

ANNUAL REPORT 2010-11

(April 2010 to March 2011)

PUDUKKOTTAI

ANNUAL REPORT 2010-11

(APRIL 2010 TO MARCH 2011)

PART I - GENERAL INFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
Krishi Vigyan Kendra National Pulses Research Centre Campus Tamil Nadu Agricultural University Vamban Colony (P O) Pudukkottai – 622 303 Tamil Nadu	04322- 290321	04322- 296677	kvkvamban @tnau.ac.in	http://www.tnau.ac.in/ dee/vamban/kvk.html

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

Address	Telephone		E mail	Web Address
	Office	Fax		
The Vice Chancellor Tamil Nadu Agricultural University Coimbatore-641 003	0422 6611201	0422 2431821	vc@tnau.ac.in	www.tnau.ac.in
The Registrar Tamil Nadu Agricultural University Coimbatore-641 003	0422 6611201	0422 2431821	registrar@tnau.ac.in	www.tnau.ac.in
The Director Directorate of Extension Education, Tamil Nadu Agricultural University, Coimbatore-641 003 -		0422 6611433	dee@tnau.ac.in	www.tnau.ac.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr.P.Chinnaiyan	Nil	9443820076	kvkvamban@tnau.ac.in

1.4. Year of sanction: 2000 (NATP)
2004 (ICAR)

1.5. Staff Position (as 31st March 2011)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category
1	Programme Coordinator	Dr.P. Chinnaiyan	Associate Professor	M	Agri Rural Management	Ph.D.	37400-67000+9000	38,800 05	.08.09	Permanent	OBC
2	Subject Matter Specialist	Th.S. S.Gopal	Assistant Professor (Selection Grade)	M	Agri. Ento	M.Sc. Agri	12000-420-18500	14,700	21.05.08	Permanent	SC
3	Subject Matter Specialist	Dr.V.Krishnamoorthy	Assistant Professor (Senior scale)	M H	orticulture	Ph.D.	15600-39100+7000	22,830 08	.05.08	Permanent	SC
4	Subject Matter Specialist	Dr. S. K. Natarajan	Assistant Professor	M	Agronomy	Ph.D.	15600-39100+6000	19,600 30	.12.09	Permanent	OBC
5	Subject Matter Specialist	Dr. S. Gurunathan	Assistant Professor	M	Agri. Eco	Ph.D.	15600-39100+6000	19,600 31	.12.09	Permanent	OBC
6	Subject Matter Specialist	Dr. R. Suresh	Assistant Professor	M	Plant Breeding and Genetics	Ph.D.	15600-39100+6000	19,600 11	.01.10	Permanent	OBC
7	Subject Matter Specialist	Dr.S.Kavitha	Assistant Professor	F	Seed Science and Technology	Ph.D.	15600-39100+6000	19,600 8.	4.2010	Permanent	OBC
8 Lab	Assistant	A.Manickavalli	Programme Assistant (Lab)	F	Agriculture	B.Sc. Agri	9,300 - 34,800 + 4,400	11,600 04	.06.07	Permanent	OBC
9	Computer Programmer	S. Suganthi	Programme Assistant (Computer)	F	Computer Science	B.Sc. (CSc)	9,300 - 34,800 + 4,400	11,130 05	.12.08	Permanent	SC
10	Farm Manager	S. Abirami	Farm Manger	F	Plant Breeding and Genetics	M.Sc. Agri	9,300 - 34,800 + 4,400	11,130 02	.07.07	Submitted Resignation	OBC
11 S	uperintendent	A.Savithri	Superintendent	F	-	-	9,300 - 34,800 + 4,800	14,680 16	.05.08	Permanent	OBC
12 S	tenographer	A. Gunasekaran	Superintendent	M	-	-	9,300 - 34,800 + 4,800	12,600 19	.04.04	Permanent	OBC
13 Driver		L. Kulandaisamy	Senior Tractor Driver (Spl. Grade)	M -			5,200 -20,200 + 2,600	12,380 12	.09.95	Permanent	OBC
14 M	echanic	A. Adaikalam	Junior Tractor Driver	M -			4,800 -10,000 + 2,000	9,450 05	.05.04	Permanent	OBC
15 S	upporting staff	C. Dhanarasu	PUSM	M	-	-	4,800 -10,000 - 1,400	7,560 05	.05.04	Permanent	OBC
16	Supporting staff	K. Subramaniam	PUSM	M	-	-	4,800-10,000 - 1,300	7,100 05	.05.04	Permanent	OBC

1.6. Total land with KVK (in ha)

: 23.20

S. No.	Item	Area (ha)
1.	Under Buildings	3.05
2.	Under Demonstration Units	2.81
3.	Under Crops	5.25
4.	Orchard/Agro-forestry	12.09
5.	Others	

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	31.03.11	550	55,00,000			
2.	Farmers Hostel	ICAR-NATP	07.12.02	305	30,00,000			
3.	Demonstration Units (2)							
4.	Fencing							
5.	Rain water harvesting system							
6.	Threshing floor	ICAR	31.3.2011	81	100000			
7.	Farm godown	ICAR	31.3.2011	18	300000			
8.	Bore well	ICAR	31.3.2011	170m depth	300000			

B). Vehicles

Type of vehicle	Year of Purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero Jeep: (Four wheeler) TN55K4693	2004	4,90,851	1,09,113	Working
Hero Honda <i>Splender+</i> : (Two wheeler) TN55M1851	2006	39,970	28,678	Working
Hero Honda Pleasure : (Two wheeler) TN 55T4543	2009	50,000	8,008	Working
Tractor TN 55 F 9655	2002	2,65,950	2,930 hrs	Working
Power Tiller TN 55 F 7341	2001	1,13,500	648 hrs	Working
Power tiller	2011	1,35,000	-	Working

C). Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Camera 2006		19,590	Working condition
Photo copier	2002	1,20,000	Working condition
LCD	2006	58,650	Not Working
Computer with accessories (Lap Top)	2006	38,700	Working condition
Generator 2011		1,00,000	Working

1.8. Details SAC meeting conducted in 2010-11

Sl.No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	02.07.2009	12	8	Skill on hybrid seed production techniques in maize COHM 5 to be provided to the farmers	One oncampus training about hybrid seed production in COHM-5 maize was conducted on 14.10.10 with the participation of 18 male rural youths One vocational training on hybrid seed production technologies in cereals & pulses were conducted between 19.7.2010 to 24.7.2010 with the participation of 6 male and 29 female farmers.
2.				Importance may given for red gram cultivation through transplanting method	One on campus training was given to 16 male and 11 female farmers on 06.07.2010. One off campus training was given to 18 male and 11 female farmers at Vallathirakottai.
3.				Technical guidance has to be provided to prevent mealy bug attack in black gram	One off campus training given to 23 male and 15 female on 18.11.10 at Dhachinapuram.
4.				Training may be given to control pod borer (Ear Wig) menace in groundnut	One off campus training was conducted at Kooliankadu on 6.9.2010 to 14 male and 20 female farmers.
5.				Technical training programme has to be given on processing of banana and banana based bye products production	One oncampus training was given to 13 female and 14 females on 04.10.2010.
6.				Training on processing of cashew apple has to be provided	One oncampus training was given to 18 male and 4 female on 08.09.2010.

Sl.No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
7.				Technologies for increasing the post harvest shelf life has to be provided for long distant transport of rose flowers (loose flowers).	One off campus training programme was conducted on 18.03.11 with participation of 20 male and 20 female were participated
8.				Techniques for extraction of concrete from rose flowers during peak season	One off campus training was conducted at Kulamangalam with the participation of 21 male and 18 female farmers on 7.10.2010.
9.				Technical advice should be given to the drip farmers on Maintenance of drip irrigation system	Field visit and onfarm advice given to the farmers of Pudunagar, Mangadu, Kotampatty training given on 8.10.10 Male - 18 and female 12 farmers participated.
10.				Technical intervention may be taken to increase the milk production in Thiruvarankulam block of Pudukkottai districts	One OFT programme on technology assessment of area specific mineral mixture was conducted at Venkidakullam.
11.				Seed production techniques booklets should be published	Booklets on Seed production of Pulses - 5000 copies, Paddy 500 copies and maize 500 copies were prepared and distributed to the interested farmers.
12.				Technology advertisement board should be kept in KVK campus, Vamban	Boards were prepared and placed in KVK.

PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1.	Agriculture, Horticulture, Forestry, Animal Husbandry and Fisheries

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

S. No	Agro-climatic Zone	Characteristics
1.	Cauvery Delta Zone & Southern Zone	Area 4,66,329 ha. Annual average rain fall was 921 mm. Single crop under rainfed situation. Two or three crops under irrigation condition. Rice – Rice is the cropping system. Groundnut – Pulses is the another system under garden land condition. Vegetable and Oilseeds are also included in the system. Some part of the district, mono cropping of banana & sugarcane are fast spreading due to the start of sugar industry and high return from banana crop.

S. No	Agro ecological situation	Characteristics
1.	Southwest and Northeast monsoon	Elevation 400 metre MSL. The district is almost a level plain with hills in northern and south eastern parts. The western portion is 600 MSL and tappers eastward upto sea proximity. The hillocks in the district are not predominantly continuous and massive and found to be granite in nature. The coastal plain stretching for 39 km.

2.3 Soil type

S. No	Soil type	Characteristics	Area in ha
1.	Red latertic loamy soil	The entire soils of the district are classified into 17 soil series. Out of the 8 series alone occupy about 90 % of the total area. In this red latertic loamy soil in 2687sqkm, river alluvial soil 1536sqkm and saline coastal 440sqkm contributes 57.62%, 32.94%, 9.44% respectively. Soils are shallow to moderately deep, medium textured, acidic to neutral, non-calcareous, moderately well drained.	4,66,329

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

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
1	Paddy	97879	161853	1826
2	Millets	6973	60575	6837
3	Pulses			
1.	Blackgram	7886	12829	1042
2.	Redgram	1633	111	560
3.	Greengram	403	481	399
4.	Cowpea	17962	1274	1429
4	Oilseeds			
1.	Groundnut 20	314	23889 14	32
2.	Gingelly	4106	2941	377
5	Sugarcane	4153	623634	125 t
6	Coconut	1668		
7	Cotton (kapas)	187	133000	1330
8	Cashew	17251	8625	500
9	Fruits			
	1. Banana	2639	79170	30 t
	2. Mango	2252	45040	20 t
	3. Other fruit crops	3474		
10	Vegetables			
	1. Brinjal	949	23725	25 t
	2. Bhendi	927	23175	25 t
	3. Chillies	596	1490	2.5 t
	4. Other vegetables	603		
11	Flower crops	153		
12	Other Crops	3327		
	Grand Total	165166		

2.5. Weather data (2010-11)

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April 26.7		45.5	24.0	83
May 88.2		42.0	19.0	86
June 89.5		40.5	21.5	82
July 50.4		40.0	22.0	76
August 124.	7	40.5	21.0	71
September 179.	1	40.5	21.5	90
October 46.0		26.5	20.0	92
November 253.	4	27.5	20.5	87
December 131.	0	40.0	18.5	96
January 23.0		35.3	23.8	92
February 6.0		36.0	23.5	94
March 0		36.7	23.5	94
Total/Mean	1018	37.58	21.57	86.92

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	333326		
<i>Indigenous</i>			
Buffalo			
Sheep			
Crossbred 1	51078		
<i>Indigenous</i>			
Goats	177816		
Pigs			
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits			
Poultry			
Hens 4	76110		
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others			

Category	Area	Production	Productivity
Fish			
<i>Marine</i>	39km 52	352	
<i>Inland</i>	12974 6	510	
Prawn			
Scampi			
Shrimp			

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

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

2.8 Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Alangudi	Thiruv arankulam	Manchanvuduthi	2010	Paddy, Pulses, Jasmine	Low yield	Introduction of HYV, Hybrid seed production
2			Kothakottai	2009	Pulses, Groundnut, paddy,	Low yield	Introduction of HYV, designer seed
3			Thavalapallam	2010	Snake gourd, Banana, Tuberose, Paddy	Low yield	Introduction of HYV, IPM
4			Kulamangalam	2010 P	addy, groundnut, pulses		Introduction of HYV, Designer seed,
5			Pattipunjai	2010	Paddy, pulses, banana, coconut		Designer seeds
6			Kurunthadi manai	2010	Paddy, bhendi, bitter gourd, cashew, coconut	Low yield	IPM, Designer seed
7			Mangadu	2009	Banana, jasmine, paddy, banana	Low Yield	INM, IPM
8			Vadagadu	2009	Maize, jasmine, paddy, banana	Low Yield	INM, IPM
9			Vennavalkudi	2010	Maize, jasmine, paddy, live stocks	Low Yield	INM, IPM
10			Kothamangalm	2010	Maize, jasmine, brinjal, paddy, pulses, fodders		Introduction of HYV, fodder bank
11			Vaniyanviduthi	2010	Maize, jasmine, brinjal, paddy, pulses, fodders		Introduction of HYV, fodder bank
12			Dachinapuram	2008	Maize, jasmine, brinjal, paddy, pulses, live stocks	Raniket incidence, Post anestrums management	Vaccination, Animal Nutrition
13			Venkidakulam	2008	Maize, jasmine, brinjal, paddy, pulses, Live stocks	Raniket incidence, Post anestrums management	Vaccination, Animal Nutrition
14			Pathampatti		Maize, brinjal, paddy, pulses,	Low Yield	Introduction of HYV
16	Illuppur	Annavasal	Thalinji	2007	Paddy, livestock	Low Yield	Designer seed
17			Vayalogam	2010	Paddy, pulses	Low Yield	Introduction of HYV
18	Ponamaravathi	Ponamaravathi	Kovanur	2010	Paddy, pulses	Low Yield	Introduction of HYV, Drudgery reduction
19			Kulipirai	2010	Paddy, pulses, Mango	Low yield	INM, , Drudgery reduction
20			Panayapatti	2010	Paddy, pulses	Low Yield	Introduction of HYV, , Drudgery reduction
21	Kandamvakottai	Kandamvakottai	Arasanipatti	2010	Paddy, sugarcane	Low Yield	Introduction of HYV
			Mattangal	2010	Paddy, cashew, groundnut	Low Yield	Introduction of HYV

2.9 Priority thrust areas

S. No	Thrust area
1.	Introduction of HYV in paddy, black gram, green gram, red gram, sesame, groundnut, snake gourd
2.	Drought mitigation in upland paddy
3.	Hybrid seed production in paddy by farmers participatory approach
4.	Farm implements for weeding in wetland paddy
5.	Popularization sprinklers in pulses
6.	Control of fruit drop in mango
7.	Value addition of pulses
8.	Integrated Pest Management
9.	Nematode management in banana
10.	Low cost preservatives for vegetable marketing
11.	Introduction of fodder bank
12.	Introduction of turkey rearing
13.	Vaccination of desi birds against Raniket disease
14.	Introduction of new improved goat breeds
15.	Post anestrus management in cross breed cows

PART III - TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
6	6	79	79	16	16	240	240

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
102	1	38	4500	4313	1415	1415	7948

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
21.05	2	1.05	64608

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
		1700	1700

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

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions												
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products			
													No.	Kg		
1.	Drought mitigation in upland paddy	Paddy	Low yield due to uncertainty of rain	Use of designer seed in upland paddy cultivation		2				2						
2.	Hybrid seed production in paddy	Paddy	Non availability of hybrid seed	Farmers participatory hybrid seed production CORH3		2				2						
3.	Farm implements for weeding in wetland paddy	Paddy	Drudgery in cono weeder	Assessing the efficacy of refined wet land weeder developed by KVK		3				2						
4.	Nematode management in banana	Banana	Yield reduction due to nematode infestation	Management of banana nematodes by PGPR consortium		1				3						
5.	Vaccination of desi birds against Raniket disease	Poultry	Loss of desi birds due to raniket disease infection	Control of raniket disease in desi chicken		1				1						
6.	Post anestrus management in cross breed cows	Livestock	Problem of post anestrus	Area specific mineral mixture for dairy cows		1				1						
7.	Introduction of High Yielding Varieties	Paddy	Low yield with existing varieties		Introduction of CO (R) 49 paddy in wet land.	1			1	2						
8.	Pa	ddy	Low yield with existing varieties		Introduction of hybrid paddy (CoRH-3)	1			1	2						
9.	Bl	ack gram	Low yield with existing varieties		Introduction of HYV VBN (Bg) 5	1			1	2	13.34					
10.		Green gram	Low yield with existing varieties		Introduction of HYV VBN (Gm) -3	1			1	2	2.00					

11.	Re	d gram	Low yield with existing varieties		Introduction of HYV VBN (Rg) 3	1 1		1	2	1.00				
12.	Se	same	Low yield with existing varieties		Introduction of HYV TMV-7	1 1			2					
13.	G	round nut	Low yield with existing varieties		Introduction of HYV TMV (Gn)-13	1 1			2	4.6				
14.		Snake gourd	Low yield with existing varieties		Introduction of PLR2 variety	1 1		1	2					
15.	IPM	Cashew	Yield loss		Management of tea mosquito bug	1 1		1	2					
16.	Control of fruit drop	Mango	Low fruit retention and quality		Spraying of SOP @ 4% at peanut stage and followup spray two times at 15 days interval	1 1		1	2					
17.	Popularization sprinklers in pulses	Pulses	Crop loss due terminal drought		Mini mobile sprinkler for pulses	1 1			2					
18.	Popularization of preservatives for vegetable marketing	Vegetables	Post harvest weight loss and poor shelf life		Popularisation of low cost vegetable preservator	1 1			1					
19.	Value addition of pulses	Pulses	Low income from raw grains		Popularisation of pulses hulling machine	1 1			1					
20.	Introduction of new improved goat breeds	Livestock	Low income from existing breeds		Suitable goat breed for higher productivity	1 1			1					
21.	Introduction of turkey rearing	Poultry	Low income from existing poultry		Introduction of Turkey birds among farmers	1 1			1					
22.	Introduction of fodder bank	Fodders	Imbalanced fodder feeding	Fodde	r Bank	2	1		2	0.11	61000			

3.B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/ enterprise	No.of programmes conducted			
				OFT	FLD	Training	Others (Field day)
1	2	3	4	5	6	7	8
1.	Use of designer seed in upland paddy cultivation	TNAU Pa	ddy	5		2	1
2.	Farmers participatory hybrid seed production CORH3	TNAU	Paddy	4		2	1
3.	Assessment of refined wet land weeder developed by KVK, Madurai	TNAU	Paddy	5		3	1
4.	Management of banana nematodes by PGPR consortium	TNAU Ban	ana	5		3	1
5.	Control of ranikhet disease in Desi chicken	TANUVAS	Poultry	50		1	1
6.	Area specific mineral mixture for dairy cows	TANUVAS	Livestock	10		1	1
7.	Introduction of CO (R) 49 paddy in wet land.	TNAU	Paddy		10	1	1
8.	Introduction of hybrid paddy (CoRH-3)	TNAU	Paddy		10	1	1
9.	Management of tea mosquito bug	TNAU	Cashew		10	1	1
10.	Spraying of SOP @ 2% at fruiting stages	TNAU	Mango		10	2	1
11.	Introduction of PLR2 variety	TNAU	Snake gourd		10	2	1
12.	Mini mobile sprinkler for pulses	TNAU	Micro irrigation		20	1	1
13.	Popularization of low cost vegetable preservator	CRIDA	PHT		20	1	1
14.	Popularization of pulses hulling machine	TNAU	Processing		20	3	1
15.	Introduction of HYV TMV (Gn)-13	TNAU	Groundnut		20	2	1
16.	Introduction of HYV TMV-7	TNAU	Sesame		20	2	1
17.	Introduction of HYV VBN (Rg)-3	TNAU	Red gram		20	2	1
18.	Introduction of HYV VBN (Bg)-5	TNAU	Black gram		20	2	1
19.	Introduction of HYV VBN (Gm)-3	TNAU	Green Gram		20	1	1
20.	Suitable goat breed for higher productivity TANUVAS		Tellichery Goat		5	1	1
21.	Introduction of Turkey birds among farmers	TANUVAS	Poultry		10	1	1
22.	Fodder Bank	TANUVAS	Fodder		15	2	1

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Field day)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	1	1	1					32	16	8	4	16	8	4	2
1	1	1	1					34	14	7	5	15	7	5	3
3		2						48	24	12	6	12	8	4	5
2	1	1	1					48	24	12	6	17	5	5	2
25	15	3	7					16	8	4	2	16	4	4	6
3	3	1	3					16	8	4	2	18	6	5	1
				3	3		1	16	8		2	16	6		3
				3	3		1	16	8		2	15	8		2
				5	1		1	16	8		2	13	12	5	5
				6	1	1	1	2	16	8		4	18	10	3
				6	2	1	1	2	16	8		4	16	10	2
				12	2	4	2	16	8		4	2	14	9	5
				13	3	3	2	16	8		4	2	15	7	4
				15	2	2	1	48	24	12	6	15	8	5	2
				12	2	4	2	2	16	8		4	17	6	6
				13	3	3	2	2	16	8		4	16	8	4
				15	2	2	1	2	16	8		4	12	10	1
				12	2	4	2	2	16	8		4	16	8	4
				13	3	3	2	16	8		4	2	15	8	1
				2	1		1	16	8		2	15	4		1
				6	1	2	1	16	8	4	2	16	6	6	5
				7	3	3	2	2	16	8		4	17	8	3

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

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

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

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

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management					
Varietal Evaluation	Paddy	Farmers participatory hybrid seed production CORH3	4 4		1
Integrated Pest Management	Banana	Application of Carbofuran 40g/sucker+Neem cake 500g on 3, 5 Month +Application of <i>Pseudomonas fluorescence</i> 25g/plant during 1, 3 rd month	5 5		1
	Banana	Management of Nematodes in banana	5 5		1
Integrated Crop Management	Paddy	Use of designer seed in upland paddy cultivation	5 5		1
		Use of designer seed in upland paddy cultivation. 5		5	1
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management	Paddy	Assessing the efficacy of refined weeder	5 5		1
		Single row power weeder designed by KVK, Madurai	5 5		1
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total					

4.B.2. Technologies Refined under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management					
Varietal Evaluation					

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

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

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management	Cattle	Area specific mineral mixture 30 to 50 g/day continuously for one year from the first day after calving	10 50	
Disease management	Poultry	1. Oral Pellet Ranikhet Vaccine on the 7& 14 day 2. RDVK – subcutaneous 8 th and 16 th week	50 250	
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

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

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

4.C1. Results of Technologies Assessed
Results of On Farm Trial -1

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Paddy Ra	infed	Low productivity due to moisture stress during early stages	Use of designer seed in upland paddy cultivation	5	TO1: The seeds are sown directly with out any treatment. Sowing taken up as dry sowing prior to monsoon.	Germination %, Population, Yield q/ha and BCR	84 28 52.8t 2.0				
					TO2: Seed hardening with 1% KCl for 10 hrs + seed treatment with Bavistin @ 2 g + Azospirillum @ 20 g/ kg of seed	Germination %, Population, Yieldq/ha and BCR	90 30 55.5 2.1	4 % increased yield over TO1 but 9.3% lesser over TO3		Nil N	il
					TO3: Designer seed techniques : Seeds hardened with 1% KCl followed by coated with polymer @ 3g + Imidachloprid @1 ml + Carbendazim @ 2g + pseudomonas @10g + Azophos @ 40g + micronutrient mixture @ 20g + DAP @ 30g / kg of seed.	Germination %, Population, Yieldt/ha and BCR	90 32 60.0 2.3	Recorded 13.6%, 9.3% higher yield over TO1, TO2	Satisfied with technology but the inputs should be available as kit in markets	Nil N	il

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	No seed treatment	52.80	q/ha	27849.5	2.0
Technology option 2	TNAU, Coimbatore	54.90	q/ha	30033.5	2.1
Technology option 3	TNAU, Coimbatore	60.00	q/ha	35337.5	2.3

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

1.	Title of Technology Assessed	Use of designer seed in upland paddy cultivation
2.	Problem Definition	Low productivity due to moisture stress during early stages
3.	Details of technologies selected for assessment	TO1: The seeds are sown directly with out any treatment. Sowing taken up as dry sowing prior to monsoon. TO2: Seed hardening with 1% KCl for 10 hrs + seed treatment with Bavistin @ 2 g + Azospirillum @ 20 g/ kg of seed TO3: Designer seed techniques : Seeds hardened with 1% KCl followed by coating with polykote @ 3g + Imidachlopid @1 ml + Carbendazim @ 2g + <i>Pseudomonas</i> @10g + Azophos @ 40g + micronutrient mixture @ 20g + DAP @ 30g / kg of seed.
4.	Source of technology	TNAU, Coimbatore
5.	Production system and thematic area	Upland, Rainfed and drought mitigation
6.	Performance of the Technology with performance indicators	TO3 performed well and yielded high by recording higher germination (90%), plant population (32/sqmt) and yield (6.0t/ha)
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Difficult to get inputs required for seed treatment in time. Hence ,the farmers felt that designer seed should be prepared and sold in the market or the chemicals required should be given as a kit for the recommended seed rate.
8.	Final recommendation for micro level situation	Designer seed technology increased the yield in paddy under upland cultivation by giving tolerance to drought and nutrient deficiency. So it is recommended for upland paddy cultivation.
9.	Constraints identified and feedback for research	Nil
10.	Process of farmers participation and their reaction	Being a new technology, farmers involved well and practiced this technology. They satisfied because of cost effectiveness and higher productivity

Results of On Farm Trial -2

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Paddy Wet	land	Non availability of hybrid seeds	Farmers Participatory hybrid seed production	2	Conventional paddy seed production	Yield/ha	71q/ha				
					Hybrid seed production	Yield/ha	2.75q/ha	Very low seed yield	Difficult to take up sequential sowing and planting, rope pulling, GA3 application. Very poor seed set and splitting of grains	Nil Nil	

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	TNAU, Coimbatore	71.30	q/ha	35687	1.92
Technology option 2	TNAU, Coimbatore	2.75	q/ha	-4090	0.89

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

11.	Title of Technology Assessed	Farmers participatory hybrid seed production
12.	Problem Definition	Non availability of hybrid seeds
13.	Details of technologies selected for assessment	TO1: Conventional paddy seed production TO2: Hybrid seed production
14.	Source of technology	TNAU
15.	Production system and thematic area	Wet land, Farmers Participatory hybrid seed production
16.	Performance of the Technology with performance indicators	Very poor seed setting percentage and seed yield
17.	Feedback, matrix scoring of various technology parameters done through farmer's participation	Hybrid seed production by farmers is non remunerative
18.	Final recommendation for micro level situation	Weather parameters in this districts is not suitable for paddy hybrid seed production
19.	Constraints identified and feedback for research	Not willing to go for hybrid seed production because of difficulties like sequential planting, pollination, application of GA3, synchronization and rope pulling .
20.	Process of farmers participation and their reaction	-

Results of On Farm Trial -3

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1 2		3	4	5	6	7	8	9	10	11	12
Paddy	Wet land	Drudgery in adoption of SRI weeder	Assessing the efficacy of refined weeder	5	Rotary weeder	Weed control Efficiency Yield/ha	57% 73.65q	User friendly Less weight Easy to operate	Easy to operate by women		
					Double row TNAU power weeder	Weed control Efficiency Yield/ha	86% 83.27q	Larger area covered per day, WCE is more	Easy to operate and more area covered in short time		
					Plastic molded cono weeder	Weed control Efficiency Yield/ha	81% 78.80q	Plastic molded cono weeder .Less adoption rate due to to more weight	Getting shoulder pain if they work for large area.		

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / ha	BC Ratio
13 14		15	16	17	18
Technology option 1 (Farmer's practice)	TNAU 73.65		q/ha	40,046	2.10
Technology option 2	TNAU	83.27	q/ha	49,135	2.31
Technology option 3	TNAU	78.80	q/ha	44,882	2.21

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

1.	Title of Technology Assessed	Assessing the efficacy of refined weeder
2.	Problem Definition	Drudgery in adoption of SRI weeder
3.	Details of technologies selected for assessment	TO1: Rotary weeder TO2: Double row TNAU power weeder TO3: Plastic molded cono weeder
4.	Source of technology	TNAU
5.	Production system and thematic area	Wetland, Drudgery reduction
6.	Performance of the Technology with performance indicators	Wet land paddy ecosystem and weed management
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	TO2 is very effective to control weeds because of more area coverage in short period and very easy to operate
8.	Final recommendation for micro level situation	Spacing in SRI method may be enhanced to 30X10 cm for double row power weeder
9.	Constraints identified and feedback for research	Square planting is must for adopting weeder. SRI marker may be modified for easy adoption by farmers
10.	Process of farmers participation and their reaction	Labour saving, high yield

Results of On Farm Trial 4

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Banana Garden	Land	Nematode Infestation	Management of Nematodes	5	TO1: No control measures	Soil Nematode Population Bunch weight(kg) Yield(q/ha)	275 20.10 460				
					TO2: Application of Carbofuran 40g/sucker+Neem cake 500g on 3, 5 Month +Application of <i>Pseudomonas fluorescence</i> 25g/plant during 1, 3 rd month	Soil Nematode Population Bunch weight(kg) Yield(q/ha)	125 22.50 494.0	The bunch weight and yield was higher over TO1		Nil Nil	
					TO3: Application of Carbofuran 40g/sucker+Neem cake 500g at planting and 3 rd Month+ <i>Pseudomonas fluorescence</i> 1. 25kg/ha + <i>Bacillus subtilis</i> 1.25kg/ha during 1 st and 3 rd month	Soil Nematode Population Bunch weight(kg) Yield(q/ha)	85 23.18 510.0	The bunch weight and yield was higher over TO2	The farmers satisfied with TO3	Nil Nil	

Contd..

Technology Assessed	Source of Technology	Production unit	nit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	No control measures	460	q/ha	127776	2.21
Technology option 2	NRC banana	494	q/ha	183700	2.63
Technology option 3	TNAU, Coimbatore	510	q/ha	193200	2.71

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

1.	Title of Technology Assessed	Management of nematode in banana
2.	Problem Definition	Nematode Infestation
3.	Details of technologies selected for assessment	TO1: No control measures TO2: Application of Carbofuran 40g/sucker at planting +Neem cake 500g at planting and 3 rd Month +Application of <i>Pseudomonas fluorescence</i> 25g/plant during 1, 3 rd month TO3: Application of Carbofuran 40g/sucker+Neem cake 500g/plant on 3, 5 Month+ <i>Pseudomonas fluorescence</i> 1.25kg/ha + <i>Bacillus subtilis</i> 1.25kg/ha during 1, 3 month
4.	Source of technology	TO2: NRC banana, TO3: TNAU, Coimbatore
5.	Production system and thematic area	Garden land, IPM
6.	Performance of the Technology with performance indicators	The root damage has been reduced and bunch weight increased
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	The Carbofuran and neem cake costs were higher
8.	Final recommendation for micro level situation	Application of Carbofuran 40g/sucker at planting +Neem cake 500g/plant at planting 3 Month + <i>Pseudomonas fluorescence</i> 1.25kg+ <i>Bacillus subtilis</i> 1.25kg/ha during 1, 3 rd month
9.	Constraints identified and feedback for research	Nil
10.	Process of farmers participation and their reaction	The farmers showed interest in adapting the technology

Results of On Farm Trial -5

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Poultry	Back yard	Incidence of ranikhet disease	Control of ranikhet disease in desi chicken	50	No Vaccination	Mortality (%) 7 th day 14 th day	17 14				
					2.RDVF vaccine – Eye drops -7 th and 14 th day 3.RDVK – Subcutaneous 8 th and 16 th week	Mortality (%) 7 th day 14 th day 8 th week 16 th week	5 5 2 2	Mortality pattern was less in TO2	-		-
					1.Oral Pellet Ranikhet Vaccine on the 7 th to 14 th day 2. RDVK – subcutaneous 8 th and 16 th week	Mortality (%) 7 th day 14 th day 8 th week 16 th week	5 5 2 2	Mortality pattern was less in TO2 and TO3	Farmers accepted the TO3 because of easy administration of vaccination by oral pellets form.	--	

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Technology Assessed	Source of Technology	Production Unit	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17
Technology option 1 (Farmer's practice)	- 70		Eggs/bird/year	1.80
Technology option 2	TANUVAS	85	Eggs/bird/year	2.30
Technology option 3	TANUVAS	85	Eggs/bird/year	2.30

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

21.	Title of Technology Assessed	Control of ranikhet disease in desi chicken
22.	Problem Definition	Incidence of ranikhet disease
23.	Details of technologies selected for assessment	TO2 : RDVF vaccine – Eye drops -7 th and 14 th day RDVK – Subcutaneous 8 th and 16 th week
24.		TO3 : Oral Pellet Ranikhet Vaccine on the 7 th to 14 th day RDVK – subcutaneous 8 th and 16 th week
25.	Source of technology	TANUVAS
26.	Production system and thematic area	Back yard poultry, Disease Management
27.	Performance of the Technology with performance indicators	Mortality pattern was reduced from 17% to 5 % in the early stage
28.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Farmers accepted TO3 even though TO2 and TO3 gave same results. Administration of vaccine in pellet form is more convenient farmers.
29.	Final recommendation for micro level situation	Oral pellet vaccine on 7 th and 14 th day and 8 th and 16 th week
30.	Constraints identified and feedback for research	Availability of pellet form of vaccine
31.	Process of farmers participation and their reaction	Farmers especially farm womens showed interest to adopt this technology to prevent the desi chicken from Ranikhet disease.

Results of On Farm Trial -6

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Cattle	Cattle rearing	Long post calving period	Assessment of area specific mineral mixture	10	No mineral mixture	Milk yield On set of first estrum No of insemination required	6L/day 6month 5				
					Mineral mixture 30- 50 g /day continuously for one year from the first day after calving	Milk yield On set of first estrum No of insemination required	7 4 3			-	-
					Area specific mineral mixture 30 to 50 g/day continuously for one year from the first day after calving	Milk yield On set of first estrum No of insemination required	8 3 2	Supplementation of area specific mineral mixture increased milk yield and conception rate % increased	Satisfied with TO3	-	

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Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	6		Litre/animal/day	24	2.10
Technology option 2	TANUVAS	7	Litre/animal/day	38	2.70
Technology option 3	TANUVAS	8	Litre/animal/day	43	3.00

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

1.	Title of Technology Assessed	Assessment of Area specific mineral mixture for dairy cows
2.	Problem Definition	Long post calving period
3.	Details of technologies selected for assessment	TO1: Farmers Practice TO2: Mineral mixture: 30- 50 g /day continuously for one year from first day after calving TO3: Area specific mineral mixture: 30 - 50 g/day continuously for one year from first day after calving
4.	Source of technology	TANUVAS
5.	Production system and thematic area	Dairy-Cross breeds
6.	Performance of the Technology with performance indicators	Milk yield was high in TO3and require less no. of insemination for conception. Quicker onset of estrum after calving.
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation	Farmers prefers TO3 since it produce higher milk yield and it is effective in success rate of insemination
8.	Final recommendation for micro level situation	Supplementation of area specific mineral mixture 30-50gm/day
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	Farmers are ready to adopt the technology because of more milk yield and effective in success rate of insemination

PART V - FRONTLINE DEMONSTRATIONS

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

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid Theme	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	C/ST	Others	Total	
1	Oilseeds	Irrigated	Rabi 2011	Ground nut	TMV (Gn) 13		Introduction of HYV	Popularization of new variety TMV (Gn) 13	4	4	5	15	20	Nil
		Irrigated	Rabi 2010	Sesame	TMV(Si)7		Introduction of HYV	Popularization of new variety TMV (Si)7	4	4	7	13	20	Nil
2	Pulses	Irrigated	Rabi 2010	Black gram	VBN (Bg)5		Introduction of HYV	Popularization of new variety VBN (Bg)5	4	4	4	16	20	Nil
		Irrigated	Rabi 2010	Green gram	VBN (Gm)3		Introduction of HYV	Popularization of new variety VBN (Gm)3	2	2	1	19	20	Nil
		Rainfed	Kharif 2010	Red gram	VBN (Rg)3		Introduction of HYV	Popularization of new variety VBN (Rg)3	4	4	3	17	20	Nil
3	Cereals	Wetland	Samba 2010	Paddy	CO (R) 49		Introduction of HYV	Popularization of new variety CO(R) 49	2	2	2	8	10	Nil
		Wetland	Samba 2010	Paddy		CORH-3	Introduction of Hybrid rice	Popularization of new hybrid CoRH-3	2	2	-	10	10	Nil
4	Milllets													
5	Vegetables	Irrigated	Kharif 2010	Snake gourd	PLR2		Introduction of HYV	Popularization of HYV PLR2	2	2	2	8	10	Nil
6	Fruit													
7	Ornamental													
8	Fruit	Rainfed	2010-11	Mango	Ba ngalora		Foliar nutrition	Foliar application of sulphate of	2	2	1	9	10	Nil

5.B. Results of Frontline Demonstrations

5.B.1. Crops

Crop	Name of the technology demonstrated	Variety Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)				
						Demo Ch			eck		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
						H	L	A											
Oilseeds																			
Ground nut	Popularization of new HYV	TMV(Gn)-13	Irrigated	20	4	21	18	19.5	18.00	8.33	25800	68250	42450	2.64	25800	63000	37200	2.44	
Sesame	Popularization of new HYV	TMV(Si)7	Irrigated	20	4	8.9	8.2	8.5	7.65	11.11	15050	32300	17250	2.14	15050	29070	14020	1.93	
Pulses																			
Black gram	Popularization of new HYV	VBN (Bg)5	Irrigated	20	4	11.2	8.56	9.88	8.40	17.62	20701	59280	38579	2.86	20701	50400	29699	2.43	
Green gram	Popularization of new HYV	VBN (Gm)-3	Irrigated	20	2	12.5	9.75	11.12	9.10	22	19900	55625	35725	2.79	19900	45500	25600	2.28	
Red gram	Popularization of new HYV	VBN(Rg)3	Rainfed	20	2	9.25	7.50	8.37	6.45	29.77	15580	41875	26295	2.68	15580	32250	16670	2.06	
Cereals																			
Paddy	Popularization of new Hybrid	CORH3	Wet land	10	2	97.6	82.2	89.9	73.6	22.15	38812	93496	54684	2.41	38812	76544	37732	1.97	
Paddy	Popularization of new HYV	CO (R)49	Wetland	10	2	81.25	70.0	75.63	64.37	17.49	38465	78650	40185	2.04	38465	66950	28485	1.74	
Millets																			
Vegetables																			
Snake gourd	Popularization of HYV	PLR2	Irrigated	10	2	390	350	370	160 (Tropical short)	131.25	73	123	185000	111877	2.53	52980	80000	27020	1.51
Flowers																			
Ornamental																			
Fruit																			
Mango	Foliar application of sulphate of potash 2% at peanut stage and 2 sprays at 15 days interval	Bangalora	Rainfed	10	2	190	156	173	152	13.82	33650	86500	52850	2.57	36019	76000	39981	2.11	
Spices and condiments																			
Commercial																			

Medicinal and aromatic																			
Fodder F	odder bank	Co(CN)-4 Co(Gg)-3	Irrigated	16	1.04	3450	2900	3175	2400	32.29	24650	71978	47328	2.92	23750	48450	24700	2.	04
Plantation																			
Cashew	Application of coir pith 50kg/tree Spraying against tea mosquito bug Profenophos 5ml/L at fleshing Chlorpyriphos 5ml/L at flowering Carboryl 1g/L at peanut stage	VRI1	Rainfed	10	2	10.4	8.6	9.5	6.13	54.98	15322	38000	22678	2.48	11621	24520	12899	2.11	
Fibre																			
Others (pl.specify)																			

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

** BCR= GROSS RETURN/GROSS COST

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

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

1. Technology demonstrated: Popularization of TMV(Gn)-13 Ground nut		
Parameter with unit	Demo (TMV(Gn)-13)	Local (VRI-2)
No. of pods/plant	38	32
Shelling percentage	74	71
Straw yield (t/ha)	4.4	3.9

2.Technology demonstrated: Popularization of TMV(Si)-7 Sesame		
Parameter with unit	Demo	Local (VRI2)
Plant height (cm)	128	135
No. of branches/plant	5	3
Powdery mildew susceptibility	Moderate	Tolerant

3.Technology demonstrated: Popularization of VBN (Bg)5 black gram		
Parameter with unit	Demo	Local (VBN3)
No. of branches	5	3
Yellow mosaic virus	Moderately susceptible	Tolerant

4.Technology demonstrated: Popularization of VBN (Gm)-3 Green gram		
Parameter with unit	Demo	Local (VBN2)
Yellow mosaic tolerance	Moderately susceptible	Tolerant

5.Technology demonstrated: Popularization of VBN (Rg)-3 Red gram		
Parameter with unit	Demo	Local (APK1)
Sterility mosaic incidence	No incidence	Tolerant
Pod borer incidence	Tolerant	Moderately susceptible

6.Technology demonstrated: Popularization of CO(R) -49 Paddy		
Parameter with unit	Demo	Local (BPT5204)
Yellow stem borer	Moderately susceptible	Moderately susceptible
Blast M	oderately susceptible	Highly susceptible
Duration (days)	125	135

7.Technology demonstrated: Popularization of CORH -3 Paddy

Parameter with unit	Demo	Local
Panicle length	32 cm	26 cm
No of tillers	35	27

8.Technology demonstrated: Popularization of PLR -2 Snake gourd		
Parameter with unit	Demo (PLR2)	Local (Tropical short)
Fruit weight(g/fruit)	600	330
Fruit volume	1100ml	350ml
No.of fruits/vine	15	12

9.Technology demonstrated: Foliar application of sulphate of potash 2% at peanut stage and 2 sprays at 15 days interval in mango		
Parameter with unit	Demo	Local
Fruit weight (g/fruit)	450	300
No. of fruits (Nos/tree)	351	302
Physical Appearance	Best	Good

10.Technology demonstrated: Popularization of Fodder Bank		
Parameter with unit	Demo	Local
Fodder availability	Throughout the year	During monsoon season
No. of cuttings	9 times	Irregular availability

11. Technology demonstrated: Soil moisture Conservation and Management of Tea Mosquito bug in cashew		
Parameter with unit	Demo	Local
	Soil moisture conservation and Spraying of Profenophos 5ml /L at flushing stage followed by chlorpyriphos 5ml/L at flowering stage and Carboryl 1g /L + Urea 4%	Without soil moisture conservation and spraying of synthetic pyrethroids
Pest incidence (%)	15	45
No. nuts (nos/tree)	550	380
Yield (kg/tree)	5.5	3.50

5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (kg/month)			Check if any	% Increase	*Economics of demonstration (Rs./bird)				*Economics of check (Rs./bird)				
					Demo					Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
					H	L	A											
Dairy																		
Poultry	Introduction of turkey birds among farmers	Nandanam-1	10	10	8.2	6.6	7.40	1.90	64.05	460	1110	650	2.41	350	418	68	1.19	
Rabbitry																		
Pigerry																		
Goat	Popularization of improved breed	Tellicherry	66		15.6	11.7	13.65	9.5	43.68	1350	3141	1791	2.33	1050	2185	1135	2.08	
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.)

12. Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demo	Check if any
Milk yield (l/cow/day)	11	8.5
Concentrate feed cost	less	more

13. Technology demonstrated: Popularization of improved Goat breed		
Parameter with unit	Demo (Tellicherry)	Check if any (Local Breed)
Body growth weight	More	Less
Flesh softness	More	Less

5.B.3. Fisheries

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

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

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

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

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

5.B.4. Other enterprises

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

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

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

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

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

5.B.5. Farm implements and machinery

Name of the implement	Cost of the implement in Rs.	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha	Labour requirement in Mandays		% save	Savings in labour (Rs./ha)	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check			Gross cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Mini mobile sprinkler	26,000	Mini mobile sprinkler in black gram	20	8	3	8	62	1250/ha	17566	39600	22034	2.25	15738	31200	15462	1.98
CRIDA vegetable preservator	2050	Popularization of CRIDA vegetable preservator	20	15kg/demo	-	1	100	250/day	91.2	150	58.8	1.64	90	108	18	1.2
Pulses hulling machine	61,000	Popularization of Pulses hulling machine	20	100kg/demo	2	4	50	500/day	5320	6100	780	1.15	4800	5200	400	1.08

* 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.)

14. technology demonstrated : Popularization of CRIDA vegetable preservator		
Parameter with unit	Demo	Local
Portability Yes		No
Lesser weight	Yes	No
Supplementary irrigation in terminal drought areas	Possible	Not possible

15. technology demonstrated : Popularization of CRIDA vegetable preservator		
Parameter with unit	Demo	Local
Shelf life of the vegetables (Days)	12	5
Electricity usage (Units/day)	0	0.7
Cost of preservation (Rs/day/15kg)	0	0.8

16. Technology demonstrated: Popularization of pulses hulling machine		
Parameter with unit	Demo	Local
Marginal price after harvesting	65	48

5.B.6. Cotton

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

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

5.B.6.2 Production technology demonstrations

Performance of demonstrations

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

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

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

5.B.6.3 Integrated pest management demonstrations

2			
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5.B.6.8 Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1 F	field days			
2 F	farmers Training			
3 M	media coverage			
4	Training for extension functionaries			

PART VI – DEMONSTRATIONS ON CROP HYBRIDS**Demonstration details on crop hybrids**

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)			% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)				
					Demo				Gross Cost	Gross Return	Net Return	**BCR	Gross Cost	Gross Return	Net Return	**BCR	
					H	L	A										
Cereals																	
Bajra																	
Maize																	
Paddy																	
Sorghum																	
Wheat																	
Others (pl.specify)																	
Total																	
Oilseeds																	
Castor																	
Mustard																	
Safflower																	
Sesame																	
Sunflower																	
Groundnut																	
Soybean																	
Others (pl.specify)																	
Total																	
Pulses																	
Greengram																	
Blackgram																	
Bengalgram																	
Redgram																	
Others (pl.specify)																	
Total																	
Vegetable crops																	
Bottle gourd																	
Capsicum																	
Others (pl.specify)																	
Total																	
Cucumber																	
Tomato																	
Brinjal																	
Okra																	
Onion																	
Potato																	
Field bean																	
Others (pl.specify)																	
Total																	
Commercial crops																	
Sugarcane																	
Coconut																	
Others (pl.specify)																	
Total																	
Fodder crops																	
Maize (Fodder)																	
Sorghum (Fodder)																	
Others (pl.specify)																	
Total																	

H-High L-Low, A-Average

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

Dairy Management											
Poultry Management											
Piggery Management											
Rabbit Management											
Animal Nutrition Management	1	22	14	36	2	2	4	24	16	40	
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	2	-	40	40	-	4	4	-	44	44	
Gender mainstreaming through SHGs											
Storage loss minimization techniques											
Value addition											
Women empowerment											
Location specific drudgery production											
Rural Crafts											
Women and child care											
Others (pl.specify)											
Agril. Engineering											
Farm machinery and its maintenance	1	21	18	39	4	2	6	25	2	0	45
Installation and maintenance of micro irrigation systems	1	9	21	30	4	6	10	13	27	40	
Use of Plastics in farming practices											
Production of small tools and implements											
Repair and maintenance of farm machinery and implements											
Small scale processing and value addition											
Post Harvest Technology											
Others (pl.specify)Usage of pulse harvester	1	20	3	23	1	3	4	21	6	27	

Group dynamics	1	8	13	21	-	5	5	8	1	8	26
Formation and Management of SHGs											
Mobilization of social capital											
Entrepreneurial development of farmers/youths											
Others (pl.specify)Creating awareness about agriportal	1	-	14	14	-	26	26	-	4	0	40
Agro-forestry											
Production technologies											
Nursery management											
Integrated Farming Systems											
Others (Pl. specify)											
TOTAL	17	190	214	404	32	85	117	222	299	521	

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

Area of training	No. of Courses	No. of Participants									
		General			SC/ST			Grand Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
Crop Production											
Weed Management	1	26	14	40	12	8	20	38	2	60	
Resource Conservation Technologies	1	21	14	35	3	4	7	24	1	42	
Cropping Systems	2	61	20	81	4	4	8	65	2	89	
Crop Diversification	2	41	32	73	5	7	12	46	s	39	85
Integrated Farming	1	9	7	16	1	2	3	10	9	19	
Micro Irrigation/Irrigation	1	18	12	30	2	1	3	20	13	33	
Seed production	5	80	91	171	12	9	21	92	100	192	
Nursery management											
Integrated Crop Management	1	13	16	29	1	4	5	14	20	34	
Soil and Water Conservation	1	19	21	40	6	6	12	25	27	52	
Integrated Nutrient Management											
Production of organic inputs											
Others (pl.specify) Importance of FFS	1	12	9	21	6	4	10	18	13	31	
Horticulture											
a) Vegetable Crops											
Production of low value and high volume crop	1	20	23	43	4	7	11	24	3	0	54
Off-season vegetables	1	15	24	39	4	3	7	19	2	7	46
Nursery raising	1	18	15	33	4	3	7	22	1	8	40
Exotic vegetables	1	14	19	33	4	5	9	18	2	4	42
Export potential vegetables	1	21	15	36	1	3	4	22	18	40	
Grading and standardization	1	21	18	39	3	2	5	24	20	44	
Protective cultivation											
Others (pl.specify) Importance of growth regulators	2	56	34	90	7	4	11	63	3	8	101
b) Fruits											
Training and Pruning											
Layout and Management of Orchards											
Cultivation of Fruit	1	12	8	20	6	4	10	18	12	30	
Management of young plants/orchards	1	18	17	35	2	4	6	20	2	1	41
Rejuvenation of old orchards											
Export potential fruits	1	32	-	32	6	-	6	38	-	38	
Micro irrigation systems of orchards											
Plant propagation techniques	1	16	15	31	4	3	7	20	18	38	
Others (pl.specify)Integrated	1	13	17	30	4	6	10	17	2	3	40

Leadership development	1	17	22	39	2	2	4	19	2	4	43
Group dynamics											
Formation and Management of SHGs											
Mobilization of social capital	1	7	8	15	1	-	1	8	8	8	16
Entrepreneurial development of farmers/youths	1	24	4	28	3	-	3	27	4	4	31
Others (pl.specify)Marketing	3	68	25	93	3	6	9	71	3	1	102
Agro-forestry											
Production technologies	2	39	41	80	2	3	5	41	4	4	85
Nursery management											
Integrated Farming Systems	1	12	13	25	2	1	3	14	14	14	28
Others (Pl. specify)											
TOTAL	61	1137	908	2045	174	167	341	1311	1075	1075	2386

Stitching										
Rural Crafts										
Production of quality animal products	18		12	20	2	3	5	10	15	25
Dairying 1		18	22	40	5	2	7	23	24	27
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production	1	17	13	30	2	4	6	19	17	36
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)Seed colouring technology	13	8	14	52	4	4	8	42	18	60
TOTAL	20	343	322	665	57	67	124	400	389	789

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1 1	9	2	21	-	-	-	19	2	21
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards	1 2	4	-	24	-	-	-	24	-	24
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	1 3	1	-	31	-	-	-	31	-	31
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify) Sericulture	1 2	1	-	21	-	-	-	21	-	21
Total	4	95	2	97	-	-	-	95	2	97

	training										
4.k. Others	(pl.specify)										
5	Agricultural Extension										
5.a. Cap	acity building and group dynamics										
5.b. Others	(pl.specify)										
	Grand Total	39	92	110	202	16	22	38	108	132	240

PART VIII – EXTENSION ACTIVITIES**Extension Programmes (including activities of FLD programmes)**

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	28 1122		1008	2130	84	73	157	21	6	27
Kisan Mela	3	468	256	724	37	28	65	14	3	17
Kisan Ghosthi										
Exhibition										
Film Show	23	312	187	499	31	12	43	16	3	19
Method Demonstrations	48 940		610	1550	83	73	156	44	7	51
Farmers Seminar	2	53	21 74		27	18 45		8	3	11
Workshop										
Group meetings	6	63	27	90	16	9	25	2	2	4
Lectures delivered as resource persons	12 55		15	70	65	8	73	2	3	5
Newspaper coverage	92									
Radio talks	14									
TV talks	3									
Popular articles	21									
Extension Literature	19									
Advisory Services	72	56	7 63		13	4 17		4	3	7
Scientific visit to farmers field	92 61		13	74	18	6	24	6	3	9
Farmers visit to KVK	923 515		224	739	110	63	173	7	4	11
Diagnostic visits	43	33	7 40		7	4 11		1	2	3
Exposure visits	3	180	62	242	41	16	57	4	2	6
Ex-trainees Sammelan										
Soil health Camp										
Animal Health Camp										
Agri mobile clinic										
Soil test campaigns	16 312		116	428	42	37	79	3	2	5
Farm Science Club Conveners meet	7 172		81	253	16	4	20	-	-	-

Self Help Group Conveners meetings										
Mahila Mandals Conveners meetings										
Celebration of important days (specify)										
Any Other (Specify)										
Total	1415	4287	2619	6906	525	347	872	130	40	170

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	Black gram & Green gram	VBN-4, VBN-5 VBN-3, VBN-2		20.94	132780	170
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds	Velimasal			0.11	5600	5
Fiber crops						
Forest Species						
Others (specify)						
Total				21.05	138380	175

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	Coconut	East coast tall		3608	90200	133
Spices						
Tuber						
Fodder crop saplings	Cumbu napier & Guinea grass	CO-4 CO-3		61000	30500	252
Forest Species						
Others(specify)						
Total				64608	120700	385

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers	Vermicompost	700	3500	6
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others (specify)	Coir pith compost	1000	5000	10
Total		1700	8500	16

9.D. Production of livestock materials

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

Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

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

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

(A). KVK News Letter etc.)

Date of start - 2008

Periodicity - Quarter

Number of copies distributed - 4500

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers			
Technical reports			
News letters	Puthugai	Dr.P.Kalaiselvan & Dr.P.Chinnaiyan	500
Technical bulletins			
Popular articles			
Extension literature			
Others (Phamplets)	Red gram transplanting	Dr.P.Chinnaiyan and Dr.R.Suresh	1000
	Vermicompost production	S.Gopal and Dr.P.Chinnaiyan	1000
	Latest varieties and technologies (2010) in Agriculture	Dr.S.K. Natarajan and Dr.P.Chinnaiyan	500
	Latest varieties and technologies (2010) in Horticulture	Dr. V.Krishnamoorthy and Dr.P.Chinnaiyan	500
	Soil testing	Programme Cordinator	1000
	Designer seed	Dr.S.Kavitha and Dr.P.Chinnaiyan	1000
	Integrated Farming System	Dr.S.K. Natatrajan and Dr.P.Chinnaiyan	1000
TOTAL			6500

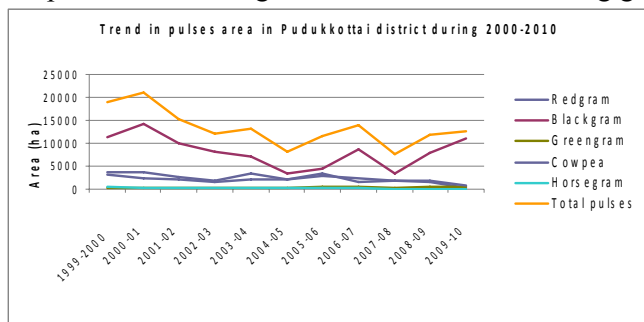
10.B. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
Nil	1	Nil	Nil

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).

Case 1: Promotion of Pulses Cultivation in Pudukkottai district

Pulses were cultivated in Pudukkottai district at around 9000 ha which was about 1.5 % of the state pulses area during 2008-09. There exists a big gap always between the production of pulses and the



demand for pulse which resulted in the price hike especially during July and August. Since the price hike was a big issue to the state government, pulse promotion programme was started in the Pudukkottai district by the KVK along with line departments to increase the area under pulses in the district. Our KVK with its full strength of technical expertise is actively involving in promotion of pulses in the district from its inception in the year 2000 through

specialized schemes like, seed village scheme, IAMWARM activities etc. KVK, Pudukkottai works in the line of increasing the area under pulses and to harness the scope of increasing the production by improving the yield through frontier production technologies by precision agriculture, micro irrigation, foliar spray of DAP proper fertilization etc.

Trend in pulses area in Pudukkottai district

Crops	1999-00	2000-01	2005-06	2006-07	2007-08	2008-09	2009-10
Red gram	3,737	3,787	3,299	1,691	1,951	1,633	197
Black gram	11,423	14,266	4,564	8,700	3,478	7,886	11,064
Green gram	344	282	456	438	224	403	409
Cowpea	50	2,453	2,917	2,420	1,937	1,796	892
Horse gram	405	189	378	389	116	65	17
Total pulses	18,959	20,977	11,614	13,816	7,706	11,718	12,579

Intervention

KVK, Pudukkottai intervened in the traditional cropping pattern of the district through seed production in KVK farms, organizing seed village trainings, distribution of pulses seeds, training to farmers, training to field functionaries etc.

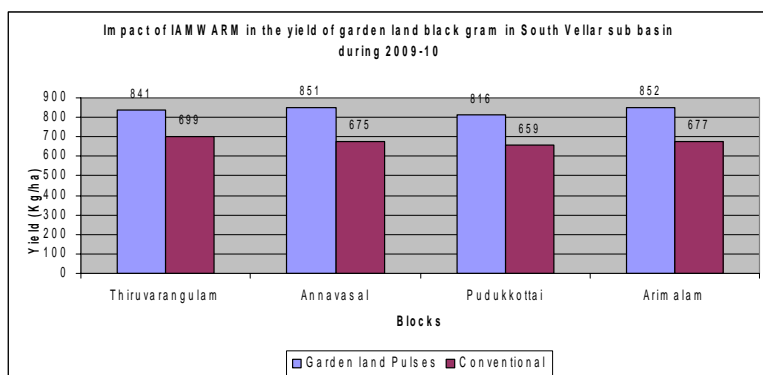
Seed production of black gram varieties like VBN - 3, VBN - 4 and VBN - 5 is being taken up in KVK farms and around 1.25 t of these varieties were produced for distribution to farmers for further seed production in farmer's field under seed village scheme during Rabi 2009 – 10. Seeds of VBN (Bg) - 4 & 5 were distributed to other district through KVKs in Villupuram, Sivagangai and Kanyakumari districts for further multiplication at their end.

In seed village schemes, 1836 kg of black gram (VBN 3, 4&5) seeds were distributed at 50 % subsidized rates to the farmers and three seed grower's trainings at critical phases of the crops were

given for each village. The scheme achieved coverage of 91.8 ha in 3 villages and about 230 farmers were trained for production of quality seeds at their own farm.

Another major component of KVK intervention is implementation of IAMWARM project, under which 8100 kg of black gram seeds (VBN 3 & 4) have been distributed in garden land and rice fallow lands of South Vellar basin in Pudukkottai district. An area of 405 ha was covered and 629 farmers were benefited in the year 2009-2010.

Effect of the technology/ process / results/impact



As a result of continuous KVK intervention as ICA R entity, during 2009-2010, the area under pulses in Pudukkottai district increased by 30 per cent over last year. With precision agricultural technologies recommended by the KVK scientists, the farmers could achieve a productivity of 700 kg/ha especially in black gram as garden land crop.

multiplied from the seed village scheme were further distributed among the pulse growers in nearby villages through KVK. The KVK intervention made the farmers to cultivate pulses as a garden land crop rather than growing as rainfed crop in marginal lands previously. Advanced precision technologies like line sowing, fertilization, foliar spray of DAP etc, achieved the objective of increasing the area under pulses and increasing the pulses production in the district.

In order to harness the synergy between technologies and community participation, special emphasis was given to build farmers capacity to produce quality seeds. Farm science clubs were organized in the pulse growing areas to promote the cultivation of improved pulses varieties. Training on improved production techniques and storage aspects of pulses have been organized in selected villages from all parts of the district. About 2150 farmers were given training. Two special trainings have also been organized to 60 agricultural officers.

Commodity groups were formed in which few pulses growers were making a group and they register themselves as seed growers. They procure pulses produced in the district by paying an incentive of Rs.1/kg above the market rate from the farmers.

A case of women pulses grower in Thiruvarangulam block

Sakuntala (50) of Poovaraskudi village in Thiruvarangulam block of Pudukkottai district is primary school educated. Being a member of local SHG, she can take up the suggestions given by the KVK, through various programmes like seed village, IAMWARM and other trainings; she took up agricultural activities of her own. She cultivated Vamban 3 black gram in 2 acres. Previously she did not adopt proper spacing and optimum plant population of 33 plants per square metre. KVK Pudukkottai intended to take up the issue of targeting farm women to disseminate production technologies that can sustain the pulses production. We trained more number of women farmers specially in seed village schemes and gave more rigorous training on pulses production and specialised techniques like line sowing, DAP spray for improving pod setting, application of bio fertilisers and super phosphate etc. As a result Sakuntala obtained a yield of 730 kg of VBN 3 (bg) from her two acres indicating a yield rate of 913 kg/ha. Previously she obtained a maximum of 520 kg from the same piece of land. Thus KVK played a catalytic role in improving her standard of living by enhancing the productivity and thereby the economics of pulses cultivation in garden lands of Thiruvarangulam block.

1.	Name of the farmer	:	A. Sakuntala	
2.	Village - Block - District	: Po	ovarasagudi-Thiruvargulam-Pudukottai	
3.	Soil type	:	Clay loam	
4.	Source or irrigation	:	Tank	
5.	Previous crop particulars	:	Paddy	
6.	Variety	:	VBN-3	
			Before KVK intervention	After KVK intervention
7.	Method of sowing	:	Broad casting	Line sowing
8.	Plant population and spacing	:	No proper spacing	30 X 10 cm
9.	Fertilizer application	:	No application	25:50:25 kg NPK/ha
10.	Yield : Grain yield (Kg/ha)	:	650	913
11.	Water use efficiency (Kg/ha cm)	:	-	52.1
12.	BCR	:	1.3	2.2
13.	Interpretation	:	40% yield increase previous years might be due to Super phosphate and bio fertilizer application. Introduction of Line Sowing in garden land Pulses crops reduce the weed infestation, and increase the yield by 40 %	

The result

The efforts made by KVK by implementing seed village programme, IAMWARM project and numerous trainings, especially trainings to farmers on pulse production at their own localities (on farm training) is yielding encouraging results. There was a very good response from the farmers' side too and they realised their responsibility which resulted in the increased area under pulses. During 2008-09, an area of 11,718 ha has been covered under pulses. Among the pulses, black gram (7,886 ha) was the major crop followed by cowpea (1,796 ha), red gram (1,633 ha) and green gram (403 ha). Due to the continuous efforts taken by the scientists of KVK and farmers area under pulses increased by 52 % from 7706 ha in 2007-08 to 11,718 ha in 2008-2009 and by 63 % in 2009-2010 (12579 ha) in Pudukkottai district. This result has evolved a cautious lesson in the minds of KVK members, that the increasing trend in area under pulses should be maintained in coming years.

Case 2: Commodity Group Approach for Higher Returns

Thiru.S.Veerassamy son of Thiru.Subbaiah residing at Venkitakulam village, Thiruvargulam block, Alangudi taluk, Pudukkottai district is a small farmer having garden land of four acres. The main source of irrigation is bore well. He completed his school studies upto 8th standard in the same village during 1980. During the study period, after the school days, he was accompanying his father and witnessing the agricultural operations. Most of the time he used to hear the radio programmes during day and night times. Apart from the entertainment programme he was hearing the agricultural

programmes also and gained knowledge on new technologies in agriculture. Later on, he was the contact farmer to the National Pulses Research Centre, TNAU, Vamban which is very nearer to his place.

After the establishment of Krishi Vigyan Kendra, Vamban during 2002 he became a contact farmer, convenor and also scientific advisory committee member of the Krishi Vigyan Kendra, Vamban. He was involved in training programmes, method demonstrations, group discussion. He was the main person involved in assessing the resources and the requirements for his village through Participatory Rural Appraisal. As a knowledgeable, innovative farmer with forward thinking to adopt new technologies, he had training on “Alternative Agricultural Crops” with KVK, Vamban during March, 2008. Though he is an innovative farmer he did not have the confidence to take up maize in his land. To make him more confident in raising maize, CoHM5 hybrid was demonstrated in his field in an area of 1.25 acres during 2008 by KVK, Vamban.

All the technologies starting from seed, seed treatment with fungicides, biofertilizers, wide ridges and furrow formation and spacing were adopted, during first week of October 2008. Further he convinced the fellow farmers for maize production in his village as **Compact Block** basis. KVK, Vamban scientist made him get higher income from maize cultivation facilitated in formation of “**Maize Commodity Group**” consisting of 16 like-minded farmers. The group approach is most beneficial, in accessing facilities available in the lined department i.e. Agricultural Marketing. The Commodity Group has joint bank account in Canara bank, Venkitakulam for transaction. Monthly Rs.50/member is being collected and deposited in the bank account as similar to save capital. After some time the members were assured on getting credit from the bank.

After the harvest, the produce of the commodity group are pooled together. Commodity Group was facilitated by KVK scientist for accessing the transport facilities available exclusively for transport of agricultural produce since the transport cost in the market was high. The existing rent for vehicle hire charges at Agri Business Centre is Rs.1000/ day of 24 hours. The produce can be stored in the godown facilities provided by **Agri Business Centre**, Department of Agricultural Marketing. Since the members of commodity group did not have storage facilities on their own, the produce were stored with free of cost and the group members can sell their produce whenever they desire in order to obtain the maximum price of the market. The farmers can also use the drying yard available with Agri Business Centre without any cost.

The Commodity Group was linked with **DEMIC**, Tamil Nadu Agricultural University by KVK, Vamban. All the members are receiving the daily state level prices of maize through SMS in their cell phones. Green Peace an NGO at Pudukottai was permitted by Govt of Tamil Nadu to procure maize in Pudukottai district at Agri Business Centre on the basis of DEMIC-TNAU and it was achieved. Now, all the members are happy, the total family income has raised, many other farmers in the village are now having stinging eyes on Maize Commodity Group either to formulate new groups or like-minded farmers to become a member of the existing Maize Commodity Group. Possibilities of establishing an Agribusiness Centre in their village itself is being examined by the department of Agriculture.

In the changing scenario of an agribusiness world, Thiru. S.Veerasamy – always with Green Towel in his shoulder – Farmer friendly – Innovative farmer reflects on KVK values – Training, Adoption of new technology and **Empowering the Farmers’ stake** through **Commodity Group - Social Capital Mobilization** in Pudukottai district.

Case 3: Women Empowerment through Rural Enterprise

Mrs. R.Pragathambal ‘farm women’ completed her school studies in Manjanviduthi village of Pudukottai district. At age of 23 she got married in the nearby village Kothakottai of Pudukottai district where ICAR-KVK, Vamban, Pudukottai is having intervention. She is having one son and one daughter. Her husband is a small farmer owning one acre land and was growing crops during north east monsoon season (October to December) as a rainfed crop. Total income of the family is

inadequate to her family. Mrs.R. Pragathambal got the awareness of training on “**Mushroom Production for Rural Entrepreneurship**” through mass media news of KVK, Pudukottai.

Mrs. R.Pragathambal trained at Krishi Vigyan Kendra, Pudukottai in “**Hands on training for three days on Mushroom Production**”. She learned the art of business and skill starting from erection of growing shed, raw materials to be used, processing of raw material, preparation of beds, maintenance of beds, maintaining temperature and humidity, controlling pests and diseases and harvesting methods. She started trial of mushroom production with the thatched shed available in her home and the feedback of her activity created confidence on mushroom production. Immediately she scaled up her business. She erected one new thatched shed near the house by availing **loan facility of self help group fund** facilitated by KVK,Vamban. She collected the information regarding the availability of spawn bottle, its price, when to buy and where to buy.

After six months she learned the skill of spawn production and purchased the laminar air flow chamber and autoclave. Later on started producing spawn on her own. She planned for cyclic production in which when to prepare beds. She was trained to assess the market potential of the district headquarters through the intervention of KVK. It was found that the mushroom available in the district headquarters was supplied from hilly districts. The price of one kilo gram was Rs.150/- (Button mushroom).

She started the mushroom production (Oyster and button mushroom) in her shed to the capacity of 5kg per day. The marketing was done by the self help group stall located in the district head quarter. The mushroom was sold @ Rs. 80/kg i.e. Rs.400/day. Total harvesting days per month was planned to 25 days and the gross income touched to Rs.10000/- per month. The expenditure on spawn and other production cost including depreciation and interest was Rs.5000/- per month and the net profit was Rs.5000/- per month and Rs.60000/- per year respectively.

In her opinion, the farm women **must have determination and clear cut objectives in life**. They should be prepared to work hard with sincerity, appreciate the dignity of labour and quality of product.

Mrs. R.Pragathambal is of the view that one who can take **moderate risk and has attitude of sincerity, devotion and commitment to work is bound to get success**. The country really needs rural women **who opt for entrepreneurial carrier in industry driven agriculture**. In this way, they contribute to create more employment positions rather than seeking employment.

In her own case Mrs R.Pragathambal sums up that she has extreme satisfaction and zero regrets. As a social obligation she offers to extend all support to the budding entrepreneurs.

The participation of women in various economic development programmes will help in solving various social, economical and political problems. The problem of employment and poverty can be controlled by intensifying efforts for generating family income.

Yes, Mrs.R.Pragathambal, a farm women, hails from a village struggled in her family in the early years of her life is a “**Model farm women for Women Empowerment**” recognized by Awards. Further documented Mass Media are the medals of her achievement and food Processing Industry in India.

B. Success Stories

1. Story of a professional bee keeper : From country side honey collector to a self sustained successful entrepreneur

"Honey Bees are angels of forests" says Mr Tamilselvan (47) of Anavayal village in Pudukkottai district in Tamil Nadu. He is one among the 35 who established bee colonies after getting motivated by KVK, Pudukkottai and trained successively at Tamil Nadu agricultural University. Like him around 125 farmers, farm women and rural youths attended three such trainings offered by the KVK. They were distributed bee hives on 75 % subsidized rates. Some of them are worth to mention here since they have grown to a status of successful bee keepers nowadays. Mr.

Tamilselvan is such one, a leading bee keeper residing at Annavayal village of Alangudi taluk owning 2 acres land. Though he had attended several training programmes at this centre, he was amused by bee keeping. After he had undergone training at KVK, Vamban, he was sent to Tamil Nadu Agricultural University, Coimbatore for an intensive 15 days training during December 2001. He came with single bee colony from the training and established the same in his own farm. Now he owns 50 colonies comprising of 3 species of honey bees and extracting pure honey from these colonies. Apart from honey bee selling, he is also making bee hives and bee stand for sale. Selling new colonies to fellow trainees has become a regular work. Upon request and payment, he is giving training to new bee keepers and NGOs. Many farm women under his guidance have started beekeeping at their farm houses.

Tamilselvan, hitherto was a trainee of KVK, Vamban became a trainer cum entrepreneur within few years. Now he is recognized as a professional beekeeper in Pudukkottai district and his economic and social status is improved well because of honey bee keeping. The Project officer, District Rural Development Agency, Pudukkottai visited his apiary unit and appreciated his activities. He started his *Banu Bee Park* at his village where he offers training and supplies bee hives along with bees to the trainees. Through training and consultancy he receives a regular income of Rs. 20,000 per annum. Farmers across the state from districts like Erode, Coimbatore, Pollachi, Tirupur, Tiruvannamalai and Villupuram visit his bee park and get amused by the entrepreneurial activity Tamilselvan is doing in his field. He is planning to purchase two acres of dry land adjoining his farm to intensify beekeeping in large scale. His fanaticism and enthusiasm brought him “Best Entrepreneur in Bee Keeping” award by Film Federation of Tamil Nadu.

Tamilselvan started his career as honey collector of naturally grown honey combs by roaming across in the country side. He was moved when his fellow men fired the bee colonies and the adults and larvae get wounded and died of fire injuries. This incident actually instigated him to study more on scientific honey bee rearing and honey collection without disturbing the bees.

By 2002, he started his business with a single bee colony and now he possesses as many as 50 in his own. He also has around 1000 bee colonies being installed in various locations in the district and the state in the forest and horticultural plantations which he considers that honey from the tree crops more organic.

Tamilselvan prepares honey bee boxes and sells to the demanding farmers @ Rs 750 per empty box and @ Rs 1500 per box with grown bee colonies. Also he supplies bees on orders from various parts of Tamil Nadu. He sells a queen bee @ Rs. 400 to those demands. If the colony possess more drones @ >10% of the bee population, he assumes that the queen bee became older and plans to discard them. That much expertise he has earned from the trainings and successive educational programmes from the University. He has learnt the art of capturing the runaway bee colonies, creation of new colonies, collection and rearing of queen bees and all aspects of honey bee rearing and he teaches these techniques to the farmers, farm women, NGOs, and rural youths across the states, the number may reach at least few hundreds. Manonmani, a marginal farm owner in vadakadu village, Rajarethinam - a Teacher in Mankadu village and rural youths like Ilayaraja and Srimurugan are some of those Tamilselvan trained and now they are practicing beekeeping in a gradually increasing scale.

Tamilselvan maintains a bee park in which he grows all kinds of flowering trees, bushes, shrubs, tendrils, plants etc for facilitating the colonies for better nectar collection. He believes more in growing flowering trees since these trees are free from pesticide and other chemical pollution and the honey will be more organic in nature.

“Last year I earned an amount of Rs 3 lakhs from honey bee rearing” says Tamilselvan. He is more appreciative about the farm university in the state. “I must be grateful to Tamil Nadu Agricultural University, Coimbatore which gave me a visiting card as a successful bee keeper from which my life style had changed towards naturally aligned and my prospects turned to be more successful earner from honey bee rearing” says Tamilselvan.

Tamilselvan showed us a fancy honey bee box made of teak wood as a model for his dream commitment. "I will present 100 of this type of honey bee boxes to my daughter as her marriage gift (*seethanam* in Tamil)". What a novel way of gifting a lovely daughter!

2. Vermicomposting

Mrs.A. Kanagavalli is a farmer having 5 acres of wetland at Vamban, Pudukkottai. She has attended several one day trainings at Remandated KVK, National Pulses Research Centre, Vamban. She has also undergone a special training on "Vermi-composting and Mushroom cultivation" at this Centre. This training was conducted for a period of 10 days especially for empowering women towards entrepreneurship development. Mrs.Kanagavalli, due to the intervention of KVK has started vermin-composting unit at her farm. Now she is doing vermin-composting in three cement tanks (6 x 5 x 5') and producing 300 kg of vermin-castings every month. She is selling vermin-castings in attractive pockets to the people of Pudukkottai for ornamental plants. Banana growers of nearby village are also demanding vermin-castings and she is now expanding the vermin-composting yard to meet the growing demand. She is hopeful of succeeding with this business and concentrating more on vermin-composting rather than agriculture. As a good will gesture, she has also supplied 3000 worms at free of cost to the Self Help Group members of Pudukkottai.

3. Pepper in plains

Yes. It is a reality. Shri.K. Thangaiyan is one of the progressive farmers, aged about 45 years residing at Pattipunchai, Vadakadu owning 3 acres of coconut grove. A glut in the market for coconut badly hurt the financial position and to compensate the loss, he searched for a new alternative crop. He was enthralled to see pepper in Kerala and its income to the farmers. He and other coconut growers wanted to learn the pepper cultivation practices and consulted the scientists of KVK, Vamban. Their felt need was fulfilled through a training programme on "Pepper cultivation" at KVK, Vamban. So far, five trainings have been conducted on this aspect for the benefit of the farming community. With a strong motivation, he purchased pepper cuttings from Kerala @ Re.1 per cutting and planted near the base of different trees like Coconut, Jack, Theprosia, Neem, Teak and Erithrina. Among the trees, he could identify Coconut is the best one for pepper to trail on the tree trunk. Apart from this, the yield of pepper was more pronounced in coconut garden where microclimate is more favorable. It could be trailed up to 10 feet and started yielding from first year onwards. He also demonstrated that ladder could be used up to 10 feet for climbing the coconut trees without damaging the pepper vines. Now he has started harvesting more pepper berries as full bearing would start from third year onwards (i.e. up to 2kg/ vine/ year). After processing, he could get 1.5 kg of dried pepper. He used to sell the dried produce to the local market @ Rs. 200 / kg. In a coconut garden, he can accommodate 75 pepper plants/ acre which would earn him an income of Rs 20,000. He had tried with different varieties like Karimunda, Panniyur 1, 2, 3, 4 & Panniyur 5. Among them, Panniyur1 and Karimunda are the best suited varieties for plains under shade. His pepper garden is a model to others and he has demonstrated that a minimum of Rs 25,000/ ha can easily be obtained in a year.

4. Nursery man

Shri.S.Thinakarassamy (48 years), son of Shri.S.Singaram residing at Kooliyankadu, owns 3 acres of wetland and 3 acres of dry land. With a strong desire for learning the latest techniques in agriculture and horticulture, he has attended several KVK training programmes. With a view to translate the skill and knowledge gained during the training programme, he started a nursery on a small scale. In pursuit of this, he constructed a polyhouse in his farm and started propagation of ornamental plants like Duranda, Crotons, Jasmine and Coleus and supplied to Pudukkottai to wn. Meanwhile, he was approached by farmers of nearby villages for seedling / grafts of fruit crops. Grafting and layering skill learnt through KVK intervention had sown the seeds of self confidence and he had started commercial sale of seedlings particularly Sapota, Guava, Cashew and Jack. He is also producing and distributing the premium cashew grafts (VRI 1, 2 & 3 varieties) to the farmers to fulfill the Government sponsored waste land development scheme at Pudukkottai district. Besides, he

is also producing saplings of forest trees like Neem, Delonix, Teak *etc.* He has now entered into propagating Delhi Crossandra and supplying to the flower growers of Pudukkottai district. The above feat earned him a name and fame and today he is one of the trusted and famous nursery men in Pudukkottai district.

The socio-economic status of Shri. S.Thinakarasamy has been improved after he entered into the nursery venture. Tremendous improvement in the standard of living is a reality i.e. family dietary, sartorial, entertainment, children education and social affairs. Since he started the nursery he has sold more than one lakh seedlings and earned a net profit of Rs. 4,14,750 and bought a new two wheeler and subsequently a jeep for visiting nursery and transporting seedlings. Currently, he is engaged in establishing new frontier venture *viz.*, medicinal plants. He is motivating and imparting nursery skills to the interested rural youths. In short, Shri. S. Thinakarasamy has empowered the unemployed school dropouts. The surplus earning is being used for expanding the nursery and constructing a new house. He has become a role model and several new nursery men are coming up in Pudukkottai district.

Shri. B.Thamilsekaran (44 years) residing at Chinnasunaiyakadu, is having two acres of land regularly attends KVK training programmes. Besides, he was strongly impressed by seeing the nursery of Shri. S. Thinakarasamy and his quantum leap from subsistence to well-to-do farmer. He was motivated to attend the training programme on nursery propagation techniques. After such training, he started a small nursery unit for propagation of Jack grafts. The whole family showed more interest and extended support in developing nursery. Now he is a famous nursery man in his village for supplying Jack grafts. His earning is around Rs. 200 per day. The annual income is Rs. 2 lakhs which is 50% more than his actual income from other sources.

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

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

S. No.	Crop	ITK Practiced	Purpose of ITK
1	Grains and Pulses	Keeping <i>Pungam</i> and Neem tree branches in Godowns	To repel the storage pest
2	Groundnut	Application of <i>Panchakavya</i> (Mixture of cow dung, cow urine, curd, ghee and milk along with some organic additives fermented solution)	To promote growth of Agricultural crops.
3	Coconut	Keeping toddy in coconut gardens	To attract red palm weevil adults.
4	Pulses	Treating the pulses with red earth slurry	To reduce storage beetle attack.
5	Human Nutrition	Preparation of weaning food from sprouted cereals and pulses.	To improve the nutrition of growing children
6	Goat	Oral administration of Betel vines, <i>omam</i> and aniseeds to goats	De-worming
7	Amla	Beating of branches of Amla tree before flowering season	Boosting yield
8	Jasmine	Pinching of current season shoot in Jasmine	Obtaining higher flower yield at the appropriate time

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

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

10.G. Field activities

- i. Number of villages adopted : 21
- ii. No. of farm families selected : 350
- iii. No. of survey/PRA conducted : 21

10.H. Activities of Soil and Water Testing Laboratory

- Status of establishment of Lab : Well established
- 1. Year of establishment : 1.09.2005
- 2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	Spectrophotometer attached with computer	1	75,072.00
2	Fridge- 300litcapacity	1	19,985.00
3	Flame photometer	1	36,720.00
4	Electronic balance –capacity-200g	1	91,520.00
5	Electronic balance –capacity-6kg	1	28,080.00
6	Water distillation unit	1	26,118.00
7	Kjelplus distillation unit Macro kjeplus apparatus	1	24,589.00
8	Mechanical shaker – reciprocating type	2	44,077.00
9	Grinder – willey mill	1	11,582.00
10	Kjelplus distillation system	1	61,320.00
11	Kjelplus distillation system	1	86,766.00
12	Laboratory Table with acid and alkali proof	2	28800.00
13	Steel Laboratory Table	5	27500.00
Total		19	562129.00

Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	1314	1225	184	32850
Water Samples	112	97	27	1120
Plant samples				
Manure samples				
Others				
Total	1426	1322	211	33970

Details of samples analyzed during the 2010-11:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	359	312	63	8975
Water Samples	64	53	18	840
Plant samples				
Manure samples				
Others				
Total	423	365	81	9815

10.I. Technology Week celebration

Period of observing Technology Week: From _____ to _____

Total number of farmers visited _____ :

Total number of agencies involved _____ :

Number of demonstrations visited by the farmers within KVK campus :

Other Details

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

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

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries

B. Major area coverage under alternate crops/varieties

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

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No.of participants
Total			

D. Animal health camps organized

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

PART XI. IMPACT

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

Name of the specific technology / Skill transferred	No. of participants	% of adoption	Change in income (Rs/ha)	
			Before (Rs./Unit)	After (Rs./Unit)
Bee keeping	73	27	-	3,500
Value added milk products	50	10	12,000	20,000
Plant protection in cashew	33	90	18,000	25,000
Introduction of annual moringa (PKM 1)	25 20		7,000	15,000
Micronutrient management in jasmine	30 50		8,000	11,000
SRI technique in paddy	200	31	10,000	17,000
Mushroom production	40	10	2,200	3,000
Saucer planting of casuarina	16	50	78,000	1,00,000
Green fodder cultivation	35	10	10,000	12,000
Seed drill for wet land paddy	100	30	10,000	13,000
Propagation of horticultural crops	20	25	15,000	25,000
Gypsum application in groundnut	100	75	30,000	38,000
Tissue culture banana	20	15	1,80,000	23,00,000

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

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

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of Organisation	Nature of Linkage
Department of Agriculture	Joint diagnostic survey Participation in Farmers' day & zonal work shop Providing seasonal messages Joint implementation of Developmental programmes Participating in ATMA programme
Department of Horticulture	Joint diagnostic survey Participation in trainings Participation in Farmers' day
Department of Agricultural Engineering	Technical discussions Participation in training programmes in village demonstrations on farm implements Participation in SAC Meeting.
District Administration	Participation in Farmers' Grievances day Collaboration in developmental and welfare programmes
District Rural Developmental Agency(DRDA)	Conducting training programmes to SHG Participation in village meetings Participation in water shed development programmes
Regional Research Centre (TANUVAS)	Participation in Training Programmes
NABARD	Joint participation in meetings/seminars/trainings.
Department of Forestry	Joint diagnostic survey
M.S.Swaminathan Research Foundation	Participation in meetings Joint diagnostic survey of field problems
All India Radio, Trichirapalli, Madurai and Kodaikanal	Announcement of KVK training programmes Broadcasting seasonal messages Broadcasting radio talks of Scientists
Department of Fisheries/Sericulture	Participation in meetings Purchase of Seeds
STAMIN, Kudumianmalai	Participation in trainings Purchase of Seeds
National Research Centre for Banana, Thiruchirapalli	Joint Participation in trainings Technical knowhow on value added products in banana
E.I.D Parry sugars Ltd	Field visit and Participation in meetings/trainings, laying out of precision farming
Department of Agriculture marketing and Agri business	Establishing market linkage, Formation of commodity groups
Tamil Nadu Forest Corporation TAFORN	Exchange of technologies related to forestry Training experts assistance for training
Directorate of Cashew Nut and Cocoa Development, Cochin	Financial assistance for conducting training and seminar
PWD	Participation in IAMWARM project

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.)
IAMWARM I	.4.2010	World Bank	20,43,000
Cashew seminar	1.4.2010	Directorate of Cashewnut and Cocoa development, Cochin	50,000.00
Farmers Participatory Seed Production Demo and Trainings in Oil seed and Pulses	1.4.2010	NADP 6	5,000.00
Water Conservation Technologies for effective drought proofing in dry land ecosystems of Tamil Nadu	1.4.2010	NABARD 4	4,965.00
Integrated Farming Systems for dry land agriculture in Tamil Nadu	1.4.2010	NABARD 5	0,715.00

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

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

Coordination activities between KVK and ATMA during 2010-11

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	ATMA Technical meeting	12	-	-
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)				
07	Other Activities (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development				

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

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

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

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

12.F. Details of linkage with RKVY

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

12. G Kisan Mobile Advisory Services

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

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty(ctl)	Cost of inputs	Gross income	
Cereals									
Pulses									
Black gram	31.6.2010			VBN4	Seed	4.0	25000	28000	
5.7.	2010			VBN5	Seed	6.0	35000	42000	
10.1	1.2010			VBN3	Seed	5.0	29000	35000	
Green Gram	12.11.2010			VBN2	Seed	1.34	8500	938	
Oilseeds									
Ground nut									
Fibers									
Spices & Plantation crops									
Coconut	5.1.2010	2010	Nursery	East coast tall	Seedlings 3	608	35000	90200	
27.	7.2010	2011	Nursery	East coast tall	Seedlings 56	0	12000	14000	595 balance stock available
Floriculture									
Fruits									
Vegetables									
Others (Fodder crops)									
Velimasal 1	5.8.2010	-	0.10	-	Seed	10kg	1000	5000	
Cumbu Napier	15.4.2010 -		0.10	Co4	Slips	30000 Nos	3000 1	5000	
Guinea grass	10.5.2010 -		0.10	C01	slips	30000 Nos	3000 1	5000	

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	rmicompost	700kg	2500	3500	
2.	Coir waste (Composted)	1000kg	2000	5000	

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	Punjab National Bank	Pudukkottai		Programme Coordinator	0393000100154329	622024002	P UNB0039300

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

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

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

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances (for 2010-11)	45.00		45.00
	Pay & Allowances (6th CPC Arrears from 1.1.2006-31.3.2011)	54.53		54.53
2	Traveling allowances	1.00		1.00
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1.80		1.80
B	POL, repair of vehicles, tractor and equipments	1.40		1.40
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	0.75		0.75
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.35		0.35
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	1.75		1.75
f	FLD on special pulse program	-		-
g	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.80		0.80
h	Training of extension functionaries	0.25		0.25
I	Maintenance of buildings	0.30		0.30

<i>j</i>	Extension Activities	0.30		0.30
<i>k</i>	Farmers Field School	0.25		0.25
<i>l</i>	Library	0.05		0.05
TOTAL (A)		108.53		108.53
B. Non-Recurring Contingencies				
1	Equipments & Furnishing			
a	Generator	1.00		1.00
b	Furniture and Furnishing	7.00		7.00
c	Power tiller	1.50		1.50
d	EPABX system	0.50		0.50
2	Works			
a	Admn Building	55.00		55.00
b	Threshing & drying yard	1.00		1.00
c	Storage godown	3.00		3.00
d	Bore well	3.00		3.00
3	Library (Purchase of assets like books & journals)	0.10		0.10
TOTAL (B)		72.10	72	.10
C. REVOLVING FUND		-		-
GRAND TOTAL (A+B+C)		180.63	180.63	180.63

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	2,86,939 1,97,2	16	1,30,299	3,53,856
April 2009 to March 2010	3,53,856 1,91,3	07	1,89,209	3,55,954
April 2010 to March 2011	3,55,954 3,18,7	23	2,83,811	3,91,466

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Th S.Gopal	Asst Professor (Agrl Ento)	IPM strategy for high value crops	TNAU	24.3.2011-25.3.2011
		Mealy bug management	ICAR	25.10.2010
Dr.V.Krishnamorthy	Asst Professor (Hort)	Protected cultivation of Hort crops	TNAU 28.3.2	011-29.3.2011
Dr.S.K.Natarajan	Asst Professor (Agronomy)	Weather based Agro advisory services	TNAU 30.3.2	011-31.3.2011
Dr.Gurunathan	Asst Professor (Agrl Economics)	New imitative on transfer of technologies	TNAU 24.3.2	011-25.3.2011
		Poultry Management	TANUVAS	24.11.2010-26.11.2010
Dr.S.Kavitha	Asst Professor (Seed Sci & Tech)	Varietal Purity testing	TNAU	25.10.2010-29.10.2010

		Strengthening of gender perspectives in agricultural Research and Extension	TANUVAS 2	4.1.2010-25.1.2010
Tmt S.Suganthi	Programme Assistant (Computer)	Data base management, web content and web hosting development	TNAU 29.3.2	011-31.3.2011

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	Paddy	Farmers participatory hybrid seed production CORH3	4
Integrated Pest Management	Banana	Application of Carbofuran 40g/sucker+Neem cake 500g on 3, 5 Month +Application of <i>Pseudomonas fluorescence</i> 25g/plant during 1, 3 rd month	5
		Application of Carbofuran 40g/sucker+Neem cake 500g on 3, 5 Month+ <i>Pseudomonas fluorescence</i> 1. 25kg+ <i>Bacillus subtilis</i> 1.25kg/ha during 3 month	5
Integrated Crop Management	Paddy	Seed hardening with 1% KCl for 10 hrs + seed treatment with Bavistin @ 2 g + Azospirillum @ 20 g/ kg of seed	5
		Designer seed techniques : Seeds hardened with 1% KCl followed by coated with polykote @ 3g + Imidachloprid @1 ml + Carbendazim @ 2g + pseudomonas @10g + Azophos @ 40g + micronutrient mixture @ 20g + DAP @ 30g / kg of seed.	5
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management	Paddy	Double row TNAU power weeder	5
		Single row power weeder designed by KVK, Madurai	5
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Others (Pl. specify)			

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops

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

Summary of technologies assessed under refinement of various livestock

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

III. FRONTLINE DEMONSTRATION

Cotton

Frontline demonstration on cotton

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

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

** BCR= GROSS RETURN/GROSS COST

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demonstration	Check		De	monstration	Check	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return
Oilseeds																		
Ground nut		Popularization of new HYV	20		4	19.5	18.00	8.33	Shelling (%) 74	71	25800	68250	42 450	2.64	25800	63000	37200	2.44
Sesame		Popularization of new HYV	20		4	8.5	7.65	11.11	No. of branches:5	3	15050	32300	17 250	2.14	15050	29070	14020	1.93
Pulses																		
Black gram		Popularization of new HYV	20		4	9.88	8.40	17.62	Yellow mosaic virus: Tolerant	Susceptible	20701	59280	38 579	2.8	20701	50400	29699	2.4
Green gram		Popularization of new HYV	20		2	11.12	9.10	22.2	Yellow mosaic virus: Moderately susceptible	Tolerant	19900	55625	35 725	2.79	19900	45500	25600	2.28
Red gram		Popularization of new HYV	20		2	8.37	6.45	29.77	Pod borer incidence: Nil	Tolerant	15580	41875	26 295	2.68	15580	32250	16670	2.06
Cereals																		
Paddy		Popularization of new Hybrid	10		2	89.9	73.6	22.15	Blast PDI: Moderately susceptible	Highly susceptible	38812	93496	34 683	2.41	38812	76544	37731	1.97
Paddy		Popularization of new HYV	10		2	75.63	64.37	17.49	No. of tillers:35	27	38465	78650	40 185	2.04	38465	66950	28485	1.74
Vegetables																		
Snakegourd	Popularization of HYV	Popularization of HYV PLR2	10		2	270	160	131.25	Fruit weight: 600g	330g	73123	185000	111877	2.53	52980	80000	27020	1.51
Flowers																		
Ornamental																		

Fruit	INM	Foliar application of sulphate of potash 2% at peanut stage and 2 sprays at 15 days interval	1	0	2	173	152	13.82	Fruit weight: 450g	300g	33650	86500	2 850	2.57	36019	76000	39981	2.11
Spices and condiments																		
Commercial																		
Medicinal and aromatic																		
Fodder	Fodder bank	Popularization of Fodder bank	1	6	1.04	3175	2400	32.29	Fodder availability: Throughout the year	During monsoon	24650	146000	121350	5.92	23750	96000	722250	4.04
Plantation	IPM	Application of coir pith 50kg/tree Spraying against tea mosquito bug Profenophos 5ml/L at fleshing Chlorpyriphos 5ml/L at flowering Carboryl 1g/L at peanut stage	10		2	9.5	6.13	35.47	Pest incidence (%):15	45	15322	38000	22 678	2.48	11621	24520	12899	2.11
Fibre																		
Others (pl.specify)																		
Total																		

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

** BCR= GROSS RETURN/GROSS COST

Vermicompost																		
Sericulture																		
Apiculture																		
Others (pl.specify)																		
Total																		

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

** BCR= GROSS RETURN/GROSS COST

Women empowerment

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

Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	1	22 14	36	2	2	4	24 1	6	40	
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	2	- 40	40	-	4	4	- 4	4	44	
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance	1	21 18	39	4	2	6	25 2	0	45	
Installation and maintenance of micro irrigation systems	1 9	21	30	4	6	10	13	27	40	
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (Usage of pulses harvester)	1 20	3	23	1	3	4	21	6	27	

Group dynamics	1	8 13		21	-	5	5	8 1	8	26
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (Creating awareness about agriportal)	1	- 14		14	- 26		26	- 4	0	40
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	17	190	214	404	32	85	117	222	299	521

Management of potted plants										
Export potential of ornamental plants	1	22 18	40	3	2	5	25 2	0	45	
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology	1	19 10	29	2	3	5	21 1	3	34	
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	1	16 16	32	2	4	6	18 2	0	38	
Integrated nutrient management	1	23 13	36	4	7	11	27 2	0	47	
Production and use of organic inputs										
Management of Problematic soils	1 8		11	19	3	2	5	11	13	24
Micro nutrient deficiency in crops	1 32		8	40	2	2	4	34	10	44
Nutrient use efficiency	1	18 21	39	1	2	3	19 2	3	42	
Balanced use of fertilizers										
Soil and water testing	1	12 22	34	-	-	-	12 2	2	34	
Others (pl.specify)										
Livestock Production and Management										
Dairy Management										
Poultry Management	1	18 14	32	3	3	6	21 1	7	38	

Piggery Management											
Rabbit Management											
Animal Nutrition Management											
Animal Disease Management											
Feed and Fodder technology	1	17	19	36	5	3	8	22	2	44	
Production of quality animal products											
Others (pl.specify)											
Home Science/Women empowerment											
Household food security by kitchen gardening and nutrition gardening											
Design and development of low/minimum cost diet											
Designing and development for high nutrient efficiency diet											
Minimization of nutrient loss in processing											
Processing and cooking											
Gender mainstreaming through SHGs											
Storage loss minimization techniques											
Value addition											
Women empowerment											
Location specific drudgery production											
Rural Crafts											
Women and child care											
Others (pl.specify)											
Agril. Engineering											
Farm machinery and its maintenance											
Installation and maintenance of micro irrigation systems											
Use of Plastics in farming practices											
Production of small tools and implements											
Repair and maintenance of farm machinery and implements											
Small scale processing and value addition	2	42	34	76	5	5	10	47	9	86	
Post Harvest Technology											
Others (pl.specify)											
Plant Protection											
Integrated Pest Management	6	10	4	99	203	11	10	21	115	109	224
Integrated Disease Management	2	33	27	60	4	6	10	37	3	70	

10. d.	Fisheries Management										
10. e.	Others (pl.specify)										
11.	Home Science										
11. a.	Household nutritional security										
11. b.	Economic empowerment of women										
11. c.	Drudgery reduction of women										
11. d.	Others (pl.specify)										
12	Agricultural Extension										
12. a.	Capacity Building and Group Dynamics										
12. b.	Others (pl.specify)	5	22	52	74	12	14	26	34	66	100
	Total	11	79	55	134	12	14	26	91	69	160

Details of vocational training programmes carried out for rural youth

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Commercial floriculture	3	18	7 25	-	-	-	18	7 25		
1.b.	Commercial fruit production										
1.c.	Commercial vegetable production	6	9	17 26	3	6	9	12	23 35		
1.d.	Integrated crop management	6	14	16 30	2	3	5	16	19 35		
1.e.	Organic farming										
1.f.	Others (pl.specify)										
2	Post harvest technology and value addition										
2.a.	Value addition	6	19	15 34	3	3	6	22	18 40		
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	12	11	45 56	6	8	14	17	53 70		
4.f.	Sericulture	6	21	10 31	2	2	4	23	12 35		
4.g.	Mushroom cultivation										
4.h.	Nursery, grafting etc.										
4.i.	Tail oring, 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	39	92	110	202	16	22	38	108	132	240

V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	72	80	7	87
Diagnostic visit	43	51	3	54
Field Day	28	2287	27	2314
Group discussions	6	115	4	119
Kisan Ghosthi				
Film Show	23	542	19	561
Self -help groups				
Kisan Mela	3	789	17	806
Exhibition	2	1522	25	1547
Scientists' visit to farmers field	92	98	9	107
Plant/animal health camps				
Farm Science Club	7	273		273
Ex-trainees Sammelan				
Farmers' seminar/workshop	1	150	5	155
Method Demonstrations	48	1706	51	1757
Celebration of important days				
Special day celebration				
Exposure visits	3	299	6	305
Others (pl.specify)				
Total	328	7912	62	8085

Details of other extension programmes

Particulars	Number
Electronic Media	
Extension Literature	3000
News Letter	3000
News paper coverage	46
Technical Articles	
Technical Bulletins	
Technical Reports	3
Radio Talks	2
TV Talks	
Animal health amps (Number of animals treated)	
Others (pl.specify)	
Total	

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 Blackgr	am & greengram	VBN-4,VBN-5 VBN-3,VBN-2	20.94 13	2780	170
Commercial crops					
Vegetables					
Flower crops					
Spices					
Fodder crop seeds	Velimasal		0.11	5600	5
Fiber crops					
Forest Species					
Others					
Total			21.05	138380	175

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	Coconut	East coast tall	3608	90200	133
Spices					
Tuber					
Fodder crop saplings	Cumbu napier & Guinea grass	CO-4 CO-3	61000 30500		252
Forest Species					
Others					
Total			64608	120700	385

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Bio Fertilizers	Vermicompost	700	3500	6
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others	Coir pith compost	1000	5000	10
Total		1700	8500	16

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	359	312	63	8975
Water	64	53	18	840
Plant				
Manure				
Others (pl. specify)				
Total	423	365	81	9815

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted
1

IX. NEWSLETTER

Number of issues of newsletter published
4

X. RESEARCH PAPER PUBLISHED

Number of research paper published

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

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

-----XXXXXXXX-----