ANNUAL REPORT 2010-11

(FOR THE PERIOD APRIL 2010 TO MARCH 2011)

KRISHI VIGYAN KENDRA (NAGAPATTINAM)

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
	Office	Fax		Address
Krishi Vigyan Kendra Tamilnadu Agricultural University Sikkal, Nagapattinam – 611 108.	04365- 246266	04365- 246266	kvksikkal@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					
Tamilnadu	0422-	-	vctnau@tnau.ac.in	www.tnau.ac.in			
Agricultural	2431222						
University							
Coimbatore -641							
003							

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

Name	Telephone / Contact				
	Residence	Mobile	Email		
Dr.T.Dhamodaran, Ph.D.,	9150151495	93448 86867	kvksikkal@tnau.ac.in aexdhamlal@yahoo.com		

1.4. Year of sanction: 2004

1.5. Staff Position (as 31st March 2011)

SI. No.	Sanctioned post	Name of the incumbent	Desig nation	M/F	Discipline	Highest Qualifi cation	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. T. Dhamodaran	Associate Professor	М	Agrl. Extension	Ph.D.,	15600- 39100+8000	26050 + 8000	31.05.10 (AN)	Permanent	SC
2	SMS	Dr. J. John Gunasekar	Associate Professor	М	Bio Energy	Ph.D.	37400- 67000+9000	37400 + 9000	07.08.09	Permanent	ВС
3	SMS	Dr. M. Joseph	Assistant Professor	М	Agronomy	Ph.D.	15600- 39100+7000	22830 + 7000	21.07.10	Permanent	SC
4	SMS	Dr. G. Thangamani	Assistant Professor	F	Agrl. Micro	Ph.D.	15600- 39100+7000	22830 + 7000	18.11.2010	Permanent	MBC
5	SMS	Dr. T. Elaiyabharathi	Assistant Professor	М	Agrl. Entomology	Ph.D.	15600- 39100+6000	19600+ 6000	30.12.09	Temporary	BC
6	SMS	Dr. G. Malathi	Assistant Professor	F	Horticulture	Ph.D.	15600- 39100+6000	19600+ 6000	31.12.09	Temporary	MBC
7	SMS	Dr. K. Sivakumar	Assistant Professor	М	Soil Science	Ph.D.	15600- 39100+6000	18850+ 6000	12.01.10	Temporary	ВС
8	Programme Assistant (Lab Tech.) /T-4	Th. V. GnanaBharathi	Programme Assistant (Lab Tech.)	М	Agriculture	B.Sc (Agri)	9300- 34800+4400	11600 + 4400	05.06.07	Permanent	SC
9	Programme Assistant (Computer) / T-4	Th. R. S.Swamiappan	Programme Assistant (Computer)	М	Computer science	MCA	9300- 34800+4400	11130 + 4400	8.12.08	Permanent	BC
10	Programme Assistant/ Farm Manager	Th. R. Vedharethinam	Programme Assistant/ Farm Manager	М	Agronomy	M.Sc (Ag) Agronomy	9300- 34800+4400	11600 + 4400	04.06.07	Permanent	MBC
11	Assistant	Th. N. Sankar	Junior Assistant cum Typist	М	Office	MA, B.Ed	5200-20200	5200+ 2400	28.02.2011	Temporary	MBC
12	Jr. Stenographer	Tmt. S. Shanthi	Junior Assistant cum Typist	F	Office	MA	5200-20200	5200+ 2400	28.02.2011	Temporary	BC
13	Driver	Th. V. Rajan	Driver cum Mechanic (Foreman)	М	Office		5200- 20200+2400	12650 + 4200	07.06.10	Permanent	MBC
14	Driver	Th. P. Govindaraju	Driver	М	Office	H Sc.,	5200-20200	5200+ 2000	28.02.2011	Temporary	SC
15	Supporting staff	Th. S. Rajendran	PUSM	М	Office		5200- 20200+1300	6850+ 1300	03.05.10	Permanent	MBC
16	Supporting staff	Th. C .Kaliyaperumal	PUSM	М	Office		5200- 20200+1300	7110+ 1300	14.09. 10	Permanent	ВС

1.6. Total land with KVK (in ha)

S. No.	Item	Area (ha)		
1	Under Buildings	2.40		
2.	Under Demonstration Units	3.60		
3.	Under Crops	15.40		
4.	Orchard/Agro-forestry	1.20		
5.	Others	0.0		
	Total	22.6		

1.7. Infrastructural Development:

A) Buildings

	A) Buildings							
		Source			Stage	e		
S.	Name of	of		Complete	e		Incomplete	
No ·	building	funding	Comp letion Date	Plinth area (Sq.m)	Expenditure (Rs. lakh)	Startin g Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR		548m2	41.65			Completed
2.	Farmers Hostel	ICAR		300m2	26.38			Completed
3.	Staff Quarters							
	1 2 3 4 5	- ICAR		400m2	33.30			Completed
4.	Demonstration Units							
	1. Rain water harvesting	RSVY Agri		5000 m2	6.00			Completed
5	Fencing	ICAR			5.00			In progress
6	Rain Water harvesting system	AED, Nagai – (subsidy		2100 m2	0.08			Completed
7	Threshing floor	ICAR			3.00			In progress
8	Implement/ vehicle shed	ICAR			3.00			In progress
9	Irrigation system	ICAR			3.00			In progress
10	Land levelling	ICAR			3.00			In progress
11	Farm godown							

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Four Wheeler Bolero Jeep	2004	4,88,210/-	119298	Good condition
Two Wheeler (TVS – star	2006	39,641/-	56305	Good condition
city)				
Two Wheeler (Suziki	2009	49651/-	11225	Good condition
Access 125)				

C) Equipments & AV aids

SI. No.	Name of Equipments	Date of purchase	Cost (Rs. in lakhs)	Present status
1.	Tractor - TN-51-C-1924	2004	3,47,607	Good
2.	Rotavator	2004	68,500	Good
3.	Cultivator	2004	14,645	Good
4.	Cage Wheel	2004	11,684	Good
5.	Leveller	2004	8.922	Good
6.	Computer with Accessories	2005	75,000	Good
7.	Xerox machine	2005	73,968	Good
8.	Shredder	2006	25,605	Good
9.	Digital Camera	2006	19,950	Good
10.	Flow through paddy thresher	2006	50,000	Good
11.	Laminar air flow chamber	2007	37,856	Good
12.	Autoclave – vertical	2007	33,560	Good
13.	Digital pH meter	2007	14,850	Good
14.	Digital electronic balance	2007	18,150	Good
15.	Computer – Desktop – 2No	2007	93,000	Good
16.	Computer (Laptop – Compaq)	2007	49,400	Good
17.	LCD Projector – 2 No	2007	1,07,000	Good

1.8. Details SAC meeting conducted in 2010-11

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

PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise				
	Rice based farming system is followed in this district				
1.	Rice – Rice – Rice fallow Pulse				
2.	Rice – Rice fallow Pulses/Cotton/Gingelly				
3.	Rice – Rice – Groundnut				
4.	Rice – Rice – Gingelly				
5.	Rice – Rice – Sugarcane (3 years rotation)				

2.2 Description of Agro-climatic Zone & major agro ecological situations

(Based on soil and topography)

S. No	Agro-climatic	Characteristics
	Zone	
1	Cauvery Delta Zone	Nagapattinam a coastal district of Tamil Nadu, lies between $10^0 8^0$ and $11^0 28$ ' in North Latitude and $76^0 34$ ' and $75^0 53$ ' in East Longitude. It is bounded on the north by Cuddalore, South by Palk Strait, west by Tiruvarur and on the east by Bay of Bengal

S. No	Agro ecological situation	Characteristics
1	Coastal Eco system	Nagapattinam is categorized as agro-ecological region 18, representing the Coastal eco-system-Eastern coastal plain, hot sub-humid to semi-arid eco-
		system with a growing period of 90 to 210 days

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Clay loam	High WHC	
2.	Clay sandy loam	Medium WHC	
3.	Sandy soil	Low WHC	
		Total	

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

S.	Crop	Area	Production (Metric tone)	Productivity
No		(ha)	(Metric tons)	(kg/ha)
1.	Paddy	160908	581329	3395
2.	Millets		NA	NA
3.	Pulses		NA	NA
	Blackgram	54476	40208	650
	Greengram	26313	21592	600
	TOTAL			
4.	Sugarcane	3694	NA	NA
5.	Cotton	1633	NA	NA
6.	Oilseeds		NA	NA
	Groundnut	3248	8133	2200
	Gingelly	624	487	480
7.	Coconut	3483	NA	NA
8	Cashew	869	365	420
9	Mango	1845	7232	3920

Source; JDA, Nagapattinam

2.5. Weather data

Month	Dainfall (mm)	Tempe	Relative Humidity	
WIOHHI	Rainfall (mm)	Maximum	Minimum	(%)
April 2010	5.5	35.7	26.4	73.0
May 2010	141.5	35.2	26.7	76.9
June 2010	106.0	35.4	26.2	74.0
July 2010	63.5	34.7	25.6	68.7
August 2010	236.5	34.8	25.5	72.3
September 2010	113.0	32.5	25.3	81.1
October 2010	110.0	32.0	25.6	82.5
November 2010	541.0	29.6	24.2	94
December 2010	512.0	28.2	22.6	97.6
January 2011	18.0	28.9	21.3	93.2
February 2011	37.5	29.8	21.3	88.5
March 2011	0.0	31.7	22.1	83.1

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

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

Category	Population	Production	Productivity
Cattle			
Cow	254611	NA	NA
Buffalo	26934	NA	NA
Crossbred	54061		
Sheep			
Crossbred	9834	NA	NA
Indigenous	23220	NA	NA
Goats			
Crossbred	107719	NA	NA
Indigenous	322205	NA	NA
Pigs			
Crossbred	818	NA	NA
Indigenous	2598	NA	NA
Rabbits	1377	NA	NA
Poultry			
Hens		NA	NA
Desi	264164	NA	NA
Improved	35894	NA	NA
Ducks	12712	NA	NA
Turkey and others	775	NA	NA
Fish			
Marine		61479 tonnes	
Inland		7120 tonnes	2.0t/ha
Prawn		NA	NA
Scampi		NA	NA
Shrimp	C 4 1 1 T	NA	NA

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

Source; Joint Director of Animal husbandry, Nagapattinam

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

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	Nagapattinam	1. Nagapattinam	North Poigainallur., South Poigai nallur Palpannaichery Sikkal, Manikkapangu,	2005	Rice-Rice-Pulses Rice-Ground Nut Rice-Vegetables	Problematic soil Low yield Water scarcity during summer Inundation of water during monsoon	Introduction of micro irrigation techniques Crop diversification Introduction of suitable high yielding & marketable varieties
		2. Thirumarugal	Vadugacherri, Poothanur, Edaiyathangudi, Panangudi,	2007	Rice-Rice-Pulses Rice-Rice-Cotton	Low yield Water scarcity Inundation of water during monsoon	Crop diversification Introduction of suitable high yielding & marketable varieties
2	Tirukkuvalai	3. Keezhaiyur	Thirukkuvalai Keezhaiyur Palakurichi	2006	Rice-Rice-Pulses Rice-Rice-Ground Nut	Problematic soil Water scarcity	Crop diversification Soil health management
3.	Kilvelur	4. Kilvelur	Nangudi Kilvelur Athipuliyur Thevur Ilupur Avarani Puducherry	2004	Rice-Rice-Pulses	 Water scarcity Flood damages Pest and disease problems 	Introduction of suitable high yielding & marketable varieties ICM & IPM Diversification

4.	Vedaranyam	5. Vedaranyam	Vedaranyam Pushbahavanam Periyakuthagai Vettaikaranirrupu Kathiripulam	2005	Rice-Rice-Pulses Rice-Ground Nut Jasmine, Rice-Vegetables Cashew & Mango	Water scarcity Inundation of water during monsoon Salinity problem	Introduction of micro irrigation techniques Introduction high value vegetables. Soil health improvement
		6. Thalainayar	Thalainayar	2005	Rice-Rice-Pulses Jasmine, Rice-Vegetables Cashew & Mango	Flood water damage during monsoon Water scarcity Salinity problem	Introduction of suitable high yielding & marketable varieties Soil health improvement
5.	Mayiladuthurai	7. Mayiladuthurai	Mayiladuthurai Manganallur	2009	Rice-Rice-Pulses Rice-Rice-Ground Nut Rice-Rice-Cotton Rice-Banana	Flood damages Heavy Soil with poor drainage	IFS concept Introduction of alternate cropping system Farm mechanization
		8. Kuthalam	Kuthalam	2009	Rice-Rice-Pulses Rice-Banana Rice-Rice-Ground Nut Rice-Rice-Cotton/ Vegetable	Flood damages Heavy Soil with poor drainage	IFS concept Introduction of alternate cropping system Farm mechanization
6.	Sirkazhi	9. Sirkazhi	Agani Thirukadaiyur Sirkali Vaitheeswarankoil	2007	Rice-Rice-Pulses Rice-Rice-Cotton Rice-Ground Nut/Vegetables Banana, Sugarcane	Poor drainage in heavy soils Saline problem	Precision farming in Vegetables Crop diversification
		10. Kollidam	Kollidam	2009	Rice-Rice-Pulses Rice-Rice-Cotton Rice-Ground Nut/Vegetables Sugarcane, Banana	Poor drainage in heavy soils Saline problem	Precision farming in Vegetables Crop diversification
7.	Tharangampadi	11.Sembanarkoil	Poraiyar Tharangampadi Anaimattam	2009	Rice – Rice – Pulses Rice – Groundnut/Vegetables Rice – Cotton Sugarcane & Banana	Poor drainage in low lands Saline problem Water scarcity	Precision farming in Vegetables Crop diversification

2.9 Priority thrust areas

S. No	Thrust area
1	Precision farming
2	Crop diversification
3	Integrated farming system concept
4	Soil and water conservation
5	Soil health management
6	Farm mechanization
7	Agroforestry
8	Non crop activities
9	Seed production

PART III - TECHNICAL ACHIEVEMENTS

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

0112120	of the Betains of thinger than demotioners of mandatory determines							
	OFT				FLD			
	1				2			
Numb	Number of OFTs Number of farmers		Number of FLDs		Number of farmers			
Targets	Achievement	Targets Achievement		Targets	Achievement	Targets	Achievement	
6	6	30	30	13	13	89	69	

	Training				Extension Programmes			
	3			4				
Numbe	er of Courses	Number of		Number of		Number of		
		Participants		Programmes		participants		
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement	
98	81	5000	2649	510	475	5000	4149	

Seed P	roduction (Qtl.)	Planting materials (Nos.) 6		
	5			
Target	Achievement	Target	Achievement	

Livestock, poultry s	rains and fingerlings (No.)	Bio-p	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.2.9

								Iı	nterventions					
S. No	Thrust area	Crop/ Enterprise	Identified Problem	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.)	Suppl bio produ No.	
	Precision farming	Vegetables	-											
	Crop diversification	Rice	Inundation and water logging during monsoon period	Evaluat ion of submer gence toleran ce rice varietie s for samba season	Populari zation of CORH 3 Hybrid Rice under SRI	2	-	6	15	50+ 50	-	-	-	-
		Vegetables	Problematic soil Low yield Water scarcity during summer	-	Popula rizatio n of PKM 1 Morin ga in deltoic alluvia 1 soil					100g				
	Integrated farming system concept	-	-	-	-	-	-	-	-	-	-	-	-	-
	Soil and water conservation	Pulses and oil seeds	Water scarcity during summer		Popula rizatio n of mobile sprinkl er in rice fallow pulses and oil seeds	1	-	1	2	-	-	-	-	

Soil health management	Rice	Inundation of water during monsoon	Integrate d algal manage ment in rice eco system	-	1	-	-	-	Copper sulphate 12.5 kg	-			
	Rice	Low yield		ICM using bio- inocula nts in rice	3	1	-	-	PSB, KSB, SISB, ZnSB	-	-	-	-
Farm mechanization	Rice	Heavy infestation of weeds Poor crop establishment in SRI	Evaluat ion of differe nt weeder s in SRI		2	1	-	-	-	-	-	-	-
	Rice	Labour scarcity		Farm Mecha nizatio n	4	1	-	-	Seeds and hiring macheneri es				
Agroforestry	-	Non availability of fodders		Popula rizatio n of fodder bank at village level	-	-	-	-	1	-	-	-	-
Non crop activities	Dairy	yield	Area Specific Mineral Mixture for Dairy cows	-	-	-	-	-	ASMM and TANUVA S mineral mixture				
	Fishery	under composite fish culture	Evaluation of polycultur e in inland fisheries in Delta region	-	1		-	1	Fish varieties				

	Poultry	Less hatchery percentage		Popula rizatio n of low cost poultry egg incubat or	-	-	-	-	Incubator				
	Poultry	Low income for landless laborers		Promot ion of Backy ard poultry to improv e the livelih ood of farm women	-	-	-	-		-	-	-	-
		Less feeding efficiency and poor awareness		Scienti fic compo site fish culture	1		-	-	Fish				
IPDM	Rice	Yield reduction due to False Smut disease in rice during Samba season	Manag ement of False Smut disease in Samba paddy	-	1	-	-	-	Fungicide s				
		Yield reduction due to stem borer and leaf folder and other bacterial diseases		IPDM for Samba rice	4	2	-	-	Biopestici des	-	-	-	-

3.B2. Details of technology used during reporting period

C NA	Title of Technology	Source of	Crop	OFT		grammes con	
S.No	Title of Technology	technology	/Enterprise	OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
OFT 1	Evaluation of different weeders in SRI	TNAU	Rice	5	-	3	1
2	Management of False Smut disease in Samba paddy	TNAU	Rice	5	-	1	-
3	Evaluation of polyculture in inland fisheries in Delta region	TANUVAS	Fishery	5	-	1	-
4	Evaluation of submergence tolerance rice varieties for samba season	TNAU	Rice	5	-	-	-
5	Area Specific Mineral Mixture for Dairy cows	TANUVAS	Dairy	10	-	-	-
6	Integrated algal management in rice eco system	TNAU	Rice	5	-	1	-
FLD 7	Farm Mechanization	TNAU	Rice	-	5	4	-
8	Popularization of CORH 3 Hybrid Rice under SRI	TNAU	Rice	-	10	1	-
9	IPDM for Samba rice	TNAU	Rice	-	10	4	-
10	ICM using bio- inoculants in rice	TNAU	Rice	-	10	2	-
11	Popularization of mobile sprinkler in rice fallow pulses and oil seeds	TNAU	Pulses/oil seeds	-	5	1	1
12	Special pulses programme	TNAU	Pulses	-	10	2	1
13	Farmers' participatory seed production in groundnut	TNAU	Ground nut	-	5	-	-
14	Popularization of PKM 1 Moringa in deltoic alluvial soil	TNAU	Moringa	-	5	-	-
15	Protected Cultivation of vegetables under shade net during off season	TNAU	Vegetables	-	4	3	-
16	Popularization of fodder bank at village level	TANUVAS	Fodder	-	5	-	-
17	Popularization of low cost poultry egg incubator	TANUVAS	Poultry	-	5	-	-
18	Promotion of Backyard poultry to improve the livelihood of farm women	TANUVAS	Poultry	-	10	-	-
19	Scientific composite fish culture	TANUVAS	Fishery	-	5	1	-

3.B2 contd..

conta.	•				NT.									
0	FT		1	F). 01 1arii	liers cov	Tro	ining		1	Others	(Specify	9
		Г	Gener			Т	Gener		SC/S	Т	Gene		SC/S'	r T
F				F				F		F				F
10	11			14				18		20	21			24
1	-	-	-	-	-	-	57	18	-	-	15	2	-	-
-	2	-	-	-	-	-	67	3	-	-	-	-	-	-
-	-	-	-	-	-	-	50	1	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	25	5	-	-	-	-	-	-
-	-	-	5	-	-	-	113	22	-	-	30	10	-	-
-	-	-	10	-	-	-	55	5	-	*	-	-	-	-
-	-	-	10	-	-	-	89	10	-	-	-	-	-	-
-	-	-	10	-	-	-	25	10	-	-	-	-	-	-
-	-	-	5	-	-	-	20	0	-	-	-	-	-	-
-	-	-	10	-	-	-	20	2	-	-	-	-	-	-
-	-	-	5	-	-	-	-	-	-	-		-	-	
-	-	-	5	-	-	-	-	-	-	-		-	-	
-	-	-	4	-	-	-	46	11	-	-		-	-	
-	-	-	5	-	-	-	-	-	-	-		-	-	
-	-	-	5	-	-	-	-	-	-	-		-	-	
-	-	-	10	-	-	-	-	-	-	-		-	-	
-	-	-	5	-	-	-	50	1	-	-	-	-	-	-
	F	F M 10 11 1 2	SC/ST	ral SC/ST Gener F M F M 10 11 12 13 1 - - - - - - - - - - - - - - - - - - - - - - 10 - - - 10 - - - 5 - - - 5 - - - 5 - - - 5 - - - 5 - - - 5 - - - 5 - - - 5	SC/ST General F M F M F M F M T M T T T T T T T	OFT	OFT FLD ral SC/ST F M F M F 10 11 12 13 14 15 16 1 - - - - - - - - 2 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 10 - - - - - - - - - - - - - - - - - - - - - -	SC/ST General General General General General General General General General Ge	SC/ST General SC/ST General F M F	OFT	OFT SC/ST General SC/ST General SC/ST Sc	OFT	OFT	OFT

PART IV - On Farm Trial

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

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

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient				-						
Management										
Varietal Evaluation										
Integrated Pest										
Management										
Integrated Crop	1	-	-	-	-	-	-	-	-	1
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										

$\textbf{4.A3.} \ \textbf{Abstract on the number of technologies assessed in respect of livestock enterprises}$

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

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

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

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Cro p	Name of the technology assessed	No. of trials	Numbe r of farmers	in
Integrated Nutrient Management					
Varietal Evaluation		Evaluation of submergence tolerance rice varieties for samba season	5	5	
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries	Rice	Evaluation of different weeders in SRI	5	5	
Integrated Farming System					
Seed / Plant production	Rice	Management of False Smut disease in Samba paddy	5	5	

Value addition			
Drudgery Reduction			
Storage Technique			
Mushroom cultivation			
Total			

$\textbf{4.B.2.} \ \textbf{Technologies} \ \textbf{Refined} \ \textbf{under various} \ \textbf{Crops}$

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	in
Integrated Nutrient Management					
Varietal Evaluation					
Integrated Pest Management					
Integrated Crop Management	Rice	Area Specific Mineral Mixture for Dairy cows	10	10	1
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
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	Milch cow	Area Specific Mineral Mixture for Dairy cows	10	
Disease management				
Value addition				
Production and management	Fish	Evaluation of polyculture in inland fisheries in Delta region	5	5
Feed and fodder				
Small scale income generating enterprises				
Total				

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

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

4.C1. Results of Technologies Assessed

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definitio n	Title of OFT	No. of trial s	Technology Assessed	Parameters of assessment	Data on the parameter 8	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7		9	10
Rice	Rice-Rice- Pulses	1.Heavy infestatio n of weeds 2.Poor crop establishme nt in SRI	Evaluation of different weeders in SRI	5 No.	T1- FP- Hand weeding T 2- Cono weeder T 3- TNAU Power weeder	Weed population/m², WCE, Plant height, No of tillers/m², No. of panicles/hill, Panicle length, No. of grains/ panicle, 1000 grain weight, Grain & Straw yield and B:C ratio	13.0 77 101 cm 39 37 83 141 20.2 6.6 t 7.8 t 2.81	TNAU power weeder performed well and recorded marginally higher grain yield and higher B:C ratio. Easy to operate and increased field capacity are other benefits of TNAU power weeder	Row to row spacing and line to line spacing should be kept more than 25 cm. Square planting also be necessarily maintained. More stirring with easy operation are the benefit.
Rice	Rice-Rice-Pulses	Yield reduction due to False Smut disease in rice during Samba season	Manageme nt of False Smut disease in Samba paddy	5 No	T1- FP- No prophylatic spray T 2- Copper hydroxide (Cocide) 500 ml/ha T 3- Propiconozole @ 500 ml/ha T 4- Super Pseudomonas 2.5 Kg/ha T 5- Carbendzim + Mancozeb @ 1Kg/ha	% grains infested, % panicle infested, Grain yield, B:C ratio	2.81 29.6 22.22 4.9 t/ha 2.04	Spraying of Propiconozole @ 500 ml/ha was found effective control of false smut with lesser number of grain infestation (29.6%) and panicle (22.2%) followed by recommended Kocide (22.6%) as against untreated check (29.62%). Propiconozole and Kocide treatments higher grain yiled of 4950kg/ha and 4332 kg/ha respectively than check.	The farmers got first time awareness on the prophylactic spray with fungicides to control false smut disease and appreciated.
Fish	Inland Fish culture	income under composite fish	Evaluation of polyculture in inland fisheries in Delta region	5 No	T1- Stunted Fingerlings of Fresh water fish Carp varieties (composite fish culture) @ 2500/ac T2- Stunted Fingerlings of Carp varieties with fresh water Prawn (Macrobrackium spp) (Poly fish culture) @ 2500+2500/ac	Feed utilization efficiency, Growth of fish, Fish yield, B:C ratio	In progress		

Rice	Rice-Rice-	Inundation	Evaluation	5 No	T1 - FP	Growth &	4000	Occurrence of prolonged	Swarna sub 1
	Pulses	and water	of			yield data		inundation for 10 days	performed better
		logging	submergenc					before flowering, the Swarna	under prolonged
		during	e tolerance		T 2- Sub swarna 1		5000	Sub 1 performed better than	water stagnation
		monsoon	rice					the local variety BPT 5204	than the local
		period	varieties for					and recorded grain yield of	variety.
			samba					5t/ha than the local check	
			season					(4t/ha).	
Milch	Live Stock		Area	10	T1 - Farmers practice (No/irregular	Milk yield	In progress		
cow			Specific		mineral supplementation)	Onset of first			
			Mineral		T 2- Mineral Mixture	estrumafter			
			Mixture for		30-50 g/day continuously for one year	calving			
			Dairy cows		from the day after calving	No. of			
					T 3- Area specific Mineral Mixture	inseminations			
					-	required for			
					30-50 g/day continuously for one year from	conception			
					the day after calving	-			

Contd..

OFT No.	Any refinement needed	Justification for refinement	Technology Assessed	Source of Technology	Production	unit	Net Return in Rs. / unit	BC Ratio
	11	12	13	14	15	16	17	18
1	Not Needed	Not needed	T1- FP- Hand weeding		6100	(kg/ha)	33200	2.56
			T 2- Cono weeder	TNAU	6500	(kg/ha)	36400	2.80
			T 3- TNAU Power weeder	TNAU	6600	(kg/ha)	36800	2.81
2	Not needed. May be proposed to FLD for 2011-12 programme	Spraying of Propiconozole @500ml/ha as prophylactic measure for effective control of false smut	T1- FP- no prophylatic spray		3985	(kg/ha)	18000	1.8
	1 18		T 2- Copper hydroxide (Cocide) 500 ml/ha	TNAU	4332	(kg/ha)	23000	2.04
			T 3- Propiconozole @ 500 ml/ha	TNAU	4950	(kg/ha)	28000	2.27
			T 4- Super Pseudomonas 2.5 Kg/ha	TNAU	4055	(kg/ha)	20000	1.90
			T 5- Carbendzim + Mancozeb @ 1Kg/ha	TNAU	4102	(kg/ha)	21000	1.95
3			T1- Stunted Fingerlings of Fresh water fish Carp varieties (composite fish culture) @ 2500/ac	(TANUVAS)		(kg/ha)		
			T2- Stunted Fingerlings of Carp varieties with fresh water Prawn (Poly fish culture) @ 2500+2500/ac	(TANUVAS)		(kg/ha)		
4	Not Needed	Not needed	T1 - FP (BPT 5204)		4000	(kg/ha)	20,000	2.00
			T 2- Swarna Sub 1	TNAU	5000	(kg/ha)	30,000	2.50
5			T1 - Farmers practice (No/irregular mineral supplementation)				·	
			T 2- Mineral Mixture 30-50 g/day continuously for one year from the day after calving	(TANUVAS)		Lit/day		
			T 3- Area specific Mineral Mixture 30-50 g/day continuously for one year from the day after calving	(TANUVAS)		Lit/day		

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

OF.					
1	Title of Technology Assessed	:	Evaluation of different weeders in SRI		
2	Problem Definition		1.Heavy infestation of weeds		
			2.Poor crop establishment in SRI		
3	Details of technologies selected	1:	T 2- Cono weeder		
	for assessment				
			T 3- TNAU Power weeder		
_	0	-	T 4- Rotary weeder		
4	Source of technology	:	T1- FP- Hand weeding T 2- Cono weeder - TNAU		
			T 3- TNAU Power weeder - TNAU		
			T 4- Rotary weeder - TNAU		
5	Production system and thematic	•	Rice-Rice-Pulses		
	area				
6	Performance of the Technology	:	Technology Assessed	Production (kg/ha)	
	with performance indicators		T1- FP- Hand weeding	6100	
			T 2- Cono weeder - TNAU	6500	
			T 3- TNAU Power weeder - TNAU	6600	
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:		ing more than 25 cm need to be power weeder. More stiring with of TNAU power weeder.	
8	Final recommendation for micro level situation	:	TNAU power weeder can be ac	lopted for Nagapattinam District	
9	Constraints identified and feedback for research	:	Farmers opined that the TNAU over conoweeder	power weeder performed well	
10	Process of farmers participation and their reaction	:			

1	Title of Technology Assessed	1:	Management of False Smut disease in Samba paddy	
2	Problem Definition	Ė	Yield reduction due to False Smut disease in rice during Sa	ımba season
3	Details of technologies selected for assessment	:	T1- FP- No prophylatic spray T 2- Copper hydroxide (Cocide) 500 ml/ha T 3- Propiconozole @ 500 ml/ha T 4- Super Pseudomonas 2.5 Kg/ha T 5- Carbendzim + Mancozeb @ 1Kg/ha	
4	Source of technology	:	T1- FP- No prophylatic spray T 2- Copper hydroxide (Cocide) 500 ml/ha - TNAU T 3- Propiconozole @ 500 ml/ha - TNAU T 4- Super Pseudomonas 2.5 Kg/ha - TNAU T 5- Carbendzim + Mancozeb @ 1Kg/ha - TNAU	
5	Production system and thematic area	:	Rice-Rice-Pulses	
6	Performance of the Technology	:	Technology Assessed	Production (kg/ha)
	with performance indicators		T1- FP- No prophylatic spray	3985
			T 2- Copper hydroxide (Cocide) 500 ml/ha	4332
			T 3- Propiconozole @ 500 ml/ha	4950
			T 4- Super Pseudomonas 2.5 Kg/ha	4055
			T 5- Carbendzim + Mancozeb @ 1Kg/ha	4102
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	The farmers got first time awareness on the prophylactic to control false smut disease and appreciated.	spray with fungicides
8	Final recommendation for micro level situation	:	Spraying of propiconozole @ 500 ml/ha measure during boot leaf and milky stage to con	
9	Constraints identified and feedback for research	:	Nil	
10	Process of farmers participation and their reaction	:	Farmers are highly interested to adopt to to measure against false smut disease during the d	

1	Title of Technology Assessed	:	Evaluation of polyculture in inland fisheries in Delta region	ı	
2	Problem Definition	:	Low income under composite fish culture		
3	Details of technologies selected for assessment	:	T1- Stunted Fingerlings of Fresh water fish Carp varieties (composite fish culture) @ 2500/ac		
4	Source of technology	:	T2- Stunted Fingerlings of Carp varieties with fresh water Prawn (Macrobrackium spp) (Poly fish culture) @ 2500+2500/ac T1- Stunted Fingerlings of Fresh water fish Carp varieties (composite fish culture)		
		•	@ 2500/ac - (TANUVAS) T2- Stunted Fingerlings of Carp varieties with fresh water F (Macrobrackium spp) (Poly fish culture) @ 2500+2500/ac-		
5	Production system and thematic area	:	Inland Fish culture		
6	Performance of the Technology	:	Technology Assessed	Production (kg/ha)	
	with performance indicators		T1- Stunted Fingerlings of Fresh water fish Carp varieties (composite fish culture) @ 2500/ac		
			T2- Stunted Fingerlings of Carp varieties with fresh water Prawn (Macrobrackium spp) (Poly fish culture) @ 2500+2500/ac		
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	:			

<u> </u>				
1	Title of Technology Assessed	:	Evaluation of submergence tolerance rice v	
2	Problem Definition	:	Inundation and water logging during mons	oon period
3	Details of technologies selected for assessment	:	T1 - FP T2- Swarnal Sub 1	
4	Source of technology	:	T1 - FP T2 Swarna Sub 1 TNAU	
5	Production system and thematic area	:	Rice-Rice-Pulses	
6	Performance of the Technology with performance indicators	:	Technology Assessed T1 - FP T 2- Swarna Sub 1	Production (kg/ha) 4000 5000
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Though the occurrence of prole flowering stage, Swarna Sub 1 variety BPT 5204	onged inundation during the performed better than local
8	Final recommendation for micro level situation	:	Swarna Sub 1 can be recommended for season	or low lying area during rainy
9	Constraints identified and feedback for research	:		
10	Process of farmers participation and their reaction	:	Farmers were reluctant to cultivate Market preference.	e new Swarna Sub 1 because of

OF	1 - 3			
1	Title of Technology Assessed	:	Area Specific Mineral Mixture for Dairy cows	
2	Problem Definition	:		
3	Details of technologies selected for assessment	:	T1 - Farmers practice (No/irregular mineral supplementation) T 2- Mineral Mixture 30-50 g/day continuously for one year from the day after calving T 3- Area specific Mineral Mixture 30-50 g/day continuously for one year from the day after calving	
4	Source of technology	:	T1 - Farmers practice (No/irregular mineral supplementation) T 2- Mineral Mixture (TANUVAS) 30-50 g/day continuously for one year from the day after calving T 3- Area specific Mineral Mixture (TANUVAS) 30-50 g/day continuously for one year from the day after calving	
5	Production system and thematic area	:	Live Stock	
6	Performance of the Technology with performance indicators	:	Technology Assessed T1 - Farmers practice (No/irregular mineral supplementation) T 2- Mineral Mixture 30-50 g/day continuously for one year from the day after calving T 3- Area specific Mineral Mixture 30-50 g/day continuously for one year from the day after calving	Production (kg/ha)
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	:		

D1. Results of Technologies Refined

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology refined	Parameters of refined	Data on the parameter	Results of refinement	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Rice	Rice-Rice- Pulses		Integrated algal managemen t in rice eco system	5 no	T1 - FP No application of Cu So4 T 2- Cu So4 @2.5 Kg/ha T 3- CuSo ₄ - 2.5kg/ha @200/kg Cono / rotary weeder 2No./ha @500/No Potash -100 kg/ha @6/kg	Growth & yield data	4750 4950 5190	Yield increased with the application of CuSO ₄ along with potash and cono-weeder by increasing the tillering capacity of the crop.	Farmers had better results with the application of CuSO ₄ along with potash and cono-weeder. Some farmers felt that the application of CuSO ₄ may be increased to have better results.

Contd..

OFT No.	Any refinement needed	Justification for refinement	Technology Assessed	Source of Technology	Production	unit	Net Return in Rs. / unit	BC Ratio
	11	12	13	14	15	16	17	18
1			T1 - FP No application of Cu So4		4750	(kg/ha)	20,000/ha	1:1.72
			T 2- Cu So4 @2.5 Kg/ha	TNAU	4950	(kg/ha)	21,500/ha	1:1.78
			T 3- CuSo ₄ -2.5kg/ha @150/kg	TNAU		(kg/ha)		
			Cono / rotary weeder 2No./ha @500/No		5190		22,900/ha	1:1.83
			Potash -100 kg/ha @6/kg					

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

OFT - 1

1	Title of Technology refined	:	Integrated algal management in rice eco system	
	Problem Definition			
3	Details of technologies selected for refinement	:	T1 - FP No application of Cu So4 T 2- Cu So4 @2.5 Kg/ha T 3- CuSo ₄ -2.5kg/ha @200/kg Cono / rotary weeder 2No./ha @500/No Potash -100 kg/ha @6/kg	
4	Source of technology	Ξ	T1 - FP No application of Cu So4 T 2- Cu So4 @2.5 Kg/ha - TNAU T 3- CuSo ₄ -2.5kg/ha @200/kg - TNAU Cono / rotary weeder 2No./ha @500/No Potash -100 kg/ha @6/kg	
5	Production system and thematic area	:	Rice-Rice-Pulses	
6	Performance of the Technology with performance indicators	:	Technology Assessed T1 - FP No application of Cu So4	Production (kg/ha) 4750
			T 2- Cu So4 @2.5 Kg/ha	4950
			T 3- CuSo ₄ -2.5kg/ha @200/kg Cono / rotary weeder 2No./ha @500/No Potash -100 kg/ha @6/kg	5190
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Farmers had better results with the application of Custono-weeder.	SO ₄ along with potash and
8	Final recommendation for micro level situation	:	Algal management is very effective in the areas wher irrigation.	e there is bore-well
9	Constraints identified and feedback for research	:	Nil	
10	Process of farmers participation and their reaction	:	Some farmers felt that the application of CuSO_4 may results.	be increased to have better

PART V - FRONTLINE DEMONSTRATIONS

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

S1. No.	Category	Farming Situation	Season and	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area	(ha)		o. of farme monstrati		Reasons for shortfall in achievement
			Year						Proposed	Actual	SC/ST	Others	Total	
1		Wetland	Rabi 2010	Rice	BPT 5204	-	Farm Mechanization	Mechanization in Rice	2	2		5	5	
2	Cereals	Wetland	Rabi 2010	Rice	-	CORH 3	Popularization	Popularization of CORH 3 Hybrid Rice under SRI	5	5		10	10	
3		Wetland	Rabi 2010	Rice	BPT 5204		Yield maximization	IPDM for Samba rice	4	4		10	10	
4		Wetland	Rabi 2010	Rice			Yield maximization	ICM using bio- inoculants in rice	10	10		10	10	
5	Pulses	Wetland	Winter 2011	Rice fallow pulses & oil seeds			Popularization	Popularization of mobile sprinkler in rice fallow pulses and oil seeds	10 (5 Pulses + 5Oil seeds)	5		5	5	Delay in purchase of mobile sprinkler
6		Garden land	summer 2011	Black gram			Integrated Crop Mangement.	Special pulses programme	4	4		10	10	
	Oilseeds	Garden land	summer 2011	Ground nut			Integrated Crop Mangement.	Farmers' participatory seed production in groundnut	1	1		5	5	
	Millets													
	Vegetables	Garden land	Kharif 2010	Moringa	PKM 1		Popularization	Popularization of PKM 1 Moringa in deltoic alluvial soil	1	1		5	5	
		Garden land	Summer 2011	Tomato, Chillies Capsicum	Indra	Lakshmi Priyanka	Yield maximization	Protected Cultivation of vegetables under shade net during off season	1200 sq.m	1200 sq.m		4	4	

I ru			1	T	1		1			1	1	
Flowers												
Ornamental												
Fruit												
Spices and												
condiments												
Contamients												
Gi.l												
Commercial												
Medicinal and												
aromatic												
Fodder	Garden land	Summer 2011	CO(CO(CN) 4 Guinea grass – Desmanthus Subabul	CO(CO(CN) 4 - Guinea grass - Desmanthus Subabul	Popularization	Popularization of fodder bank at village level	1			5		
Plantation												
Fibre												
11010												
Doing								1	-			
Dairy												
Poultry	Incubator	2010- 2011	low cost poultry egg incubator		Popularization	Popularization of low cost poultry egg incubator				5		
	Irrigated	2010-11	Backyard poultry	Local & hybrid	Improving livelihood of farmers	Promotion of Backyard poultry to improve the livelihood of farm women	-	-		10		

Rabbitry												
Pigerry												
Sheep and												
goat												
gour												
Decales												
Duckery												
Common												
carps												
Mussels												
fishes	Inland fish culture	2010- 2011	Composite fish culture	Cutla Rogu Mirgal		Popularization	Scientific composite fish culture	1	1	5	5	
				<u> </u>								
Oyster												
mushroom												
Button												
mushroom												
muom oom												
Vermicompost												
verinicompost												
Sericulture												
Apiculture	_				_							
Implements												
Others												
		<u> </u>	L									

(specify)							

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

S1. No.	Category	Farming Situation	Season and Year	Crop	Variety / breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	S	tatus of soil		Previous crop grown
										N	P	K	
1	Oilseeds	Garden land	summer 2011	Ground nut			Integrated Crop Mangement.	Farmers' participatory seed production in groundnut	summer 2011	L	M	Н	
2	Pulses	Wetland	Winter 2011	Rice fallow pulses & oil seeds			Popularization	Popularization of mobile sprinkler in rice fallow pulses and oil seeds	Winter 2011				
3		Garden land	summer 2011	Black gram			Integrated Crop Mangement.	Special pulses programme	summer 2011	L	M	Н	
4	Cereals	Wetland	Rabi 2010	Rice	BPT 5204	-	Farm Mechanization	Mechanization in Rice	Rabi 2010	L	M	Н	Fallow
5		Wetland	Rabi 2010	Rice		CORH 3	Popularization	Popularization of CORH 3 Hybrid Rice under SRI	Rabi 2010	L	М	Н	Fallow
6		Wetland	Rabi 2010	Rice	BPT 5204		Yield maximization	IPDM for Samba rice	Rabi 2010	L	М	Н	Fallow
7		Wetland	Rabi 2010	Rice			Yield maximization	ICM using bio- inoculants in rice	Rabi 2010	L	M	Н	Fallow
	Millets												
8	Vegetables	Garden land	Kharif 2010	Moringa	PKM 1		Popularization	Popularization of PKM 1 Moringa in deltoic alluvial soil	Kharif 2010	L	M	Н	Vegetables
9		Garden land	Summer 2011	Tomato, Chillies Capsicum		Lakshmi Priyanka indra	Yield maximization	Protected Cultivation of vegetables under shade net during off season	Summer 2011	L	M	Н	Vegetables

Flowers						
Ornamental						

Fr	7									
1	ruit									
SJ	Spices and									
cc	condiments									
Co	Commercial									
M	Medicinal and									
ar	romatic									
		Garden land	Summer 2011	CO(CO(CN) 4 Guinea grass – Desmanthus Subabul	CO(CO(CN) 4 - Guinea grass – Desmanthus	Popularization	Popularization of fodder bank at village level			
Fo	Fodder				Subabul					
Pl	Plantation									
Fi	Fibre									

5. B. Results of Frontline Demonstrations

6. B. 1. Crops

Crop	Name of the technology	Variety	Hybrid	Farming situation	No. of	Area		Yie	ld (q/ha)		%	*Econo		nonstration ((Rs	ics of check s./ha)	
Сюр	demonstrated	variety	Hybrid		Demo.	(ha)		Demo)	Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							Н	L	A										
Cereals	Mechanization in Rice	BPT 5204	-	Wetland	5	2	72	60	66	60	10	24000	67200	43200	2.8	26500	60480	33980	2.3
	Popularization of CORH 3 Hybrid Rice under SRI	-	CORH 3	Wetland	10	5	81	68	74.5	54.5	36.69	25450	74500	49050	2.92	24320	54500	30140	2.23
	IPDM for Samba rice	BPT 5204	-	Wetland	10	4	67	56	61.5	58	6.03	24050	61500	37450	2.55	26000	58000	32000	2.23
	ICM using bio- inoculants in rice		-	Wetland	10	10					In progress								
Pulses	Popularization of mobile sprinkler in rice fallow pulses and oil seeds			Wetland	5	5					In progress								
	Special pulses programme	ADT 3		Garden land	16	6.4	5.6	2.5	4.3	2.5	41.8	9250	17200	7950	1.85	7700	10000	2300	1.30
Oilseeds	Farmers' participatory seed production in groundnut			Garden land	5	1					In progress								
Millets																			
winiets																			
Vegetables	Popularization of PKM 1 Moringa in deltoic alluvial soil	PKM 1		Garden land	5	1					In progress								
	Protected Cultivation of vegetables under shade net during off season	Tomato Chilli Capsicum	Lakshmi Priyanka Indira	Garden land	4	300 sq.m					In progress								
Flowers																			

Ornamental		1									1	1	
T													
Fruit													
Spices and													
condiments													
Commercial													
Medicinal													
and aromatic													
	Popularization of fodder bank at village level	Garden land	CO(CO(CN) 4 - Guinea grass - Desmanthus Subabul	5	1			In progress					
Fodder			Sububui										
Plantation													
Fibre													
Others													
(pl.specify)													

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

** BCR= GROSS RETURN/GROSS COST

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

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

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

5.B.2. Livestock and related enterprises

Type of	Name of the technology	Breed	No. of	No. of	Yield (q/ha)				%	*Ec	Rs.	f demonstrat /unit)	*Economics of check (Rs./unit)				
livestock	demonstrated	Biccu	Demo	Units	Ι	Demo)	Check if any	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					Н	L	Α										
Dairy																	
																	
																	+
Poultry	Popularization of low cost poultry egg incubator	egg incubator	5	1					In progress								
	Promotion of Backyard poultry to improve the livelihood of farm women	Local & hybrid	10	-					In progress								
Rabbitry																	
Pigerry																	┿
1.gen.y																	+
																	+
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	n to technology demonstrated
Parameter with unit	Demo	Check if any

5.B.3. Fisheries

Type of	Name of the technology	Breed	No. of	Units/ Area	its/ Area (m^2) $N = M = M + M = M + M = M = M = M = M = M$		(q/ha)	%	*Economics of demonstration Rs./unit) or (Rs./m2)					*Economics of check Rs./unit) or (Rs./m2)				
Breed	demonstrated	breed	Demo	(m ²)			0		Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
					Н	L	Α											
Common carps	Scientific composite fish culture	Cutla Rogu Mirgal	5	0.4					In progress									
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	n to technology demonstrated
Parameter with unit	Demo	Check if any

5.B.4. Other enterprises

	Name of the technology	Variety/	No. of	Units/ Area		Y	ield (q/ha)	%	*Econor		onstration (Rs./ ./m2)	unit) or	*Economics of check (Rs./unit) or (Rs./m2)				
Enterprise	demonstrated	species	Demo	{m ² }	Demo		Check if any	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR		
					Н	L	Α											
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	n to technology demonstrated
Parameter with unit	Demo	Local

5.B.5. Farm implements and machinery

Name of the	Implement in		No. of	Area covered		quirement ndays	%	Savings in labour	*Eco	nomics of (Rs.	demonstrat ha)	ion	*	Economic (Rs.	cs of check ./ha)	
implement	Rs.	demonstrated	Demo	under demo in ha	Demo	Check	save	(Rs./ha)	Gross cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR

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

** BCR= GROSS RETURN/GROSS COST

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

	Data on other parameters in relation	n 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	Area (Area (ha)		. of farmer monstratio		Reasons for shortfall in achievement
					year	Proposed	Actual	SC/ST	Others	Total	
	Production Technology										
	IPM										
	Farm Implements										

5. B. 6.2 Production technology demonstrations

Performance of demonstrations

Farming situation	Technology Demonstrated	Area (ha)	No.of	N/	TT. 1	Yield (d	q/ha)	% Increase	Ecor	nomics of (Rs.		tion	Econon	nics of loc	al check (l	Rs./ha)
			demo.	Variety	Hybrid	Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR

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

		Demonstrat		ii cotto	II uul III	5 =010											
	Farming	Technology	Area				Yield (d	ı/ha)	%	Ecor	nomics of	demonstra	tion	Econor	nics of loc	al check (Rs./ha)
~	situation	Demonstrated	(ha)	No.of			,	•	Increase		(Rs.	/ha)					
Category			` '	demo.	Variety	Hybrid				Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
				demoi			Demo	Local		Cost	Return	Return	Den	Cost	Return	Return	Den
						-	Dellio	Local		Cost	Ketuili	Ketuiii		Cost	Ketuili	Ketuiii	
Bt hybrids																	
·																	
Desi																	
hybrids																	
(AXA)																	
HXB																	
Hybrids																	
Trybrids																	
HXH																	
Hybrids																	
Herbacium																	
Varieties																	
varieties																	
Hirsutum																	
Varieties																	
Arboreum																	
Varieties																	
v an retics	1	1			l	1		l	l .	l	l	1	1	1		1	l

5.B.6.3 Integrated pest management demonstrations

Farming situation	Variety	Hybrid	No. of blocks	Total No. of	Area	Incide	nce of pe	est and	Seed C (q/ha)	otton Yi	eld	Econom (Rs./ha)	ics of demo	onstration		Economics of local check (Rs./ha)			
				Demo.	(ha)	IPM	Non IPM	% Change	IPM	Non IPM	% Change	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR

										ī
										Ī
			_		_		,			1

5.B.6.4 Demonstrations on farm implements

Name of the implement	Area (Ha)	No. of Demo.	Name of the technology demonstrated		requireme on (Rs./ha)	
				Demo	Local check	% change
Total						

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

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

${\bf 5.B.6.6 Technical\ Feedback\ on\ the\ demonstrated\ technologies\ on\ all\ crops\ /\ enterprise}$

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1			
2			

5.B.6.7 Farmers' reactions on specific technologies

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1			
2			

5.B.6.8 Extension and Training activities under FLD

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

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids

	Demonstra	Name No. Area Yield (q/ha)							*Economics of demonstration *Economic (Rs./ha) (Rs./ha)						cs of check		
Type of	Name of the technology	Name of the	No. of	Area		Yie	ld (q/	ha)	%		(Rs.	/ha)			(Rs.	/ha)	
Breed	demonstrated	hybrid	Demo	(ha)		Demo		Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals					Н	L	A										
Bajra																	
Maize																	
Paddy																	
Sorghum																	
Wheat																	
Others																	
(pl.specify)																	
Total Oilseeds																	
Castor																	
Mustard																	
Safflower																	
Sesame																	
Sunflower																	
Groundnut																	
Soybean																	
Others																	
(pl.specify)					-												
Total Pulses																	
Greengram																	
Blackgram																	
Bengalgram																	
Redgram																	
Others																	
(pl.specify)																	
Total																	
Vegetable																	
Bottle gourd																	
Capsicum																	
Others																	
(pl.specify)																	
Total																	
Cucumber																	
Tomato																	
Brinjal																	
Okra Onion													-	-	<u> </u>		
Potato													 	 	 	1	
Field bean																	
Others																	
(pl.specify)																	
Total									-								
Commercial]	<u> </u>
crops					-												<u> </u>
Sugarcane Coconut													-	-	<u> </u>		-
Others					-								1	1	-		
(pl.specify)					ĺ									1			
Total																	
Fodder crops													İ				
Maize																	
(Fodder)																	
Sorghum																	
(Fodder)														1	 		-
Others (pl.specify)																	
Total													 	 	 		
า บเลา					<u> </u>						l	l	1	1	1		

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)

					No.	of Partici	pants			
Area of training	No. of		General			SC/ST		,	Grand Tot	al
C .	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies	1	20	-	20				20	-	20
Cropping Systems	1	14	1	15				14	1	15
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation	1	116	16	132				116	16	132
Seed production										
Nursery management										
Integrated Crop Management	1	21	4	25				21	4	25
Soil and Water Conservation	1	25	-	25				25	-	25
Integrated Nutrient Management										
Production of organic inputs										
Others – machineries for rice	1	60	15	75				60	15	75
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	1	20	8	28				20	8	28
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	1	10	3	13				10	3	13
Others (pl. specify)										
c) Ornamental Plants										
Nursery Management	<u> </u>									

Management of notted plants	1		Ι	Ι		I	I	I
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	1	18	2	20			18	2	20
Storage loss minimization techniques									
Value addition									
Women empowerment									
Location specific drudgery production									
Rural Crafts									
Women and child care									
Others (pl. specify)									
Agrl. Engineering									
Farm machinery and its maintenance	1	33	2	35			33	2	35
Installation and maintenance of micro	1	20	0	20			20	0	20
Use of Plastics in farming practices									
Production of small tools and	1	10	-	10			10	-	10
implements Repair and maintenance of farm	1	20	0	20			20	0	20
machinery and implements Small scale processing and value									
addition Post Harvest Technology									
Others – farm mechanization	4	112	22	125			112	22	125
	4	113	22	135			113	22	135
Plant Protection									
Integrated Pest Management	1	21	4	25			21	4	25
Integrated Disease Management									
Bio-control of pests and diseases	1	67	3	70			67	3	70
Production of bio control agents and bio pesticides									
Others -									
Fisheries									
Integrated fish farming									
Carp breeding and hatchery									
management Carp fry and fingerling rearing									
Composite fish culture	1	50	1	51			50	1	51
Hatchery management and culture of									
freshwater prawn Breeding and culture of ornamental							1		
fishes Portable plastic carp hatchery									
Pen culture of fish and prawn						-	1		
Shrimp farming						-			
Edible oyster farming									
						<u> </u>			

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	2	44	3	47		44	3	47
Vermi-compost production	1	48		48		48		48
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	1	23	25	48		23	25	48
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	1	35	15	50		35	15	50
farmers/youths Others (pl. specify)								
Agro-forestry								
Production technologies								
Nursery management	1	30	1	31		30	1	31
Integrated Farming Systems								
Others (Pl. specify)								
TOTAL								

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

	No. of				No.	of Partici	pants			
Area of training	Course s		General	1		SC/ST	ı		Grand Tot	
Crop Production	1 -	Male	Female	Total	Male	Female	Total	Male	Female	Total
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management	1	40	22	62				40	22	62
Integrated Crop Management	1	23	-	23				23	-	23
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl. specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high	1	10	20	30				10	20	30
volume crop Off-season vegetables	1	_	22	22				_	22	22
Nursery raising										
Exotic vegetables	1	70	15	85				70	15	85
Export potential vegetables										
Grading and standardization	1	40	5	45				40	5	45
Protective cultivation										
Others (Precision farming)	3	88	2	90		-	-	88	2	90
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	1									

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	1	30	05	35		30	05	35
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								

Г						1		1	
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	1	10	15	25			10	15	25
Women empowerment									
Location specific drudgery production									
Rural Crafts									
Women and child care									
Others (pl. specify)									
Agrl. Engineering									
	1	0	20	20			0	20	20
Farm machinery and its maintenance	1	0	20	20			0	20	20
Installation and maintenance of micro irrigation systems									
Use of Plastics in farming practices									
Production of small tools and implements									
Repair and maintenance of farm machinery and implements									
Small scale processing and value addition									
Post Harvest Technology									
Farm mechanization	3	65	29	94			65	29	94
Plant Protection									
Integrated Pest Management	2	33	6	39			33	6	39
Integrated Disease Management	1	30	15	45			30	15	45
Bio-control of pests and diseases									
Production of bio control agents and bio	1	30	10	40			30	10	40
pesticides			_						
Others (papaya mealy bug)	1	25	5	30			25	5	30
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)									

						1			
2	30	7	37				30	7	37
1	23	2	25				23	2	25
1	34	20	54				34	20	54
1	50	-	50				50	-	50
	1	1 23	1 23 2	1 23 2 25	1 23 2 25	1 23 2 25	1 23 2 25	1 23 2 25 23 1 34 20 54 34	1 23 2 25 23 2 1 34 20 54 34 20 1 34 20 54 34 20

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

	No. of				of Particij	Participants						
Area of training	Courses	General				SC/ST	Grand To					
Nursery Management of Horticulture crops		Male	Female	Total	Male	Female	Total	Male	Female	Total		
Training and pruning of orchards												
Protected cultivation of vegetable crops												
Commercial fruit production												
Integrated farming												
Seed production												
Production of organic inputs	1	29	3	32				29	3	32		
Planting material production												
Vermi-culture												
Mushroom Production	1	23	25	48				23	25	48		
Bee-keeping												
Sericulture												
Repair and maintenance of farm machinery and implements	2	54	28	82				54	28	82		
Value addition	1	10	15	25				10	15	25		
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	1	-	34	34				-	34	34		
Fry and fingerling rearing												
Any other (mealy bug parasitoids)	1	30	10	40				30	10	40		
TOTAL	<u> </u>	50	10					50				

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

	No. of				No.	of Particij	pants				
Area of training	Courses	General SC/ST Grand Tot									
N N N N N N N N N N N N N N N N N N N		Male	Female	Total	Male	Female	Total	Male	Female	Total	
Nursery Management of Horticulture crops	1	30	15	45				30	15	45	
Training and pruning of orchards											
Protected cultivation of vegetable crops	1	50	5	55				50	5	55	
Commercial fruit production											
Integrated farming											
Seed production											
Production of organic inputs											
Planting material production											
Vermi-culture											
Mushroom Production										<u> </u>	
Bee-keeping										 	
Sericulture											
Repair and maintenance of farm machinery and implements											
Value addition	<u> </u>										
Small scale processing											
Post Harvest Technology											
Tailoring and Stitching											
Rural Crafts											
Production of quality animal products											
Dairying										 	
Sheep and goat rearing										 	
Quail farming	<u> </u>									 	
Piggery										├	
Rabbit farming											
Poultry production	<u> </u>									├ ──	
Ornamental fisheries										<u> </u>	
Composite fish culture		50		51				50	1	51	
<u> </u>	1	50	1	51				50	1	51	
Freshwater prawn culture											
Shrimp farming											
Pearl culture											
Cold water fisheries											
Fish harvest and processing technology											
Fry and fingerling rearing											
Any other (tree cultivation)	1	7	25	32				7	25	32	
TOTAL											

7. E. Training Programmes for Extension Personnel including sponsored training programmes (On Campus)

	No. of				No.	of Particip	oants			
Area of training	Courses		General		SC/ST			Grand Tot		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	6	123	18	141				123	18	141
Integrated Pest Management	2	35	-	35				35	-	35
Integrated Nutrient management	1	15	-	15				15	-	15
Rejuvenation of old orchards										
Protected cultivation technology	1	26	5	31				26	5	31
Production and use of organic inputs	1	25	5	30				25	5	30
Care and maintenance of farm machinery and implements	3	50	5	55				50	5	55
Gender mainstreaming through SHGs	1	18	2	20				18	2	20
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 Agroforestry	1	15	-	15				15	-	15
Total										

7. F. Training programmes for Extension Personnel including sponsored training programmes (Off Campus)

	No. of				No.	of Particip	pants			
Area of training	Courses		General			SC/ST		(Grand Tota	al
		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

G.N.		No. of Courses				No.	of Particip	oants			
S.No.	Area of training			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										
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	1	20	-	20				20	-	20
8.b.	Others (rice mechanization)	1	18	2	20				18	2	20
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 (Post harvest technology and fish processing)	1	-	34	34				-	34	34
11.	Home Science										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others ("Gender sensitization")	1	18	2	20				18	2	20
12	Agricultural Extension										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl. specify)										
	Total										

Details of sponsoring agencies involved

- 1. Department of Agricultural Engineering, Nagapattinam
- 2. GOI through Directorate of Extension Education, TNAU, Coimbatore
- 3. Central Institute of Fisheries Technology (CIFT), Cochin

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

		No. of	of No. of Participants								
S.No.	Area of training	Courses	General		SC/ST			Grand Total			
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production										
1.c.	Commercial vegetable production										
1.d.	Integrated crop management										
1.e.	Organic farming										
1.f.	Others (pl.specify)										
2	Post harvest technology and value addition										
2.a.	Value addition										
2.b.	Others (pl.specify)										
3.	Livestock and fisheries										
3.a.	Dairy farming										
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing										
3.d.	Piggery										
3.e.	Poultry farming										
3.f.	Others (pl.specify)										
4.	Income generation activities										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides,										
	bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery										
	and implements										
4.d.	Rural Crafts										
4.e.	Seed production										
4.f.	Sericulture										
4.g.	Mushroom cultivation										
4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	1 1 57										
5	Agricultural Extension										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	Grand Total										

PART VIII – EXTENSION ACTIVITIES

Extension Programmes (including activities of FLD programmes)

Nature of Extension	No. of	No.	No. of Participants (General)		No. of Participants SC / ST			No. of extension personnel		
Programme	Programmes	Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	9	145	23	168	-	-	-	5	-	-
Kisan Mela	-	-	-	-	-	-	-	-	-	-
Kisan Ghosthi	-	-	-	-	-	-	-	-	-	-
Exhibition	3	850	515	1365	-	-	-	15	7	22
Film Show	-	-	-	-	-	-	-	-	-	-
Method Demonstrations	15	637	235	872	-	-	-	-	-	-
Farmers Seminar	3	150	-	150	-	-	-	-	-	-
Workshop	-	-	-	-	-	-	-	-	-	-
Group meetings		-	-	-	-	-	-	-	-	-
Lectures delivered as resource persons	15	550	65	615	-	-	-	-	-	-
Newspaper coverage	63	-	-	-	-	-	-	-	-	-
Radio talks	20	-	-	-	-	-	-	-	-	-
TV talks	5	-	-	-	-	-	-	-	-	-
Popular articles	4	-	-	-	-	-	-	-	-	-
Extension Literature	9	-	-	-	-	-	-	-	-	-
Advisory Services	129	-	-	654	-	-	-	-	-	17
Scientific visit to farmers field	110									
Farmers visit to KVK										
Diagnostic visits	84	75	9	84						
Exposure visits	4	172	28	200				2		2
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) News letter	2									
Total										

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)						
Oilseeds						
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
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						
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				
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				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings	,			
Others (Pl. specify)				
Total				

$\begin{array}{c} \textbf{PART X-PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND} \\ \textbf{DROUGHT MITIGATION} \end{array}$

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

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

Name	:	Uzhavan
Date of start	:	Oct – Dec 2007
Periodicity	:	Quarterly
No. of copies distributed every quarter	:	100

(B) Literature developed/published

Item	Title	Authors name	Number
Research	Influence of organics for increased	Venkatakrishnan, D., K.	
papers	sugar recovery in sugarcane. IN:	Dhanasekaran, K. Sivakumar	
	International conference on Food technology	and R. Devanathan.	
	Role of Humic acid and fertilizers on	Sivakumar, K and T.	
	Nutrient uptake of rice.	Dhamodaran	
	Per se performance & heterosis of two	Malathi. G.,T. Dhamaodaran	
	hybrids of chillies for capsaicin & Oleoresin content in three different seasons	and D.Veeraragavathattham	
	Seasonal influence of per re	Malathi. G.,T. Dhamaodaran	
	performance of 2 hybrids and their parents of chillies for growth & yield characlets	and D.Veeraragavathattham	
	Effect of humic acid and fertilizers on growth and yield of rice.	Sivakumar. K., Dhamodaran. T, D. Venkatakrishnan and K. Dhanasekaran	
	Effect of different organic manures on yield components of sugarcane.	Venkatakrishnan, D., S. Manimaran, K. Dhanasekaran, K. Sivakumar and S. Srinivasan	
	Per se performance of twelve hybrids and their parents of chillies for yield contributing triats.	Malathi, D. D. Veeraragavathantham and T. Dhamodarn	
	Preserving soil health and maximizing rice yield by integrated application of fertilize and humic acid.		
Technical			
reports			
News letters			
Technical bulletins			
Popular articles	Azolla as feed for turky	T. Dhamaodaran, Sivakumar. K and V. Gnanabharathi	
	Sea bass culture in fresh water	T. Dhamaodaran, R. Revathi and Sivakumar.	
Extension literature	Newly released varieties and farm implements of TNAU	T. Dhamaodaran, V. Gnanabharathi and R.Vedharathinam	500
Others (books)	SRI technology & farm implements	Dr. K. Rangasamy, Dr. P.Dhananchezhiyan, Dr.J.John Gunasekar, Selvi. K.Rathi kanna, Dr.B.J. Pandiyan,	

		Dr.M.V.Rengasamy	
	Plant Biochemistry	Dr.V.Arunkumar, Dr.N.Senthil	
		Kumar and Dr.K.Sivakumar	
	Flora of Tropical Dry ever green forest	Dr.A.Bala, Dr. R.Revathi and	
		Dr.M.G.Rao	
TOTAL			

10. B. Details of Electronic Media Produced

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

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

Success Story I

Mr.M.Sekar, S/O Muthu, Pattamangalam, Keelvelur has landholding of 9 acres wetland and has 15 years of experience in rice cultivation. He is a B.Sc. graduate working in Tamil Nadu Civil Supplies Corporation. He happened to attend the trainings conducted by Krishi Vigyan Kendra, Sikkal three years back on SRI cultivation that is how he had his first contact with KVK. Subsequently, he was trained on benefits of Azolla, mechanization and nutrient management in rice cultivation. He was further taken to various rice research stations of Tamil Nadu Agricultural University (TNAU) on exposure visit. He was much impressed and decided to take up the technologies of TNAU and ICAR. He showed much interest towards adopting the technologies. His adoption of new and improved technologies were well monitered by KVK scientists.

His conviction in following the technologies has prompted KVK to give On Farm Trials (OFT), Adaptive Research Trials (ART) and Front Line Demonstration Trials (FLD) in paddy for the past two years. His income has increased upto Rs.22,500/acre in 2011, while he got only Rs.15,000/acre under conventional method of rice cultivation in 2009. Now he has become a progressive farmer in the village and farmers receive cropping advice from him. Hence, his social status and recognition among the farming community has improved tremendously which was a source of encouragement for his daughter to become an agriculture scientist. To fulfill her aim she has joined B.Sc. (Agri) in 2010 which was hailed by her parents and relatives.

Success Story II

Shri. Balakrishnan, S/o. Sankaran a progressive farmer of Karaiyiruppu a nearby village from KVK premises, who used to visit KVK very frequently to take advice on farm activities. He is a rice producer and was not able to generate good remuneration for all his efforts, all the firms fighting against floods, droughts and natural calamities, being this coastal district from the tail end of the cauvery delta net work. Rice is the prime crop since the soil is clayey with poor drainage and any cropping is only based on rice farming. Rice being a low remunerative crop

he wanted to switch over to alternate cropping/farming system to generate more income and sustainability in production system.

Since water is a very scarce input during summer and kharif, he has excavated a farm pond (1.0 acre) for harvesting rain water with the assistance of the department of Agricultural Engineering. He has also raised a piece of low level (0.5 ac) with the excavated soil. He has been practicing dairy, fish farming besides rearing back yard poultry. He has approached the KVK to take advice on improving his farm and to generate more income. Accordingly KVK scientists have visited his farm and appropriate advises/solutions were offered from time to time.

He was suggested to go for high value crops like bhendi, chillies and tomato in the raised portion of his farm (0. 5 ac.). He has also made a record yield from this bhendi crop. He has obtained Rs.60,000/- by sale of bhendi (price ranged from Rs.8/- to Rs.12/- per kg).

This crop was witnessed by 250 of farmers who have been motivated to go for hybrid vegetables. His field is being witnessed by farmers from various blocks and taking his advice. He is serving an excellent model in this district, not only in vegetables, but also in back yard poultry.

Success Story III

Tmt. Kasthuri W/o.Mr. Ramadoss, Agni, Sirkali taluk of Nagapattinam District is a privileged and inventive woman keen on utilizing scientific information in crop production technologies. She used to actively participate in various training programmes conducted regularly at KVK, Sikkal. Apart from attending the training programme she also has the habit of watching Agricultural programmes in Doordhashan (Pothigai) channel, listening AIR, reading dailies and agriculture magazines.

Reasons for establishment

- Started vegetable production to utilize recourses effectively with some income generation.
- Self reliance
- Social status
- Perceived opinion

Due to vegetable production the following advantages were perceived.

- Increased family income
- Improved social status
- Increased self satisfaction

Constraints and Suggestions

- ❖ Non availability of quality seeds/ seedlings
- ❖ Fluctuation in production/yield depending upon the climatic condition
- Limited area and resource
- Price fluctuation

Institutional support on market intelligence will greatly help in marketing the products at higher price thus increasing the profit margin.

Case analysis

The case illustrates that vegetable production by Tmt. Kasthuri has fetched considerable income from limited area and resource. An attitude characterized by a strong orientation towards scientific and systematic approach to achieve the objectives has enabled her to reap the benefits of the vegetable cultivation.

Further her full time involvement and commitment in vegetable as a main avocation and income generating activity, gave her the confidence for effective involvement of resources and time in listening/reading mass media, contacting KVK and TNAU scientists in acquiring knowledge about the improved vegetable production which proved to be the driving force for producing vegetables.

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

- a. The training Programmes, OFT and FLD are proposed based on the needs of the farming community
- b. All the training Programmes were announced well in advance through AIR, Karaikal and local dailies.
- c. Method demonstrations are also arranged in the village based on the requirements.
- d. The technologies are explained and computer and CD's in the training conducted in the village also.
- e. Trainees are taken on exposure visit to the fields of successful farmers to create confidence and motivate them to start a new venture for becoming entrepreneur.
- f. In training programmes resource farmers are being hired to share their experience with trainees to build confidence about the technical feasibility and economic viability.
- g. The impact of TOT is documented by action oriented photographs, video film, writing of success stories and publishing in dailies and journals.

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	Rice	Cultivated 40 numbers of	To create awareness
		rice traditional varieties	

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

- -Group Discussion
- Group interaction
- Village visit
- Personal contact
- Grievance day meeting
- Monthly zonal workshop

10. G. Field activities

i. Number of villages adopted

ii. No. of farm families selected

iii. No. of survey/PRA conducted

10. H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab

1. Year of establishment : 2010-11

2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	Digital Visible Spectrophotometer Model SL-207	1	39,104
	"Elico" Make		
2	Digital pH meter "Elico" Make	1	5,970
3	All Glass Single Distillation unit	1	36,400
4	Khan Shaker "Labline"	1	20,800
5	Hot air oven	1	17,680
6	Hot plate	1	7956
7	Willey mill	1	32,760
8	Water Bath	1	7,249
9	UP based Flame Photometer "Elico" Make	1	45,240
10	Digital conductivity meter "Elico" Make	1	11,326
11	Electronic Top loading balance "Cyberlab"	1	6760
12	Electronic Top loading balance "Shimadzu"	1	20,592
13	Water and Soil analysis kit	1	19,750
14	Digestion system (Kelplus)	1	1,12,216
15	Distillation system (Kelplus)	1	1,82,936
16	Instrument table	5	78,000
17	Rack, Almirah, Angle Iron rack	-	70,000
18	Soil and Plant storage cabin	-	1,00,000
19	Wash basin, sink and exhauster fan		70,000
20	Servo relay stabilizer – 2 Kva	1	7,500
21	Micropipette	2	3600
22	Buchner funnel with flask	1	2000
23	Titration unit	2	10,000
24	Vacuum pump	1	5000
25	HCL Computer with printer	1	37,600
otal	· · · · · · · · · · · · · · · · · · ·		9,50,439

Details of samples analyzed so far since establishment of SWTL: Nil

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: Nil

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	to
--------------------------------------	------	----

Total number of farmers visited : Total number of agencies involved :

Number of demonstrations visited by the farmers within KVK campus:

Other Details

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

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

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries
Tamil nadu – Nagapattinam	Rice – CORH 3	10	10
Tamil nadu – Nagapattinam	Rice – Sub Swarna	5	5

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	Meet	tings	Gost	hies	Field	l days	Farn	ners fair	Exhi	bition	Film	show
	No.	No.of	No.	No.of	No.	No.of	No.	No.of	No.	No.of	No.	No.of
		farmers		farmers		farmers		farmers		farmers		farmers
Total												

PART XI. IMPACT

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

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

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

11.B. Cases of large scale adoption

Rice mechanization	-	Tractor drawn cage wheel, rotavator, SRI weeders and combine harvester/ paddy threshers			
Popularizing CORH 3		Popularized newly released rice hybrid			
Azolla	- Production technology and popularizing as a feed animals, poultry and fish				
Hybrid vegetables introduction	vegetables - Chillies (Priyanka), Tomato (Lakshmi Cabbage (Hari rani), Knolkhol (Wlbeans (S-9), Pole beans (US2)				
High yielding rice varieties	varieties - Popularized newly released high yielding rice varieties vi CO(R)48, CO(R)-49, CO(R)-50				

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

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage					
State dept. of Agriculture	1. Joint training, extension programmes and implementations of Rashtriya Sam Vikas Yojana, 2. Giving technical support and infrastructural support during monthly zonal workshop.					
Dept. of Horticulture	 1.Joint training programmes 2.Offering need based technical guidance to the extension functionaries. 3. Pre kharif and rabi training programme 4. Field diagnostic visit 5. Flood / Drought assessment 6. yield performance assessment 					
NABARD	Organizing Farm Science Club and exposure visits.					
Local, NGOs (DHAN, KUDUMBAM, CAP-TEEN, CREATE, CWS, CES, PCI,NCRC, MSSRF, RCPDS, PEDA, VAANGHAI)	Organizing on/off campus training Programmes offering need based technical guidance.					
ZPD, CRIDA, CIAE, IICPT, CIFT, DEE, SCMS, CPPS, CPBG, TRRI (Aduthurai), SWMRI (Thanjavur) Krishi Vigyan Kendra, (Needamangalam)	Technical consultancy and exchange of SMS during training programmes.					

AIR (Trichy, Karaikal)	Offering radio programmes on latest crop production					
	technologies and announcements.					
NHM	To implement the precision farming					
District Collectorate	To implement the waste land development scheme and					
DRDA, Nagapattinam	land reforms counseling and grievance day meeting					
	Organizing skill development training programme to					
	rural youth SHGs. Organizing need based training					
	programme and promoting agricultural					
	entrepreneuship					

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.)
IFS	2007	RSVY- Agriculture	15,00,000/-
NICRA	2010 - 11	CRIDA, HYD	30,35,000

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/ No

S. No.	Programme	Nature of linkage	Remarks
1.	District level planning, technology transfer and activities related with researchable issues	Member in the ATMA governing board and management committee	Collaborated in the district action plan preparation

Coordination activities between KVK and ATMA during 2010-11

	Programme		No. of	No. of	Other remarks
S. No.		Particulars	programmes attended by KVK staff	programmes Organized by KVK	(if any)
01	Meetings				
02	Research projects				
03	Training programmes				
04	Demonstrations				
05	Extension Programmes				
	Kisan Mela				
	Technology Week				
	Exposure visit				
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	Others (Pl. specify)				
06	Publications				
	Video Films				
	Books				
	Extension Literature				

	Pamphlets		
	Others (Pl.		
	specify)		
	Other		
07	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
١						

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

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

12.F. Details of linkage with RKVY

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

12. G Kisan Mobile Advisory Services :--

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
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)

		Year of		Details o	Details of production			nt (Rs.)	
Sl. No.	Demo Unit	establis hment	Area (ha)	Variety	Produce	Qty.	Cost of inputs	Gross incom e	Remarks
1	Low Cost Drip	2010	1.0	Vegetables	Vegetables				
2	Azolla	2010	5 cents	Azolla	Azolla				
3	Kitchen garden drip kit	2010	5 cents	Vegetables	Vegetab les				
4	Nursery production under shade net	2010	10 cents	Vegetables, forest tree saplings and ornamental plants	Vegetables, forest tree saplings and ornamental plants				
5	Protected cultivation of cole crops	2010	2 cents	Cole crops					
6	Production of mealy bug parasitoids	2010	5 cents	Acerobagus	Parasito ids				

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

				Details of production			Amount (Rs.)		
Name of the crop	Date of sowing	Date of harvest	Area (ha)	Variety	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
Cereals									
Paddy	20.8.10	22.9.10	1.4	CR 1009	Grain	2480 Kg		26040	
Paddy	7.9.10	6.10.10	2.45	CO43	Grain	4500 Kg		48148	
Paddy	7.9.10	15.10.10	2.4	CO50	Grain	4380 Kg		46864	
Pulses									

Oilseeds							
Fibers							
Spices & Plant	tation crops						
Floriculture							
Fruits							
Vegetables							
Brinjal					26.5	265	
Others							
(Azolla)			Rong	Bio	150 kg		
			Ping	product			
Casurina					50 no	100	
seedlings							
Protray					149 no	2235	
Seedlings				-	14 no	 1050	
with tray							

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

Sl.	Name of the	_	Amou		
No.	Product	Qty	Cost of inputs	Gross income	Remarks
1	Vermi compost	644 kg		3220	
2	Cocopeat	130 kg		420	

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

	Name	Detai	ls of production		Amou	nt (Rs.)	
Sl. No	of the animal / bird / aquatics	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
	Egg			3395 no		7808	
	Layer bird			21 no		840	

13.E. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
October 2008			
November 2008			
December 2008			
January 2009			
February 2009			
March 2009			
April 2009			
May 2009			
June 2009			
July 2009			
August 2009			
September 2009			

13. F. Database management

S. No	Database target	Database created

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

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

PART XIV - FINANCIAL PERFORMANCE

14. A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute							
With KVK							

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

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

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

S. No.	Particulars	Sanctioned	Released	Actual Expenditure
A. Rec	curring Contingencies			
1	Pay & Allowances	4500000		7702494
2	Traveling allowances	100000		100712
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	190000		485267
В	POL, repair of vehicles, tractor and equipments	150000		182867
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	100000		123597
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	65000		65000
Е	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	200000	5813000	200000
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	68000		68000
G	Training of extension functionaries	10000		10000
Н	Maintenance of buildings	25000		25000
I	Establishment of Soil, Plant & Water Testing Laboratory	400000)	400000
J	Library	5000		5000
	TOTAL (A)	5813000		9367937
B. Nor	n-Recurring Contingencies			
1	Works	1700000		1700000
2	Equipments including SWTL & Furniture	1430000		1430000
3	Vehicle (Four wheeler/Two wheeler, please specify)	0		0
4	Library (Purchase of assets like books & journals)	10000		10000
TOTA	L (B)	3140000		3140000
C. RE	VOLVING FUND	0		0
GRAN	ND TOTAL (A+B+C)	8953000		12507937

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2008 to March 2009				
April 2009 to March 2010				
April 2010 to March 2011				

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

100 Details of Title a		ed by KVK staff during 2010-11		
Name of the staff	Desig nation	Title of the training programme	Institute where attended	Dates
Dr.K.Sivakumar	Assistant Professor	International Conference on "Eliminating hunger and Poverty"	MSSRF, Chennai	7.8.2010 to 9.8.2010
Dr.G.Malathi	Assistant Professor	National Seminar on Production of Medicinal plants	HC&RI, TNAU, Coimbatore	24.09.2010 to 26.09.2010
Dr.J.John Gunasekar	Associate Professor	International conference on food supply and security	IICPT, Thanjavur	30.10.2010 to 31.10.2010
Dr. K. Sivakumar, Dr.G.Malathi	Assistant Professor	International Conference on Bio resource Technology its application and achievements	Nirmala College for women, Coimbatore	07.10.2010, 08.10.2010
Dr.T.Dhamodaran Dr.M.Joseph	Associate Professor Assistant Professor	Round up Ready flex cotton Technology	TNAU, Coimbatore	28.10.10
Dr.T.Elaiyabharathi,	Assistant Professor	Mealybug management	NBAII, Bangalore	30.10.2010
Dr.M.Joseph	Assistant Professor	Integrated Farming System for sustainable farming	KVK, Kattupakkam	10 – 12.11.2010
Dr.M.Joseph	Assistant Professor	On Alternative Poultry farming as a livelihood option for farming community	KVK, Namakkal	24 – 26.11.2010
Dr.G.Malathi	Assistant Professor	Plant diversity for Aesthetic values and landscape gardening	HC&RI, Coimbatore	26- 28.11.2010
Dr. K. Sivakumar	Assistant Professor	Southern region STCR training cum seminar	Dept. of SS&AC, TNAU, Coimbatore	15.12.10 to 16.12.10
Dr.T.Dhamodaran	Associate Professor	5 th National Conference on KVK 2010	Maharana Pratap University of Agriculture and Technology, Udaipur	22.12.10 to 24.12.10
Dr. G. Malathi	Assistant Professor	Strengthening Gender perspective in agricultural research and development	TANUVAS, Madhavaram, Chennai	24.01.2011 to 25.01.2011
Mr. V. Gnanabharathi	Programme Assistant	Communication skill	SWMRI, Thanjavur	15.2.2011
Dr. G. Malathi	Assistant Professor	Protection of plant varieties and farmers right act	TRRI, Aduthurai	15.3.11
Dr. T. Elaiyabharathi	Assistant Professor	IPDM in major crops	Office of the DEE, TNAU, Coimbatore	25.03.2011 & 26.3.2011
Dr. G. Malathi	Assistant Professor	Protected cultivation of horticultural crops	Office of the DEE, TNAU, Coimbatore	28.3.2011 to 29.3.2011
Dr. M. Joseph	Assistant Professor	'Weather based Advisory Services'	Office of the DEE, TNAU, Coimbatore	30 - 31.3.2011

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

SUMMARY FOR 2010-11

I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management			
Varietal Evaluation	1	Evaluation of submergence tolerance rice varieties for samba season	5
Integrated Pest Management			
Integrated Crop Management			
Integrated Disease Management	1	Management of False Smut disease in Samba paddy	5
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries	1	Evaluation of different weeders in SRI	5
Integrated Farming System	1	Evaluation of polyculture in inland fisheries in Delta region	5
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Others (Pl. specify)			
Total			

Summary of technologies assessed under livestock

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Disease Management			
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management	Dairy	Area Specific Mineral Mixture for Dairy cows	10
Production and Management			
Others (Pl. specify)			
Total	•		

Summary of technologies assessed under various enterprises

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

Summary of technologies assessed under home science

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

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops

Thematic areas	Crop	Name of the technology refined	No. of trials
Integrated Nutrient Management			
Varietal Evaluation			
varietai Evaluation			
Integrated Pest Management			
g			
Integrated Crop Management	1	Integrated algal management in rice eco system	5
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
megrated ramming bystem			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Ct Tl'			
Storage Technique			
Others (Pl. specify)	1		
Onicis (r.i. specify)	-		
Total	1		

Summary of technologies assessed under refinement of various livestock

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

Summary of technologies refined under various enterprises

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

Summary of technologies refined under home science

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

III. FRONTLINE DEMONSTRATION

Cotton

Frontline demonstration on cotton

Crop	Thematic Area	Name of the technology demonstrated	No. of KVKs	No. of Farmers	Area (ha)	Yield (q/ha)		0/ 1	*Econ	omics of de	monstration (R	s./ha)			nics of check ls./ha)	
Сгор	Thematic Area	Name of the technology demonstrated	No. of KVKs	No. of Parmers		Check	% Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
Total																

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

** BCR= GROSS RETURN/GROSS COST

Other crops

		Name of the technology	No. of	No. of	Area	Yield	(q/ha)	% change in yield	Other parame	ters	*Eco	nomics of den	nonstration (R	s./ha)	*Economics of check (Rs./ha)			
Crop	Thematic area	demonstrated	KVKs	Farmer	(ha)	Demons ration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals	Farm Mechanization	Mechanization in Rice	-	5	2	66	60	10			24000	67200	43200	2.8	26500	60480	33980	2.3
	Popularization	Popularization of CORH 3 Hybrid Rice under SRI		10	5	74.5	54.5	36.69			25450	74500	49050	2.92	24320	54500	30140	2.23
	Yield maximization	IPDM for Samba rice		10	4	61.5	58	6.03			24050	61500	37450	2.55	26000	58000	32000	2.23
	Yield maximization	ICM using bio- inoculants in rice		10	10													
Millets																		
	1 10	P ,																
	Integrated Crop	Farmers'																
	Mangement.	participatory seed																
		production in																
Oilseeds		groundnut		5	1													
	Den IndexCon	Donata di cari																
	Popularization	Popularization of																
		mobile sprinkler																
		in rice fallow																
		pulses and oil																
Pulses		seeds		5	5													
	Integrated Crop	Special pulses						44.0			00.50	45000	#0.F0	4.0#	## 00	10000		1.00
	Mangement.	programme		16	6.4	4.3	2.5	41.8			9250	17200	7950	1.85	7700	10000	2300	1.30
Vegetables	Popularization	Popularization of PKM 1 Moringa in deltoic		5	1													
regetables		alluvial soil	L		ļ								L	<u> </u>		L	L	L

Flowers				1		1	1		ı			1				
New Properties New		Yield	Protected		4	1200										1
Flowers		maximization	Cultivation of			sq.m										l
Flowers			vegetables under													İ
Flowers			shade net during													İ
Flowers			off season													ì
Fruit	Flowers															
Fruit																
Spices and Spi	Ornamental															
Spices and Spi																
Condiments Commercial Com	Fruit															
Condiments Commercial Com																
Commercial	_															1
Medicinal and aromatic Popularization Popularization of fodder bank at village level S 1 Plantation Fibre Chers (plapecify)	condiments															L
Medicinal and aromatic Popularization Popularization of fodder bank at village level S 1 Plantation Fibre Chers (plapecify)																<u> </u>
Aromatic Company Com	Commercial															
Aromatic Company Com																ĺ
Fodder Popularization Popularization of fodder bank at village level 5 1 Plantation Fibre Chers (pLspecify)	Medicinal and															
Fodder Fodder bank at village level	aromatic															
Fodder Fodder bank at village level																<u> </u>
Fodder village level 5 1		Popularization	Popularization of													ì
Fodder			fodder bank at													İ
Fodder			village level													l
Fibre	Fodder				5	1										
Fibre																
Others (pl.specify)	Plantation															
Others (pl.specify)																
(pl.specify)	Fibre															
(pl.specify)																
	Others															
Total Total	(pl.specify)															
Total															-	
			Total					•	•	•	•	•	•	•		

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

** BCR= GROSS RETURN/GROSS COST

Livestock

Catalana	Thematic area	Name of the technology	No. of	No. of	No.of	Major pa	rameters	% change in major parameter	Other pa	rameter	*E		emonstration (F	Rs.)		*Economic	s.)	
Category	Thematic area	demonstrated	KVKs	Farmer	units	Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																		
Poultry	Popularization	Popularization of low cost poultry egg incubator		5														
Today	Improving livelihood of farmers	Promotion of Backyard poultry to improve the livelihood of farm women		10														
																		
Rabbitry																		1
																		
Pigerry																		
Sheep and goat														ļ				<u> </u>
Duckery														1				<u> </u>
2 denci j														-				
Others																		
(pl.specify)																		
																		<u> </u>
																		<u> </u>
	<u> </u>	Total									L			l	L			<u> </u>
		10141																

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

** BCR= GROSS RETURN/GROSS COST

Fisheries

Cotoroni	Thematic area	Name of the	No. of	No. of	No.of	Major pa	arameters	% change in major parameter	Other par	rameter	*E	conomics of de	monstration (R	s.)		*Economic (R:		
Category	Thematic area	technology demonstrated	KVKs	Farmer	units	Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps	Popularization	Scientific composite fish culture		5	5													
Mussels																		
Ornamental fishes																		
Others																		
(pl.specify)																		
		Total						•	•	•	•	•	•	•			•	

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

** BCR= GROSS RETURN/GROSS COST

Other enterprises

Category	Name of the technology demonstrated No. of KVKs	No. of			No.of	Major pa	rameters	% change in major parameter	Other pa	rameter	*Econon	nics of demons	tration (Rs.) or	Rs./unit		*Economic (Rs.) or		
		KVKs	Farmer	units	Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
Oyster mushroom																		
Button mushroom																		
Duttoii iilusiii ooiii																		
Vermicompost																		
																	ŀ	
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

Women empowerment

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

Farm implements and machinery

Name of the	Crop	Name of the technology demonstrated			No. of	No. of	Area		servation nan hour)	% change in major parameter	Labor reduction	on (man days)	Cost	reduction (Rs./	ha or Rs./Unit	ect.)
implement	Сгор		KVKs	Farmer	(ha)	Demons ration	Check									

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

Other enterprises

Demonstration details on crop hybrids

Сгор	Name of the Hybrid	e formore	Area (ha)	Yield (kg/ para	ha) / majo meter	or	Economics (Rs./ha)						
				Demonst- ration	Local check c	% hange	Gross Cost	Gross Return	Net Return	BCR			
Cereals													
Bajra													
Maize													
Rice													
Sorghum													
Wheat													
Others (pl.specify)			+										
Total													
Oilseeds													
Castor													
Mustard													
Safflower													
Sesame													
Sunflower													
Groundnut													
Soybean													
Others (pl.specify)													
Total													
Pulses													
Greengram													
Blackgram													
Bengalgram													
Redgram													
Others (pl.specify)													
Total													
Vegetable crops													
Bottle gourd													
Capsicum													
Others (pl.specify)													
Total													
Cucumber													
Tomato													
Brinjal													
Okra													
Onion													
Potato													
Field bean													
Others (pl.specify)													
	1									1			

Total					
Commercial crops					
Sugarcane					
Coconut					
Others (pl.specify)					
Total					
Fodder crops					
Maize (Fodder)					
Sorghum (Fodder)					
Others (pl.specify)					
Total					

IV. Training Programme
Farmers' Training including sponsored training Programmes (On campus)

					No.	of Partici	pants			
Area of training	No. of		General			SC/ST	<u>.</u>		Grand Tot	al
Area of training	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies	1	20	-	20				20	-	20
Cropping Systems	1	14	1	15				14	1	15
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation	1	116	16	132				116	16	132
Seed production										
Nursery management										
Integrated Crop Management	1	21	4	25				21	4	25
Soil and Water Conservation	1	25	-	25				25	-	25
Integrated Nutrient Management										
Production of organic inputs										
Others – machineries for rice	1	60	15	75				60	15	75
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop Off-season vegetables	1	20	8	28				20	8	28
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	1	10	3	13				10	3	13
Others (pl. specify)	1	10	,	13				10	3	13
c) Ornamental Plants										
Nursery Management										
Management of potted plants										

					1	
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	1	18	2	20		18	2	20
Storage loss minimization techniques								
Value addition								
Women empowerment								
Location specific drudgery production								
Rural Crafts								
Women and child care								
Others (pl. specify)								
Agrl. Engineering								
Farm machinery and its maintenance	1	33	2	35		33	2	35
Installation and maintenance of micro irrigation systems	1	20	0	20		20	0	20
Use of Plastics in farming practices								
Production of small tools and implements	1	10	-	10		10	-	10
Repair and maintenance of farm	1	20	0	20		20	0	20
machinery and implements Small scale processing and value								
addition Post Harvest Technology								
Others – farm mechanization	4	113	22	135		113	22	135
Plant Protection								
Integrated Pest Management	1	21	4	25		21	4	25
	1						'	
Integrated Disease Management Bio-control of pests and diseases	1	67	3	70		67	3	70
	1	07	3	70		07	3	70
Production of bio control agents and bio pesticides								
Others -								
Fisheries								
Integrated fish farming								
Carp breeding and hatchery								
management Carp fry and fingerling rearing								
Composite fish culture	1	50	1	51		50	1	51
Hatchery management and culture of								
freshwater prawn Breeding and culture of ornamental								
fishes Portable plastic carp hatchery								
Pen culture of fish and prawn						1		
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								
Production of Inputs at site Seed Production Planting material production Bio-agents production Bio-pesticides production Bio-fertilizer production								
Seed Production Planting material production Bio-agents production Bio-pesticides production Bio-fertilizer production								
Planting material production Bio-agents production Bio-pesticides production Bio-fertilizer production								
Bio-agents production Bio-pesticides production Bio-fertilizer production								
Bio-pesticides production Bio-fertilizer production								
Bio-fertilizer production								
Î								
	2	44	3	47		44	3	47
Vermi-compost production	1	48		48		48		48
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	1	23	25	48		23	25	48
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	1	35	15	50		35	15	50
farmers/youths Others (pl. specify)								
Agro-forestry								
Production technologies								
Nursery management	1	30	1	31		30	1	31
Integrated Farming Systems								
Others (Pl. specify)								
TOTAL								

Farmers' Training including sponsored training programmes (Off campus)

No. Production		No. of				No.	of Partici	ipants			
Marco Marc	Area of training	Course			1			T			
Resource Conservation Technologies	Crop Production	-	Male	Female	Total	Male	Female	Total	Male	Female	Total
Cropping Systems	Weed Management										
Coop Diversification	Resource Conservation Technologies										
Coop Diversification	Cropping Systems										
Micro Irrigation											
Seed production	Integrated Farming										
Nursery management	Micro Irrigation/Irrigation										
Integrated Crop Management	Seed production										
Soil and Water Conservation Integrated Nutrient Management I	Nursery management	1	40	22	62				40	22	62
Soil and Water Conservation Integrated Nutrient Management I		1	23	-	23				23	-	23
Production of organic inputs											
Production of organic inputs	Integrated Nutrient Management										
Chief (pl. specify) Chief (pl. specify)											
A											
Production of low value and high volume crop											
Production of low value and high volume crop											
volume crop Image: Control of the control		1	10	20	30				10	20	30
Nursery raising Exotic vegetables 1 70 15 85 Export potential vegetables Grading and standardization 1 40 5 45 Protective cultivation Others (Precision farming) 3 88 2 90 88 2 90 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 Management of Ornamental plants Export potential of ornamental plants Export potential of ornamental plants Export potential of ornamental plants Export potential of ornamental plants Export potential of ornamental plants Propagation techniques of Ornamental	volume crop										
Exotic vegetables		1	-	22	22				-	22	22
Export potential vegetables Grading and standardization 1 40 5 45 Protective cultivation Others (PreCision farming) 3 88 2 90 88 2 90 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 Export potential of ornamental plants Propagation techniques of Ornamental											
Grading and standardization 1 40 5 45		1	70	15	85				70	15	85
Protective cultivation Others (PreCision farming) 3 88 2 90 88 2 90 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											
Others (Precision farming) 3 88 2 90 88 2 90 b) Fruits Training and Pruning Layout and Management of Orchards Cultivation of Fruit Management of young plants/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 Others (pl. specify) Company of the plants Export potential of ornamental plants Propagation techniques Others (pl. specify) Company of the plants Export potential of ornamental plants Propagation techniques of Ornamental		1	40	5	45				40	5	45
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 Propagation techniques of Ornamental	Protective cultivation										
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	Others (Precision farming)	3	88	2	90		-	-	88	2	90
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	b) Fruits										
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	Training and Pruning										
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	Layout and Management of 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 Propagation techniques of Ornamental	Cultivation of Fruit										
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	Management of young plants/orchards										
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	Rejuvenation of old 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	Export potential fruits										
Others (pl. specify) c) Ornamental Plants Nursery Management Management of potted plants Export potential of ornamental plants Propagation techniques of Ornamental	Micro irrigation systems of orchards										
c) Ornamental Plants Nursery Management Management of potted plants Export potential of ornamental plants Propagation techniques of Ornamental	Plant propagation techniques										
Nursery Management Management of potted plants Export potential of ornamental plants Propagation techniques of Ornamental Propagation techniques of Ornamental	Others (pl. specify)	1									
Management of potted plants Export potential of ornamental plants Propagation techniques of Ornamental	c) Ornamental Plants										
Export potential of ornamental plants Propagation techniques of Ornamental	Nursery Management	1									
Propagation techniques of Ornamental	Management of potted plants										
	Export potential of ornamental plants	1									
	Propagation techniques of Ornamental Plants	+									

Others (pl. specify)					1		1		
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	1	30	05	35			30	05	35
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	1	10	15	25		10	15	25
Women empowerment								
Location specific drudgery production								
Rural Crafts								
Women and child care								
Others (pl. specify)								
Agrl. Engineering								
Farm machinery and its maintenance	1	0	20	20		0	20	20
Installation and maintenance of micro								
irrigation systems Use of Plastics in farming practices								
Production of small tools and implements								
Repair and maintenance of farm								
machinery and implements Small scale processing and value addition								
Post Harvest Technology								
Farm mechanization	3	65	29	94		65	29	94
Plant Protection								
Integrated Pest Management	2	33	6	39		33	6	39
Integrated Disease Management	1	30	15	45		30	15	45
Bio-control of pests and diseases								
Production of bio control agents and bio	1	30	10	40		30	10	40
pesticides Others (Papaya mealy bug)	1	25	5	30		25	5	30
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)								

		l	l	l	1		1	1	l	
Production of Inputs at site Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production	2	30	7	37				30	7	37
Vermi-compost production	1	23	2	25				23	2	25
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production	1	34	20	54				34	20	54
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	1									
	ļ .	50		7 0						70
Production technologies	1	50	-	50				50	-	50
Nursery management										·
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL										
		l	l	l		1	1	<u> </u>	l	l

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

	No. of				No.	of Particij	pants			
Area of training	Courses	Male	General Female	Total	Male	SC/ST Female	Total	Male (Female	al Total
Nursery Management of Horticulture crops		Maie	remaie	Total	Male	remate	Total	Maie	remaie	Total
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs	1	29	3	32				29	3	32
Planting material production										
Vermi-culture										
Mushroom Production	1	23	25	48				23	25	48
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	2	54	28	82				54	28	82
Value addition	1	10	15	25				10	15	25
Small scale processing										
Post Harvest Technology										<u> </u>
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	1	-	34	34				-	34	34
Fry and fingerling rearing										
Any other (mealy bug parasitoids)	1	30	10	40				30	10	40
TOTAL	1									

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

	No. of				No.	of Particip	oants			
Area of training	Courses		General			SC/ST	•		Grand Tota	
Nursery Management of Horticulture crops	1	Male 30	Female 15	Total 45	Male	Female	Total	Male 30	Female 15	Total 45
Training and pruning of orchards			15					50	10	
Protected cultivation of vegetable crops	1	50	5	55				50	5	55
Commercial fruit production	1	30	3	33				30	3	33
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	1	50	1	51				50	1	51
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (tree cultivation)	1	7	25	32				7	25	32
	1		23	32				,	23	32
TOTAL										

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

	No. of				No.	of Particip	pants			
Area of training	Courses		General			SC/ST		(Grand Tota	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	6	123	18	141				123	18	141
Integrated Pest Management	2	35	-	35				35	-	35
Integrated Nutrient management	1	15	-	15				15	-	15
Rejuvenation of old orchards										
Protected cultivation technology	1	26	5	31				26	5	31
Production and use of organic inputs	1	25	5	30				25	5	30
Care and maintenance of farm machinery and implements	3	50	5	55				50	5	55
Gender mainstreaming through SHGs	1	18	2	20				18	2	20
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 Agroforestry	1	15	-	15				15	-	15
Total										

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

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

Sponsored training programmes

G 33	Sponsored training programmes	No. of Courses	Courses No. of Participants								
S.No.	Area of training			General			SC/ST		Grand Tota		al
			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										
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	1	20	-	20				20	-	20
8.b.	Others (rice mechanization)	1	18	2	20				18	2	20
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 (Post harvest technology and fish processing)	1	-	34	34				-	34	34
11.	Home Science										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others ("Gender sensitization")	1	18	2	20				18	2	20
12	Agricultural Extension										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl. specify)										
	Total										

Details of sponsoring agencies involved

- 1. Department of Agricultural Engineering, Nagapattinam
- 2. GOI through Directorate of Extension Education, TNAU, Coimbatore
- 3. Central Institute of Fisheries Technology (CIFT), Cochin

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

	Details of vocational training progra	No. of		J	10		of Particip	oants			
S.No.	Area of training	No. of Courses		General			SC/ST		-	Frand Tota	nl .
		Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management		17ILIC	1 cmarc	10441	TTUIC	Temme	10441	Marie	1 cmarc	10441
1.a.	Commercial floriculture										
1.b.	Commercial fruit production										
1.c.	Commercial vegetable production										
1.d.	Integrated crop management										
1.e.	Organic farming										
1.f.	Others (pl.specify)										
2	Post harvest technology and value addition										
2.a.	Value addition										
2.b.	Others (pl.specify)										
3.	Livestock and fisheries										
3.a.	Dairy farming										
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing										
3.d.	Piggery										
3.e.	Poultry farming										
3.f.	Others (pl.specify)										
4.	Income generation activities										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides,										
	bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery										
	and implements										
4.d.	Rural Crafts										
4.e.	Seed production										
4.f.	Sericulture										
4.g.	Mushroom cultivation										
4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	Others (pl.specify)										
5	Agricultural Extension										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	Grand Total										

V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	129	654	17	671
Diagnostic visits	89	84	5	89
Field Day	9	168	5	173
Group discussions	=	-	-	-
Kisan Ghosthi	=	-	-	-
Film Show	-	-	-	-
Self -help groups	-	-	-	-
Kisan Mela	-	-	-	-
Exhibition	3	1365	22	1387
Scientists' visit to farmers field	110	-	-	-
Plant/animal health camps	-	-	-	-
Farm Science Club	-	-	-	-
Ex-trainees Sammelan	-	-	-	-
Farmers' seminar/workshop	3	150	-	150
Method Demonstrations	15	872	-	872
Celebration of important days				
Special day celebration				
Exposure visits	4	200	2	202
Others (pl.specify)				
Total				

Details of other extension programmes

Particulars Particulars	Number
Electronic Media	0
Extension Literature	9
News Letter	2
News paper coverage	63
Technical Articles	27
Technical Bulletins	3
Technical Reports	0
Radio Talks	20
TV Talks	5
Animal health amps (Number of animals treated)	0
Others (pl.specify)	0
Total	129

VI. PRODUCTION OF SEED/PLANTING MATERIAL

Production of seeds by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals					
Oilseeds					
Pulses					
Commercial crops					
Vegetables					
Flower crops					
Spices					
Fodder crop seeds					
Fiber crops					
Forest Species					
Others					
Total					

Production of planting materials by the KVKs

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

Production of Bio-Products

	Name of the bio-product	Quantity		
Bio Products		Kg	Value (Rs.)	No. of Farmers
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others				
Total				

Production of livestock and related enterprise materials

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

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

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil				
Water				
Plant				
Manure				
Others (pl.specify)				
Total				

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted			
I	Χ.	NEWSLETTER	
Number of issues of newsletter publi	shed	: two	

X. RESEARCH PAPER PUBLISHED

Number of research paper published

Book

- SRI technology & farm implements Dr. K. Rangasamy, Dr. P.Dhananchezhiyan, Dr.J.John Gunasekar, Selvi. K.Rathi kanna, Dr.B.J. Pandiyan, Dr.M.V.Rengasamy
- ❖ Plant Biochemistry Dr.V.Arunkumar, Dr.N.Senthil Kumar and Dr.K.Sivakumar
- ❖ Flora of Tropical Dry ever green forest Dr.A.Bala, Dr. R.Revathi and Dr.M.G.Rao

Book Chapter:

- Sivakumar, K., K. Dhanasekaran, S.Srinivasan and D.Venkatakrishnan. 2011.
 Effect of Humic acid and fertilizers on yield of Rice and soil available micronutrient status. IN: proceedings of the National Seminar on crop Improvement strategies for sustainable Agriculture. Pp 65-70.
- Dhanasekaran, K., K. Sivakumar, R.Bhuvaneswari and S.Sathiamurthy. 2011. Effect of Humic acid and micronutrient mixture on the quality and yield of tomato. IN: proceedings of the National Seminar on crop Improvement strategies for sustainable Agriculture. Pp 1-7.
- Srinivasan.S., A.Angayarkanni, D.Venkatakrishnan, K.Sivakumar, and A.Anandan. 2011. Improvement of Grain yield of Rice under targeted yield model. IN: proceedings of the National Seminar on crop Improvement strategies for sustainable Agriculture. Pp 19- 22.
- Venkatakrishnan, D., Sivakumar, K., Mohandas. S., S. Srinivasan and K. Dhanasekaran. 2011. Influence of Zinc on Ca, Mg, Zn and Cu uptake of tomato. IN: proceedings of the National Seminar on crop Improvement strategies for sustainable Agriculture. Pp 61-63.

Research articles:

- Venkatakrishnan, D., K. Dhanasekaran, K. Sivakumar and R. Devanathan 2010. Influence of organics for increased sugar recovery in sugarcane IN: International conference on Food technology, Ed. II (Infotech 2010) held a IICPT, Tanjore.
- Sivakumar, K and T. Dhamodaran. 2011. Role of Humic acid and fertilizers on Nutrient uptake of rice. IN: proceedings of the International conference on Bioresource technology (ICBRT) held a Nirmala college of women, Coimbatore. Pp 207-2013.
 - 3. Malathi. G.,T. Dhamaodaran and D.Veeraragavathattham. 2011. *Per so* performance & heterosis of two hybrids of chillies for capsaicin &

Oleoresin content in three different reasons in ICBRT

- 4. Malathi. G.,T. Dhamaodaran and D.Veeraragavathattham. 2011
 Seasonal influence of per re performance of 2 hybrids and thei
 parents of chillies for growth & yield charactets in ICBRT
- 5. Sivakumar. K., Dhamodaran. T, D. Venkatakrishnan and K. Dhanasekaran 2011. Effect of humic acid and fertilizers on growth and yield of rice.
- 6. Venkatakrishnan, D., S. Manimaran, K. Dhanasekaran, K. Sivakumar and S Srinivasan. Effect of different organic manures on yield components o sugarcane.
- 7. Malathi, D. D. Veeraragavathantham and T. Dhamodarn. 2011. Per seperformance of twelve hybrids and their parents of chillies for yield contributing triats.
- 8 Sivakumar. K and T. Dhamodaran. D. 2011. Preserving soil health and maximizing rice yield by integrated application of fertilizer and humic acid. **IN**: National seminar on soil health improvement for enhancing crop productivity held at TNAU, Coimbatore during 17-18.3.2011.

Booklet

❖ Role Of microbes for sustainable agriculture - Dr.K.C.Gouthaman, Dr.T.Elaiya bharathi and Dr.John Gunasekar

Popular

- Role of humic acid and fertilizer on nutrient uptake of rice' at ICBRT, Coimbatore.
- ♦ Dhaniya keerai in "Nilavalam", September 2010 (Page No. 16 to 18)

act in Seminar:

- Venkatakrishnan. D., R.Devanathan, M.Ravichandran, K.Sivakumar, K.Dhanasekaran and S. Srinivasan. 2010. Effect of different organic manures on Post harvesr NPK status in Sugarcane grown soil .New challenges and oppurtumities in soil organic matters Research held on 26th February 2010 at Department of Soil Science & Agricultural Chemistry faculty of Agricultural Annamalai University.
- **2.** Sivakumar.K. and T.Dhamodaran 2010 Role of humic acid and fertilizers an nutrient uptake of Rice. In: International Conference on Bio resource Technology –its applications and achievements held at Nirmala College for women, Coimbatore on 7-8, October 2010.
- **3.** Malathi.G., T.Dhamodaran and D.Veeraragavathatham 2010 Seasonal influence on Per re performance of two hybrids and their parents of chillies (capsicum annuum) for growth and yield contributing characters In: International Conference on Bio resource Technology –its applications and achievements held at Nirmala College for women, Coimbatore on 7-8, October 2010.
- **4.** Malathi.G., T.Dhamodaran and D.Veeraragavathatham 2010 Per se performance and heterosis of two F1 hybrids of chillies for Capsaicin and Oleoresin content in

three different season.	In: International	Conference on Bi	o resource To	echnology -
its applications and ach	nievements held at	Nirmala College	for women,	Coimbatore
on 7-8. October 2010.				

5. 5. Malathi.G., T.Dhamodaran and D.Veeraragavathatham 2010. Capsicum genetic diversity in colour extraction & landscape gardening. In: International Conference on Bio resource Technology –its applications and achievements held at Nirmala College for women, Coimbatore on 7-8, October 2010.

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

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

