watermelon and Sesame crops to educate among the farmers. • To create awareness on market supply chain through farm school • To assess the performance of the technologies in the given socio economic condition of the farmers

Coordination activities between KVK and ATMA during 2010-11

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	**Meetings**	Monthly review meetings	10		
02	**Research projects**	Efficacy of Acerophagus papayae & Role of Panchyat leaders in Schemes	-	2	
			3		
03	**Training programmes**	IPM & Value addition	2		
04	**Demonstrations**				
05	**Extension Programmes**				
	Kisan Mela				
	Technology Week				
	Exposure visit				
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	Others (Pl. specify)	Farm school	-	5	
06	**Publications**				
	Video Films				
	Books				

	Extension Literature				
	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**
1.	Mango model nursery	-	18,00,000	18, 00, 000	**-**

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**

11. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2010			
May			
June			
July			
August			
September			
October			
November			
December			
January 2011			
February			
March			

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1.	Slatted floor goat rearing	2009	57.80 m^2	Tellichery x Boer		2			
				Tellichery x Kanni		3			
				Tellichery		1			

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									
Paddy-	15.11.10	12.04.11	0.20	IWP	Seeds	Post harvest process is being carried out. The results will be furnished later			
Paddy	15.11.10	08.04.11	0.10	CO 49	Seeds				
Paddy	05.12.11	-	0.10	Co(R) 50	Seeds				
Paddy	10.12.11	-	0.40	ADT 39	Seeds				
Pulses									
Horse gram	13.10.10 19.10.10	10.02.11 to 15.02.11	2.0 ha	Paiyur 2	Seeds	1000 kg	5875	35000	
Oilseeds									
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables									
Brinjal				CO BH 2	Vegetables	250 kg		1750	
Others (specify)									
Fodder	-	-	0.10	Co(CN)4	Cuttings	28355	-	12760	

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Mealy bug parasitoid	2000 no.	-	-	Distributed to 40 farmers

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1.	NIL						

13.E. Utilization of hostel facilities

Accommodation available (No. of beds) - 30

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2010			
May 2010			
June 2010			
July 2010			
August 2010	100	2	
September 2010			
October 2010	19	1	
November 2010	20	1	
December 2010	389	21	
January 2011	120	6	
February 2011	344	13	
Marc h 2011	340	10	

13.F. Database management

S. No	Database target	Database created
	Resource inventory of the District	1. Nine fold classification of land 2. Number and size of operational holdings 3. Weather parameters of the district. (for a minimum period of ten years) 4. Details of soil profile 5. Detailed cropping pattern (for a minimum period of ten years) 6. Area, production and productivity of major crops 7. Details of livestock wealth in the district 8. Production and productivity of livestock produces 9. Area under irrigation from different sources 10. Seasonal availability of labour

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

10.00lakhs	**10.00lakhs**		**No. of Training programmes**	**No. of Demonstrations**	**No. of plant materials produced**	**Visit by farmers (No.)**	**Visit by officials (No.)**		
Work is in progress.									

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	State bank of India	TNAU Branch, Coimbatore	-	-	-	-	-
With KVK	State bank of India	Dharmapuri	0832	Associate Professor and Head	30117740134	-	-

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

S. No	Items / Head	Opening balance if any	Remittance by ZPD VIII Bangalore	Actual expenditure dubitable to Council A/C	Closing balance if any	Remarks
1	**Production Technology – 50 ha**					
	a. Essential inputs		35000	34970	30	
	b. POL, hiring vehicle, Kisan melas, printed materials, reports, demonstration boards		15000	14891	109	
	Total					
2.	**Farm Implements – 75 ha**					
	a. New equipments					
	b. Contingencies		5000	5000	0	
	Total		55000	54,861	139	

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

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	45.00	45.00	62.67
	Pay & Allowances (6th CPC Arrears from 1.1.2006-31.3.2011)	45.56	45.56	45.56
2	**Traveling allowances**	1.25	1.25	1.25
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.50	2.50	2.49
B	POL, repair of vehicles, tractor and equipments	1.85	1.85	1.69
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.25	1.25	1.25
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.40	0.40	0.39
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	1.95	1.95	1.91
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.90	0.90	0.79
G	Training of extension functionaries	0.25	0.25	0.25
H	Maintenance of buildings	0.30	0.30	0.30
I	Farmers field school	0.25	0.25	0.24
J	Library	0.05	0.05	0.05
TOTAL (A)		**101.81**	**101.81**	**119.60**
B. Non-Recurring Contingencies				
1	**Equipments including SWTL & Furniture**			
	Laser guided land leveller	5.00	5.00	4.00
	Generator	1.00	1.00	1.00
	PAS	0.30	0.30	0.45
	EPABX System	0.50	0.50	0.63
2	**Works**			
	Rain water harvesting with micro irrigation system	10.00	10.00	10.00
	Land Levelling	2.00	2.00	2.00
	Cost escalation for Admn. Hostel & Quarters building	10.32	10.32	10.32
	Bore Well	3.00	3.00	3.00
4	**Library** (Purchase of assets like books & journals)	0.10	0.10	0.10
TOTAL (B)		**32.22**	**32.22**	**31.49**
C. REVOLVING FUND		**1.00**	**1.00**	**0.68**
GRAND TOTAL (A+B)		**132.03**	**132.03**	**151.09**
GRAND TOTAL (A+B+C)		**133.03**	**133.03**	**151.77**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2008 to March 2009	57929	102322	40482	119769
April 2009 to March 2010	119769	61805	73850	107724
April 2010 to March 2011	107724	157584	68232	197076

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.P.Sridhar	Programme coordinator	Round up ready flex cotton technology	TNAU, Coimbatore	28.10.10
Dr.R.Jansirani	SMS (Agrl. Extension)	Round up ready flex cotton technology	TNAU, Coimbatore	28.10.10
		National seminar on extension reforms – initiatives and impact	TNAU, Coimbatore	11.12.10 to 12.12.10
		Gender perspective in Agriculture Research and Extension	TANUVAS, Chennai	23.01.10 – 25.01.11
		To attend training cum workshop on Gender perspective in agricultural research and extension	TNAU, Coimbatore	23.03.11 – 25.03.11
Dr.K.Indhumathi	SMS (Horticulture)	Protected cultivation of horticultural crops	TNAU, Coimbatore	28.03.11 – 29.03.11
	SMS (Horticulture)	Technological Interventions for Sustaining Production of Commercially Viable Medicinal Crops in India	HC & RI, TNAU, Coimbatore	24.09.2010 – 26.09.2010
Dr.P.S.Shanmugham	SMS (Agricultural Entomology)	Mass Production of Papaya Mealybug Parasitoids	Department of Agricultural Entomology, TNAU, Coimbatore.	13.10.2010
		Alternative Strategies in Poultry farming	TANUVAS KVK, Namakkal	24.11.10 - 26.11.10

		SAS Package	TNAU, Coimbatore	27.12.10 - 31.12.10
		seminar on climate change challenges and opportunities for tuber crops	CTCRI, Trivandrum	20.01.2011 To 22.01.2011
		IPDM strategies in High yielding crops	TNAU, Coimbatore	24.03.11 – 25.03.11
Tmt. P.Suthamathi Assistant Professor (PB&G)	SMS (PB & G)	National plant breeding congress	TNAU, Coimbatore	08.07.2010 09.07.2010
Dr.N.A.Saravanan Assistant Professor (PB&G	SMS (PB & G)	National plant breeding congress	TNAU, Coimbatore TNAU, Coimbatore	08.07.2010 09.07.2010
	SMS (PB & G)	SRI	ORS, Tindivanam	14.05.10 - 15.05.10
Tmt.A.Pabitha	Programme Assistant (Computer)	Data base management system and web designing	TNAU, Coimbatore	29.03.11 – 31.03.11

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