TNAU

ICAR

ANNUAL REPORT 2010-11

(FOR THE PERIOD APRIL 2010 TO MARCH 2011)

Krishi Vigyan Kendra
Tamil Nadu Agricultural University
Virinjipuram- 632 104
Vellore District

GENERAL INSTRUCTIONS

Please these instructions very carefully before starting preparation

Sl. No.	Instructions
General	Annual report is the most important achievement report for the KVK and it directly reflects the overall achievements pertaining to the reported period. Hence due care need to be given at your end for preparing this.
	Period of Report if from April 2010 to March 2011
	Last date of receiving the soft copy through email to ZPD VIII is 20th April 2011 positively.
	Please prepare minimum of 20 good action photographs with relevant captions covering various mandated activities of the KVK in High resolution JPG format and send separately along with this report
	By carefully preparing Summary Table you are helping ZPD VIII to compile your report. Hence please prepare the Summary tables carefully tallying with the relevant portions of the main report on all aspects.
	In the soft copy alone you please retain the blank column and rows as such with - as the same would be easy for ZPD VIII to compile and analyze the data
1.7	Under demonstration unit, kindly give name of unit. Source of funding must be mentioned
3.B.	This should tally with the thrust areas given in Sl.No.2.7
3.B2.	This can be made in landscape table
4.A1 to 4.B.4	Total of 4.A.1 should tally with 4.B.1, 4.A.2 with 4.B.2, 4.A.3 with 4.B.3. and 4.A.4 with 4.B.4
5.A.	For example thematic area – popularization of variety, and under this thematic area if two varieties have been popularized, please give separately.
5.A and 5.B	Kindly ensure that hybrids mentioned are really hybrids and then incorporate in the appropriate column
4.A, 4.B, 4.C, 5.A and 5.B	In case of all OFTs and FLDs, raw data (data on OFT and FLD on individual farmers basis) is required to be maintained at KVK level carefully and all data for this report must be compiled based on the raw data.
7 .A to 7.H	Please ensure that the total figures are tallying properly
Part VIII	Extension activity under celebrations for each important day, please insert separate rows and give appropriate data separately. Clubbing of data may be avoided.
10.A	Monthly, quarterly and Annual Report of KVK are compilation reports only and need not be considered as Technical Reports.
Cover page	For sending to ZPD, cover page should be same as given in the first page of the format. In other words no need of putting photographs and other picture formats. The same may be included while submitting the final Annual Report during Annual Review Workshop.

PART I - GENERAL INFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Web Address
	Office	FAX		
Krishi Vigyan Kendra Virinjipuram – 632 104 Vellore district Tamil Nadu	(0416) 2914453	(0416) 2272221	kvkvrinjipuram@tnau.ac.in	www.tnau.ac.in

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

Address	Telephone		E mail	Web Address
	Office	**FAX**		
Tamil Nadu Agricultural University Coimbatore – 641 003 Tamil Nadu.	0422 - 2431222	0422 - 2436636	vctnau@vsnl.com	www.tnau.ac.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr.P.Sumathi	----	9487520817	sumathiperiyasamy@yahoo.co.in

1.4. Year of sanction: 2004

1.5. Staff Position (as on 31st March 2011)

S. No.	Sanctioned post	Name of the incumbent	Designation	Gender	Discipline	Highest Qualification	Pay Scale	Basic pay	Dt. of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1.	Programme Coordinator	Dr.P.Sumathi	Programme Coordinator	F	Agricultural Extension	Ph.D.,	38800 Pay Band+9000 AGP	47800	24.05.04	Permanent	SC
2.	SMS	Dr.S.Joshua Davidson	Assistant Professor (Agrl.Engg)	M	Agricultural Engineering	Ph.D.,	21230 Pay Band+7000 AGP	28230	02.12.04	Permanent	OBC
3.	SMS	Dr.G.Mani	Assistant Professor (Seed Technology)	M	Seed Science & Technology	Ph.D.,	21150 Pay Band+6000 AGP	27150	01.06.07	Permanent	OBC
4.	SMS	Dr.A.P.Sivamurugan	Assistant Professor (Agronomy)	M	Agronomy	Ph.D.,	18840 Pay Band+6000 AGP	24840	29.12.2009	Permanent	OBC
5.	SMS	Dr.S.Paul Sebastian	Assistant Professor (Environmental Science)	M	Environmental Science	Ph.D.,	18840 Pay Band+6000 AGP	24840	30.12.2009	Permanent	OBC
6.	SMS	Dr.T.Prabhu	Assistant Professor (Horticulture)	M	Horticulture	Ph.D.,	18840 Pay Band+6000 AGP	24840	30.12.2009	Permanent	SC
7.	SMS	Dr.A.Suganthi	Assistant Professor (Entomology)	F	Entomology	Ph.D.,	18840 Pay Band+6000 AGP	24840	04.01.2010	Permanent	OBC
8.	Programme Assistant	Mr.K.R.Srinivasan	Programme Assistant(Technical)	M	Agricultural Extension	M.Sc.	9,300 -34,800 + 4,400 Grade Pay	9,300	24.2.2011	Permanent	OBC
9.	Programme Assistant (Computer)/ T-4	Mrs.S.Sangeetha	Programme Assistant(Computer)	F	Computer Science	M.C.A.,M.Phil	9,300 -34,800 + 4,400 Grade Pay	15070	05.12.2008	Permanent	OBC
10.	Programme Assistant/ Farm Manager	Mrs.Suganya	Farm Manager	F	Agriculture	B.Sc (Agri.)	9,300 -34,800 + 4,400		28.2.2011	Permanent	OBC
11.	Superintendent	Tmt.R.Krishnaveni	Superintendent	F	-	-	9,300 - 34,800 + 4,800 Grade Pay	18100	15.04.04	Permanent	OBC

12.	Jr. Stenographer	Mrs.G.Banumathi	Assistant	F	-	-	5,200 -20,200 + 2,400 Grade Pay	11880	01.12.08	Permanent	OBC
13.	Driver	Th.S.Ekambaram	Driver (SG)	M	-	-	5,200 - 20,200 + 2,600 Grade Pay	14510	04.05.04	Permanent	OBC
14.	Driver	Th.G.Babusamy	Mechanic (Grade-II)	M	-	-	5,200 - 20,200 + 2,400 Grade Pay	10300	20.8.07	Permanent	OBC
15.	Supporting staff	Th.P.Renu	Office Assistant	M	-	-	5,200 - 20,200 + 1,800 Grade Pay	9520	20.06.05	Permanent	OBC
16.	Supporting staff	Tmt.A.Valliammal	PUSM	F	-	-	4,800 – 10,000 + 1,300 Grade Pay	7400	04.05.04	Permanent	OBC

1.6. Total land with KVK (in ha) **:** 24.15 ha

S. No.	Item	Area (ha)
1	Under Buildings	0.8
2.	Under Demonstration Units	2.0
3.	Under Crops	19.35
4.	Orchard/Agro-forestry	2.0
5.	Others	-

1.7. Infrastructural Development: Nil

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR-KVK	July, 2007	570	45,20,000	-	-	-
2.	Farmers Hostel	ICAR-KVK	July, 2007	285	31,00,000	-	-	-
3.	Staff Quarters			486	36,00,000	-	-	-
	1. SMS	ICAR-KVK	July, 2007			-	-	-
	2. SMS	ICAR-KVK	July, 2007			-	-	-
	3. SMS	ICAR-KVK	July, 2007			-	-	-
	4. SMS	ICAR-KVK	July, 2007			-	-	-
	5. SMS	ICAR-KVK	July, 2007			-	-	-
	6. SMS	ICAR-KVK	July, 2007			-	-	-
4.	Demonstration Units	ICAR-KVK	Oct, 2007	2 ha.	2,00,000	-	-	-
	1	ICAR-KVK	Oct, 2007	2 ha.		-	-	-
	2	ICAR-KVK	Oct, 2007	2 ha.		-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
Jeep (TN 23 AA 4924)	2004	4,88,682	86,888	Good condition
Tractor (TN 23 AA 7655)	2005	4,93,716	2755.3	Good condition
Motor Bike (TN 23 AB 8345)	2006	38,781	21,466	Good condition
Motor Bike (TN 23 AF 9661)	2009	41,976	9,219	Good condition

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Photocopier	2005	74,500	Good condition
Computer with Accessories	2005	75,000	Good condition
LCD	2007	53,000	Good condition
Computer (Desktop)	2007	47,000	Good condition

1.8. A). Details SAC meeting conducted in 2010-11: SAC meeting was conducted on 10.02.2011

Suggested points for Action to be taken

1. Papaya mealy bug parasitoids may be multiplied and distributed to the needy farmers. (Registrar, TNAU, Coimbatore)
2. KVK, Vada Virinjipuram may continue demonstrations and follow up regularly. Emphasis has to be given on demonstrations in villages in and around KVK. Seminars, on- farm techniques may be conducted at Kothamangalam panchayat area. **(Panchayat President, Kothamangalam)**
3. Activities of KVK may be reached to grass root level. Farmers have to be trained and guided properly to manage drought. Farm Advisory to farmers on different techniques based on climate and environmental conditions. (**Mr.Thayanithi, Farmer)**
4. Awareness on recent technologies and farm equipments may be popularized by KVK **(Sharmila, Women farmer)**
5. Demonstration and training on varieties of red gram specific during rainy season may be taken up. Training on papaya mealy bug parasitoid production may be imparted to Extension functionaries. **(Joint Director of Agriculture, Vellore)**
6. FLD on Azolla production may be implemented at KVK. Demonstration and production techniques of recently released fodder grasses may be implemented. **(Regional Joint Director, Animal Husbandry)**
7. Seeds of Brinjal VRM may be produced. **(Deputy Director of Horticulture)**
8. Fisheries Department may be involved while conducting training. **(Assistant Director of Fisheries)**
9. Trainings and demonstrations on fodder crop production may be imparted. Members of SHG and small farmers may be motivated for fodder production. **(Associate Professor- TNUVAS training centre)**
10. Awareness programme on sericulture may be done by KVK. **(Asst. Director,Sericulture)**
11. Techniques available at ICAR/SAU may be tuned according to district level. SAC has to be conducted every year particularly during February month. The technologies developed last year may be utilized by line departments. **(Principal Scientist Zonal Project Directorate, Bangalore).**
12. SAC may be conducted once in 6 months. SHG may be given training on different farm techniques. One more KVK to be sanctioned for Vellore District as the District is one of the largest in Tamil Nadu**. (District Collector, Vellore district).**

13. Seed production of green gram variety VBN(Gg)3 may be initiated at KVK farm. Azolla production to be developed at KVK farm. (**Director, TRRI, Aduthurai).**

14. The Director of Extension Education appreciated the District Collector for gracing the SAC meeting. The yield parameters to be recorded for all FLD's and OFT's. **(DEE, TNAU, Coimbatore)**

Action taken

1. Papaya mealy bug parasitoids have been multiplied in this KVK and so far distributed to 25 farmers in the district
2. Farm advisory services on drought mitigation in crops is emphasized to the needy farmers
3. Seed production of Brinjal VRM 1 and green gram is in progress
4. Training on fodder cultivation techniques is being organized to the farmers regularly and the recently released cumbu napier hybrid (CO(CN)4) is being promoted among the farmers.

PART II - DETAILS OF THE DISTRICT

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

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

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

S. No	Agro-climatic Zone	Characteristics
1.	North Eastern Zone	The climate is basically semi-arid tropical. While the period from April to June experiences very hot weather condition, cold weather condition prevails during December and January. The average minimum and maximum temperatures are 13^{o} Celsius and 46^{o} Celsius respectively.

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

2.3. Soil type : Predominantly Sandy loam and Red loamy

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	44,508	175700	3947 (grain)
2.	Sorghum	11,509	12900	1125
3.	Bajra	5,281	3800	717
4.	Ragi	9,113	25400	2785
5.	Maize	3,200	12400	3865
6.	Others	4,264	2700	627
7.	Red gram	14,647	12800	875
8.	Black gram	7,094	4400	615
9.	Green gram	3,466	1800	510
10.	Cow pea /lablab	6,692	4500	675
11.	Horse gram	7,212	3800	524
12.	Cotton	6,533	12100	314 (lint)
13.	Sugarcane	19,143	244600	12.78 (MT) (Jaggery)
14.	Groundnut	59,789	148000	2475
15	Gingelly	1,592	600	375
16	Sunflower	100	1000	1000
17	Castor	1,140	700	627

Horticulture

S. No.	Crop	Area (ha)	Production (tonnes)	Productivity (tonnes /ha)
Fruit Crops				
18.	Banana	6410	256420	40
19.	Mango	12404	74424	6.0
20.	Guava	431	5160	12.0
21.	Sapota	457	9120	20.0
22.	Lemon	64	945	15
23.	Grapes	27	400	15.0
24.	Cashew	24	360	15.0
25.	Jack	68	2040	30.0

26.	Amla	21	40	2.0
27.	Pomegranate	03	56	20
28.	Orange& Sathukudi	15	54	3.6
29.	Coconut	19,800	9,95,000 nuts/yr/ha	50.25 nuts/yr/ha
30.	Papaya	12	240	20
31.	Sweet orange	02	7.0	20
Vegetable Crops				
32.	Brinjal	524	10474	20.0
33.	Tomato	621	9320	15.0
34.	Bhendi	416	2910	7.0
35.	Greens	135	2700	20
36.	Colacasia	192	1343	7.0
37.	Tapioca	370	11112	30.0
38.	Moringa	31	1224	40.0
39.	Beans	92	733	8.0
40.	Onion	54	537	40.0
41.	Pumpkin	07	144	20.0
42.	Radish	34	504	15.0
43.	Lab lab	59	587	10.0
44.	Cluster beans	161	1610	10.0
45.	Sweet potato	6	114	20.0
46..	Ash gourd	4	53	15
47.	Bitter gourd	18	264	15
48.	Bottle gourd	8	113	15
49.	Cabbage	2	31	15
50.	Cucumber	1	6	10
51.	Elephant yam	70	705	10
52.	Ribbed gourd	9	136	15
53.	Snake gourd	1	13	15
54.	Water melon	20	396	20
Flower crops				
54.	Rose	101	710	7.0
55.	Jasmine	698	5580	8.0
56.	Jathimalli	395	3940	10

57.	Crossandra	130	260	2
58.	Chrysanthemum	65	650	10
59.	Nerium	5	23	5
60.	Kakada jasmine	6	45	8
61.	Marigold	14	210	15
62.	Mullai	1079	8628	8
63.	Tuberose	9	44	5
Spices				
64.	Chillies	397	397	1.0
65.	Turmeric	861	4307	6.0
66.	Coriander	75	23	0.3
67.	Curry leaf	25	4940	200
68.	Mint	13	26	2.0
69.	Tamarind	420	2522	6.0
Plantation crops				
70.	Arecanut	15	150	10.0
71.	Betel leaf	48	952	20

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

2.5. Weather data

Month	**Rainfall (mm)**	**Temperature ^{0} C**		**Relative Humidity (%)**
		Maximum	**Minimum**	
April, 2010	-	37.8	23.5	76
May, 2010	24	38.9	24.8	69
June, 2010	58.1	36.3	24.6	74
July, 2010	68.5	35.4	24.6	75
August, 2010	147.1	36.5	24.8	76
September, 2010	199.2	32.1	23.2	89
October, 2010	238.0	31.0	27.7	85
November, 2010	249.0	29.3	22.0	98
December, 2010	3.5	27.5	19.0	91
January, 2011	-	30.0	14.1	76
February, 2011	0.7	31.6	17.3	67
March, 2011	-	33.8	19.8	63

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

Category	Population	Production	Productivity
Cattle			
Crossbred	1,59,308	3,47,41,065 liters of milk	1,59,308
Indigenous	3,71,718	-	3,71,718
Buffalo	29,392	-	29,392
Sheep			
Crossbred	14,757	-	-
Indigenous	2,80,382	-	-
Goats	2,32,315	-	-
Pigs		-	-
Crossbred	1,112	-	-
Indigenous	11,243	-	-
Rabbits	1,682	-	-
Poultry			
Hens-	11,00,428	-	-
Desi	88,034	-	-
Improved	10,12,394	-	-
Ducks	49,237	-	-
Turkey and others	5,518	-	-

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

2.8 Details of Operational area / Villages

S.No	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Vellore	Vellore	Thondantulasi, Narasingapuram	2	Chillies	Improper diagnosis of pest and disease	Crop protection
2.	Tirupattur	Jolarpet	Mandalavadi, Yelagiri, Thamalerimuthur, Kethandapatty	2	Red gram	Poor crop establishment	Crop management
3.	Vellore	Vellore	Karugamputtur, Vaiyathur	1	Animal husbandry	Low milk yield	Nutrition
4.	Vellore	Walaljah and Vellore	Ratnagiri, Kandhaneri	1	Black gram	Flower drop and low yield	Crop management
5.	Vellore	Vellore	Kandhaneri, Kazhanipakkam	2	Coconut	High incidence of rhinoceros beetle	Crop protection
6.	Katpadi	Gudiyatham And Katpadi	Paradharami, Senkundram, Chinnapallikuppam, Vellore	2	Sugarcane	Requirement of more setts under conventional method	Crop management
7.	Katpadi	K.V.Kuppam	Kothamangalam, Chozhamur	2	Paddy	High incidence of pest and diseases	Crop protection
8.	Katpadi	K.V.Kuppam	Kavasampattu, Vaduganthangal, Sennangkuppam, Kollaimedu, Nathammedu	1	Brinjal	Low yield of existing varieties	Crop improvement
9.	Arcot and Katpadi	Arcot, Timiri, Katpadi	Palur, Damukanpatti, Sirugarumpur	2	Paddy	High labour wages	Farm mechanization

10.	Arcot, Vellore	Walajah, Vellore	Sakkaramallur,. Esayanur, Kannikapuram, Ratnagiri	1	Fisheries	Low yield of local species	Productivity improvement
11.	Arakkonam	Sholingur	Veeranathur, Velam, Kodaikkal	2	Paddy	Yield reduction and Water scarcity	Crop management
12.	Katpadi, Vellore	Katapdi, Vellore	Kavasampattu, Melkavanur, Virinjipuram, Karugamputtur	1	Fodder crop	Using crop residues instead of fodder	Crop management
13.	Tirupattur	Tirupattur	Solainagar, Thamalerimuthur, Lakshmipuram, Periyamottur, Chinnamookanur	1	Sunflower	High incidence of pest and disease	Crop protection
14.	Gudiyatham	Gudiyatham	Velleri, Paradharami, Thattaparai	2	Green gram	Low productivity	Crop management
15.	Arcot	Arcot	Kurumudithangal, Karikkanthangal, Kalavai, Agaram, Mecheri	1	Black gram	Low productivity	Crop management

2.9 Priority thrust areas

S. No	Thrust area
1.	**Cereals** • Popularization of high yielding varieties & hybrids • Integrated crop management • Integrated Weed Management • Integrated Nutrient Management
2.	**Pulses** • Popularization of high yielding varieties • Integrated crop management

	• Integrated Nutrient Management • Integrated Pest Management
3.	**Oilseeds** • Popularization of High yielding varieties & hybrids • Integrated crop management • Integrated Nutrient Management • IPM
4.	**Coconut** • Integrated Management for Rhinoceros beetle • Mechanization
5.	**Vegetables** • Popularization of high yielding varieties & hybrids • IPM for vegetable crops • Management of shoot and fruit borer in Brinjal
6.	**Forage crops** • Popularization of Co (CN) 4 Cumbu Napier Hybrid forage grass, Guinea grass and Desmanthus
7.	**Water scarcity** • Soil moisture conservation by deep ploughing with chisel plough and mulching with crop residues • Drip irrigation system with fertigation.
8.	**Animal Husbandry** • Ranikhet disease management in poultry • Increasing milk yield through composite mineral mixture • Composite fish culture
9.	**Poultry** • Introduction of Poultry suited for broiler and egg laying
10.	**Farm Mechanization** • Popularization of Paddy transplanter • Popularisation of Cono weeder in Paddy • Popularization of sett cutter in sugar cane • Popularisation of Drum Seeder in Paddy • Popularisation of Coconut tree climber

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	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
6	5	84	34	12	11	152	142

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
130	162	7500	8249	220	286	2200	2631

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
15	17.26	36000	38356

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

3.B1. Abstract of interventions undertaken based on thrust areas identified for the district as given in S. 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.	Yield improvement and farm mechanization	Paddy / Farm Implements	Low yield of existing varieties, Pest problems, non availability of labourers, more drudgery and high labour wages	Assessment of efficient mechanical weeding Practices in SRI	Popularization of Co(R)H-3 paddy in SRI method and mechanization in paddy cultivation	5	-	2	4	38 Kg 40 kg	-	-	2	16
2.	Plant protection	Paddy	Pest and disease problem	-	Integrated pest and disease management in paddy	6	-	-	-	-	-	-	1	5
3.	Yield improvement, Farm mechanization	Sugarcane/ farm implements	Non - availability of labours, more drudgery and high labour wages	-	Popularization of motorized Sugarcane sett cutter	3	-	1	2	-	-	-	-	-
4.	Yield improvement, Pest management `	Groundnut	Low yield of existing varieties, Pest problem	-	Introduction of HYV and integrated crop management practices in groundnut in rabi season	2	-	-	-	200 kg of pods	-	-	2	7.5 kg

5.	Yield improvement	Sesame	Low yield due to non adoption of production technologies	-	Introduction and popularization of latest variety TMV 7 sesame and integrated crop management practices	2	-	-	-	25 kg	-	-	3	20 kg
6.	Plant protection	Sunflower	Yield reduction due to high pest and disease incidence	-	Designer seed module for pest and disease management in Sunflower	1	-	1		50 Kg	-	-	2	20 Kg
7.	Plant protection	Chillies	Low yield due to pest and disease problem	Management of Chillies pest and disease complex	-	6	-	-	-	-	-	-	1	1 lt.
8.	Plant protection	Coconut	low nut yield per annum	-	Management of rhinoceros beetle in coconut	2	-	-	-	-			1	12
9.	Yield improvement	Redgram	Low yield	Assessment of planting method in redgram	-	2	-	-	-	-	7500	-	4	6
10.	Yield improvement	Pulses	-	Assessment of the performance of the pulse wonder in pulses	Popularisation of drought mitigation technologies in pulses (Black gram VBN-4)	2	-	-	-	100 Kg	-		-	-
11.	Yield improvement	Brinjal	Low yield of existing varieties	-	Popularization of COBH2 Brinjal	5	-	-	-	0..20 kg	-	-	3	809.8 kg

12.	Animal husbandry	Dairy cows	Nutritional imbalance, Usage of crop residues instead of fodder	Area specific mineral mixture for dairy cows	Popularization of fodder bank at village level	4	-	-	-	3.15 Kg	16,200 (CN hybrid) 5000 (Guinea grass)	-	-	-
13.	Poultry	Poultry birds	Disease problem	Control of Ranikhet disease in *desi* chicken	-	2	-	-	-	-	-	500	-	-
14.	Fisheries	Fish culture	Low yield of local species	-	Popularisation of composite fish culture in Village ponds	2	-	-	-	-	-	Rohu-1200 Nos Catla -1200 Nos Mrigal-1200 Nos Common carp-1200 Nos Silver carp-1200 Nos	-	-
15.	Yield improvement	Green gram (Special pulses programme)	Low yield of existing varieties	-	Integrated crop management practices in Green gram	1	-	1	1	100 Kg	-	-	4	14.5
16.	Yield improvement	Black gram (Special pulses programme)	Low yield of existing varieties	-	Integrated crop management practices in Black gram	1	-	1	1	100 Kg	-	-	4	14.5

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	Trainings	Others (Specify)
1	2	3	4	5	6	7	8
1.	Assessment of efficient mechanical weeding practice in SRI	TNAU, Coimbatore	Paddy	5	-	2	-
2.	Management of Chillies pest and disease complex	TNAU, Coimbatore	Chillies	5	-	6	-
3.	Assessment of the performance of the pulse wonder in pulses	TNAU, Coimbatore	Blackgram	5	-	1	-
4.	Assessment of planting method in redgram	TNAU, Coimbatore	Redgram	5	-	2	-
5.	Control of Ranikhet disease in *desi* chicken	TNAU, Coimbatore	Poultry	50	-	2	-
6.	Area specific mineral mixture for dairy cows	TNAU, Coimbatore	Dairy cows	14	-	2	-
7.	Popularization of Co(R)H-3 paddy in SRI method	TNAU, Coimbatore	Paddy	-	10	2	-
8.	Integrated pest and disease management in paddy	TNAU, Coimbatore	Paddy	-	10	6	-
9.	Popularization of mechanization in rice cultivation:	TNAU, Coimbatore	Paddy	-	10	3	-
10.	Popularisation of drought mitigation technologies in pulses (Black gram VBN-4)	TNAU, Coimbatore	Blackgram	-	10	1	-
11.	Popularisation of COBH2 Brinjal	TNAU, Coimbatore	Brinjal	-	10	5	-
12.	Popularization of fodder bank at village level	TNAU, Coimbatore	Fodder	-	10	2	-
13.	Popularisation of composite fish culture in village ponds	TNAU, Coimbatore	Fish culture	-	5	2	-
14.	Introduction of HYV and integrated crop management practices in groundnut in rabi season	TNAU, Coimbatore	Groundnut	-	5	2	
15.	Introduction and popularization of latest variety TMV 7 sesame and integrated crop management practices	TNAU, Coimbatore	Sesame	-	10	2	
16.	Popularization of Sugarcane sett cutter	TNAU, Coimbatore	Sugarcane	-	50	3	-
17.	Designer seed module for pest and disease management in Sunflower	TNAU, Coimbatore	Sunflower	-	10	1	-
18.	Management of Rhinoceros beetle in Coconut	TNAU, Coimbatore	Coconut	-	12	2	-

3.B2 contd..

No. of farmers covered															
OFT				**FLD**				**Training**				**Others (Specify)**			
General		**SC/ST**		**General**		**SC/ST**		**General**		**SC/ST**		**General**		**SC/ST**	
M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
9	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
30	4	7	3	91	13	39	9	948	510	461	201	-	-	-	-

PART IV - On Farm Trial

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management			1							1
Integrated Pest Management					1					1
Integrated Crop Management			1							1
Farm Machineries	1	-	-	-	-	-	-	-	-	1
Total	1	-	2	-	1	-	-	-	-	4

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

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Nutrition Management	1					1
Disease Management		1				1
TOTAL	1	1				2

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

4.B. Achievements on technologies Assessed

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	Pulses	Assessment of the performance of the pulse wonder in pulses	5	5	1
Integrated Pest Management	Chillies	Management of Chillies pest and disease complex	5	5	1
Integrated Crop Management	Redgram	Assessment of planting method in redgram	5	5	1
Farm Machineries	Paddy	Assessment of efficient mechanical weeding Practices in SRI	5	5	2
Total			**20**	**20**	**5**

4.B.2. Technologies Refined under various Crops : Nil

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	Dairy cows	Area specific mineral mixture for dairy cows	14	14
Disease management	Poultry	Control of Ranikhet disease in *desi* chicken	50	50
Total			**64**	**64**

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

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
Chillies	Irrigated	Improper diagnosis of the disease by majority of vegetable growers Inadequacy of control experienced by adopters	Management of Chillies pest and disease complex	5	1. Azadiractin @ 2ml/lit on 25th DAT 2. Difenaconazole – 0.5ml/lit – 35 (need based) and 60 DAT 3. Imidacloprid@ 2 ml/lit (need based) 4. *P. fluorescens@* 10g/lt on 40 DAT 5. Flubendiamide 25ga.i./ha 6. Setup Pheromone trap@12 no/ha	% plants showing disease symptom; % of fruits with pod borer damage Yield/ha	1.4 % 2.5 % 14.1 t/ha	Application of pesticides, difenaconazole and pseudomonas, reduced the pest and disease incidence and recorded higher net returns and BC ratio	Newer fungicide and bio-pesticides keep the disease incidence under control	-	-

Contd..

Technology Assessed	Source of Technology	Production	unit	Net Return (Profit) Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	Chemical control with carbendazim and synthetic pyrethroids ,Pesticide retailer	11.16	t/ha	59600	2.15
Technology option 2	TNAU, Coimbatore	12.00	t/ha	68000	2.31
Technology option 3	TNAU, Coimbatore	14.12	t/ha	89200	2.72

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
Red gram	Irrigated	Poor crop establishment & yield	Assessment of planting method in redgram	5	Seedlings raised in polybags and transplanted on 25-28 DAS, seed treatment (*Rhizobium*, *Trichoderma*,*Phosphobacteria*), Pulse wonder and thiodicarb spray	No of plant / m^2 No of pods/plant Yield/ha BCR	1.34 119 752 kg 1.51	Performance of red gram under transplanting was poor when compared to direct sowing	Growth & development of red gram was poor under transplanted conditions. Mortality of seedlings due to water logging	Yes	The performance of redgram should be tested in consideration with climatic & edaphic factors

Contd..

Technology Assessed	Source of Technology	Production	unit	Net Return (Profit) Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	Red gram is grown as intercrop in cotton	443	kg/ha	5628	1.61
Technology option 2	TNAU, Coimbatore	1087	kg/ha	18764	2.11
Technology option 3	TNAU, Coimbatore	752	kg/ha	8819	1.51

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
Blackgram	irrigated	Increased flower drop, poor seed set percentage and drastic yield reduction	Assessment of the performance of Pulse wonder in Black gram	5	Application of pulse wonder @ 2.25 kg/acre at the peak flowering stage.	No of pods/plant Yield/ha BCR	38 835 kg 2.18	Application of pulse wonder increased the seed set percentage and yield	Farmers realized the impact of pulse wonder though reduced flower drop	-	-

Contd..

Technology Assessed	Source of Technology	Production	unit	Net Return (Profit) Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 Farmers practice	Non-adoption of any foliar spray and non-application of recommended dose of fertilizers	680	kg/ha	12,640	1.63
Technology option 2	TNAU, Coimbatore	790	kg/ha	16,920	1.80
Technology option 3	TNAU, Coimbatore	835	kg/ha	24,925	2.18

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
Farm Implements	Irrigated	Non-availability of labours, High labour wages, More drudgery involved and Less net income	Assessment of efficient mechanical weeding practices in SRI	3	Weeding with SRI power weeder	Cost of weeding Rs. / ha. Cost saving in % Time saving in %. Drudgery reduction	720 31 71.5 High	Weeding by SRI power weeder mitigates the problem of labour shortage and high labour wages. Also weeding by SRI power weeder reduced weeding cost and increased net returns.	Appreciated the use of SRI power weeder.	-	-

Contd..

Technology Assessed	Source of Technology	Production	unit	Net Return (Profit) Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1	Use of single row conoweeder in SRI	6.25	t/ha.	42015	2.27
Technology option 2	TNAU	5.54	t/ha.	33822	2.04
Technology option 3	TNAU	6.38	t/ha.	43782	2.34

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
Dairy cows	Livestock production	Non supplementation of mineral mixtures	Area specific mineral mixtures for dairy cows	14	1. No mineral mixture supplementation 2.TANUVAS mineral mixture 30-50 g/day 3. Area specific TANUVAS mineral mixture 30-50 g/day	Milk yield	1823 lit/year 2029 lit/ year 1918 lit/ year	Average milk yield has increased due supplementation of mineral mixture	Increased milk yield TANUVAS mineral mixture is better than the area specific mineral mixture 1.	-	-

Contd..

Technology Assessed	Source of Technology	Production	unit	Net Return (Profit) Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	No mineral mixture supplementation	1823	lit/year	12568.00	1.64
Technology option 2	TANUVAS	2029	lit/year	14952.00	1.73
Technology option 3	TANUVAS	1918	lit/year	13285.00	1.65

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
Poultry	Poultry farming	No Vaccination	Control of the Ranikhet disease	50 units	Option 1: 1. No Vaccination Option 2: 1. Lasota vaccine-eye drops 7th and 14th day 2. RDVK vaccine subcutaneously on 8th and 16th week Option 3: 1. Oral pellet Ranikhet vaccine 7th and 14th day. 2. RDVK vaccine subcutaneously on 8th and 16th week	• Mortality % • Disease incidenc	OFT is in progress	OFT is in progress	OFT is in progress	-	-

Contd..

Technology Assessed	Source of Technology	Production	unit	Net Return (Profit) Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	No Vaccination	OFT is in progress	OFT is in progress	OFT is in progress	OFT is in progress
Technology option 2	TANUVAS				
Technology option 3	TANUVAS				

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 Chillies pest and disease complex**
2. Problem Definition: Improper diagnosis of pest & disease by majority of vegetable growers
   Inadequacy of control experienced by adopters
3. Details of technologies selected for assessment:

   Option 1: Chemical control with carbendazim and synthetic pyrethroids

   Option 2: Spraying of Mancozeb @2g/lit at 15 days interval from the first appearance of the symptom, Setup Pheromone trap@12 no/ha and spraying of chlorpyriphos@2ml/lit

   Option 3: Azadiractin @ 2ml/lit on 25th DAT
   Difenaconazole – 0.5ml/lit – 35 (need based) and 60 DAT
   Imidacloprid @2 ml/lit (need based)
   P. fluorescens@ 10g/lt on 40 DAT
   Flubendiamide 25ga.i./ha
   Setup Pheromone trap@12 no/ha
4. Source of technology: TNAU, Coimbatore
5. Production system and thematic area: Irrigated condition, pest management
6. Performance of the Technology with performance indicators: % fruit damage by fruit borer; % thrips damage, % of fruits with fruit rot symptom, Yield/ha
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring

   Techniques: Newer pesticides along with botanicals keep the pest & disease incidence under control
8. Final recommendation for micro level situation: Spraying of Azadiractin @ 2ml/lit on 25th DAT and imidacloprid @2 ml/lit (need based)for thrips control, spraying of Difenaconazole – 0.5ml/lit – 35 (need based) and 60 DAT and application of *P. fluorescens*@ 10g/lt on 40 DAT for managing disease, spraying of Flubendiamide 25ga.i./ha and setting up Pheromone trap@12 no/ha for management of fruit borer
9. Constraints identified and feedback for research: Nil
10. Process of farmers participation and their reaction: More number of farmers participated and became aware of the new pesticide molecules for control of chilli pest and diseases.

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 planting method in redgram**

2. Problem Definition: Poor crop establishment and yield

3. Details of technologies selected for assessment:

   Option 1: Farmers practice, Redgram is grown as intercrop in cotton

   Option 2: Direct sowing with seed treatment (*Rhizobium, Trichoderma,Phosphobacteria*), Pulse wonder and thiodicarb spray

   Option 3: Seedlings raised in polybags and transplanted on 25-28 DAS, seed treatment (*Rhizobium, Trichoderma,Phosphobacteria*), Pulse wonder and thiodicarb spray

4. Source of technology: TNAU, Coimbatore

5. Production system and thematic area: Irrigated condition, crop management

6. Performance of the Technology with performance indicators: No of plant / $m^{2,}$, No of pods/plant, Yield/ha, BCR

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring

   Techniques: Performance of redgram was poor under transplanted conditions. Mortality of seedlings due to water logging.

8. Final recommendation for micro level situation: Transplanting of redgram is not suitable for the areas prone for waterlogging. During monsoon period (More number of rainy days) where direct sowing is not possible , transplanting may be done

9. Constraints identified and feedback for research: - The performance of redgram should be tested in consideration with climatic & edaphic factors

10. Process of farmers participation and their reaction: Farmers were not satisfied with transplanting of redgram.

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 the performance of pulse wonder in Blackgram**
2. Problem Definition: Laboriousness involved in DAP spray
   High procurement price of NAA and Salicylic acid in the market
3. Details of technologies selected for assessment:

   Option 1: Farmers practice (Non-adoption of any foliar spray and non-application of recommended dose of fertilizers)

   Option 2: Foliar spray of NAA 40mg/litre and 100 mg/litre of Salicylic acid at pre-flowering stage and 15 days thereafter. Followed by 2% DAP spray at
   flowering stage and 15 days thereafter.

   Option 3: Foliar spray of Pulse wonder @ 2.25 kg/acre at peak flowering stage
5. Production system and thematic area: irrigated condition
6. Performance of the Technology with performance indicators: No. of pods/plant, Yield (Kg/ha), Cost-Benefit ratio
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring

   Techniques: Combination of nutrients and growth regulators enhances flower and seed set drastically.
8. Final recommendation for micro level situation: Spray of pulse wonder @ 2.25 kg/acre drastically increases the yield in black gram upto 21% over that of farmers practice.
9. Constraints identified and feedback for research: Nil
10. Process of farmers participation and their reaction: Farmers participation was high as they realized high seed set percentage and increased yield in the crop

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 efficient mechanical weeding practices in SRI**
2. Problem Definition : Non availability of labours, high labour wages, more drudgery involved in weeding and less net income
3. Details of technologies selected for assessment : T1: Use of single row conoweeder in SRI
   T2: Use of two row finger type rotary weeder in SRI
   T3: Use of two row SRI power weeder
4. Source of technology : TNAU
5. Production system and thematic area : Paddy – Paddy/ Paddy – Pulse production and farm mechanization
6. Performance of the Technology with performance indicators :

Performance Indicators	T1 Single row cono weeder	T2 Two row finger type rotary weeder	T3 Two row SRI power weeder
Man hours/ ha.	42	24	12
Field capacity (ha./hr.)	0.023	0.042	0.084
Labour saving in %	-	43	71.50
Cost of weeding/ha.	1050 (labour)	600 (labour)	720 (labour + petrol)
Cost saving in %	-	43	31
Drudgery Reduction level	Low (Shoulder pain)	low (Shoulder pain)	High (no shoulder pain)
Time saving in %	-	43	71.50

7. Feedback, matrix scoring of various technology parameters done : farmer's participation / other scoring techniques
   Farmers appreciated the operation of SRI power weeder, its increased field capacity and drastic reduction of drudgery in SRI weeding
8. Final recommendation for micro level situation : Single row SRI power weeder may be recommended for different spacing of crop
9. Constraints identified and feedback for research : Preferred single row SRI power weeder to use for third weeding comfortably without crop damage.
10. Process of farmers participation and their reaction : SRI power weeder can be used only the fields where SRI marker has been used.

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: **Area Specific mineral mixture for dairy cows**
2. Problem Definition: Non supplementation of mineral mixtures
3. Details of technologies selected for assessment:

   Option 1: No mineral mixture supplementation
   Option 2: TANUVAS mineral mixture 30-50 g/day
   Option 3: Area specific TANUVAS mineral mixture 30-50 g/day
4. Source of technology: TANUVAS, Chennai
5. Production system and thematic area: Livestock production, nutrition
6. Performance of the Technology with performance indicators: Milk yield
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring

   Techniques: Increased milk yield TANUVAS mineral mixture is better than the area specific mineral mixture
8. Final recommendation for micro level situation: 30-50 g of TANUVAS mineral mixture / cow/ day will help to increase the yield of milk
9. Constraints identified and feedback for research: -
10. Process of farmers participation and their reaction: Response was good for TANUVAS mineral mixture but area specific mineral mixture has to be improved after analysis.

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: **Control of Ranikhet disease in desi chicken**
2. Problem Definition: No Vaccination
3. Details of technologies selected for assessment:

   Option 1: No Vaccination
   Option 2: Lasota vaccine-eye drops 7^{th} and 14^{th} day, RDVK vaccine subcutaneously on 8^{th} and 16^{th} week.
   Option 3: Oral pellet Ranikhet vaccine 7^{th} and 14^{th} day, RDVK vaccine subcutaneously on 8^{th} and 16^{th} week.

4. Source of technology: TANUVAS, Chennai
5. Production system and thematic area: Poultry, disease management
6. Performance of the Technology with performance indicators: Disease incidence
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring

   Techniques: OFT is in progress
8. Final recommendation for micro level situation: OFT is in progress
9. Constraints identified and feedback for research: - OFT is in progress
10. Process of farmer's participation and their reaction: OFT is in progress

4.D1. Results of Technologies Refined : Nil

4.D.2. Details of each On Farm Trial for refinement : Nil

PART V - FRONTLINE DEMONSTRATIONS

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

S. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
1.	Oilseeds	Irrigated	Rabi, 2010-2011	Groundnut	TMV13		Crop management	Seed rate of 200 kg, application of gypsum 400 kg, Micronutrient spray 3 rounds (DAP – 2.5 kg, Ammonium sulphate -1 kg, Borax – 500 g, planofix – 375 ml), *P. fluorescens* seed treatment- 10 g/kg + *P. fluorescence* 2.5 kg / ha soil application on 30 DAS, Pesticides and pheromone trap	1	1	1	4	5	-
2.		Rainfed	Rabi, 2010-11	Sesame	TMV 7		Crop management	TMV 7 sesame Seeds-5 kg, *P. fluorescence* seed treatment- 10 g/kg + *P. fluorescence* 2.5 kg / ha soil application on 30 DAS, Azospirillum 3 packets, Zinc sulphate 5kg, $MnSO_4$ -5 kg, Malathion@750 ml/ha, Neem oil 2% -2 rounds	5	5	2	8	10	-
3.		Irrigated	Rabi, 2010-11	Sunflower	-	KBSH41	Pest and Disease management	Sunflower hybrid (KBSH 41) seeds – 50 kg, Hitron halo Polymer-25 kg, Carbendazim – 50 g, Imidacloprid-500ml, Azopsirillum-6kg, P. fluorescens-10 kg, and T. viride-10 Kg	2	2	4	6	10	-
4.	Pulses (Special pulses programme)	Irrigated	Rabi, 2010	Green gram	VBN 2		Crop management	Seed rate of 10 kg/acre, seed treatment with *Trichoderma viride* @ 4 g/kg of seed, *Rhizobium & Phosphobacteria* @ 3	4	4	3	7	10	-

								packets / ha, Soil application of *P. fluorescens* @ 2.5kg./ha, Application of SSP & MOP, Application of pendimethalin at 1 kgai/ha as pre emergence herbicide						
5.	Pulses (Special pulses programme)	Irrigated	Rabi, 2010	Black gram	VBN 4		Crop management	Seed rate of 10 kg/acre, seed treatment with *Trichoderma viride* @ 4 g/kg of seed, *Rhizobium & Phosphobacteria* @ 3 packets / ha, Soil application of *P. fluorescens* @ 2.5kg./ha, Application of SSP & MOP, Application of pendimethalin at 1 kgai/ha as pre emergence herbicide	4	4	4	6	10	
6.	Pulses	Rainfed	Rabi, 2010-11	Black gram	VBN 4	-	Crop management	Drought mitigation through mini mobile sprinkler sprayer	5	5	3	7	10	In progress
7.	Cereals	Irrigated	Rabi, 2010	Paddy	ADT 36		Crop protection	Application of Tricycloazole@500g/ha, Propiconazole @ 750ml/ha, *Pseudomonas*ST@10g/kg for blast management and application of Neem oil 3%, Thiomethaxam @ 100g, Imidachloprid @ 100 ml/ha along with light trap and yellow pan trap for BPH management	5	5	3	7	10	-
8.		Irrigated	Kharif, 2010	Paddy		Co(R)H-3	Crop management	Seed rate of 7.5kg/ha, seed treatment with *P. fluorescens* @ 10g/kg + Soil application @ 2.5kg./ha, seed treatment with *Azospirillum* @ 3 packets / ha, spraying of chlorantraniprole @ 30g ai/ha	5	5	4	6	10	

9.	Vegetables	Irrigated	Rabi'2010	Brinjal	-	COBH2	Popularisation	Popularisation of COBH2 Brinjal	1	1	3	7	10	-
10.	Coconut	Irrigated	Rabi, 2009-10	Coconut	Local		Crop protection	Fixing Phermone traps – 1No./ha + application of Naphthalene 4 kg/ha + Phorate 10G @ 2kg/ha + *Metarhizium anisopliae* culture – 2 packets/ plantation	5	5	5	7	12	-
11.	Fodder	Irrigated	Rabi, 2009-10	CN hybrid grass, Guinea grass, Hedge Lucerne and subabul		Co4 Co2	Animal husbandry	Intercropping of hedge Lucerne with CN hybrid grass and guinea grass, border planting of subabul	1	1	3	7	10	-
	Rabbitry													
	Pigerry													
	Sheep and goat													
	Duckery													
	Common carps													
12.	Ornamental fishes	Fish culture	2010	-	-	-	Fish culture	Popularisation of composite fish culture in Village ponds	5	5	-	-	5	-
13.	Implements	Irrigated	Rabi 2010	Paddy	ADT 43 & ADT 36	-	Mechanization	Mechanization in paddy cultivation	2	2	2	8	10	-
14.		Irrigated	Rabi 2010 - 11	Sugarcane	86032	-	Mechanization	Use of motorized sugarcane sett cutter	10	10	9	41	50	-

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

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
1.	Oilseeds	Irrigated	Rabi, 2010-11	Coconut	Local		Crop protection	Integrated pest management	Rabi,2009-10	Low	Medium	Medium	-
2.		Irrigated	Rabi, 2010-2011	Ground nut	TMV13		Crop management	Integrated crop management practices	Rabi, 2010-2011	low	medium	high	-
3.		Rainfed	Rabi, 2010-11	Sesame	TMV 7		Crop management	Integrated crop management	Rabi, 2010-11	low	medium	high	Rice

								practices					
4.		Irrigated	Rabi, 2010	Sunflower		KBSH 41	Pest and Disease management	Designer seed module for pest and disease management in sunflower	Rabi, 2010-11	Low	medium	medium	Cotton
5.	Pulses (Special pulses programme)	Irrigated	Rabi, 2010-11	Green gram	VBN 2		Crop management	Integrated crop management practices in Green gram	Rabi,2010	Low	Medium	High	Groundnut
6.	Pulses (Special pulses programme)	Irrigated	Rabi, 2010-11	Black gram,	VBN 4		Crop management	Integrated crop management practices in Black gram	Rabi,2010	Low	Medium	Medium	Groundnut
7.	Cereals	Irrigated	Rabi, 2010	Paddy	ADT 36		Crop protection	Integrated pest management practices	Rabi, 2010	Low	Medium	Medium	Rice
8.		Irrigated	Kharif, 2010	Paddy		CO(R)H3	Crop management	Popularisation	Kharif, 2010	Low	Medium	High	Rice
	Millets												
9	Vegetables	Irrigated	Rabi'2010	Brinjal	-	COBH 2	Popularisation	Popularisation of COBH2 Brinjal	Rabi'2010	Medium	Low	High	fallow
	Flowers												
10	Fodder	Irrigated	Rabi, 2009-10	CN hybrid grass, Guinea grass, Hedge Lucerne and subabul		CO4 CO2	Animal husbandry	Popularisation	Rabi, 2010-11	low	medium	high	-

5.B. Results of Frontline Demonstrations

5.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Oilseeds																			
Groundnut	Introduction of HYV and integrated crop management practices in groundnut in rabi season	TMV 13		Irrigated	5	1	18.24	15.89	17.07	14.15	20.7	24,167.00	51,210.00	27,043.00	2.12	22986.00	42450.00	19464.00	1.85
Sesame	Introduction and popularization of latest variety TMV 7 sesame and integrated crop management practices	TMV 7		Rainfed	10	5	8.41	6.83	7.62	6.48	17.6	14633	30480	15847	2.08	13474	25920	12446	1.92
Sunflower	Designer seed module for pest and disease management in sunflower	-	KBSH 41	irrigated	10	2	2440	2180	2240	1660	38	18,000	60,480	42,480	3.36	16,000	44,820	28,820	2.80
Coconut	Management of Rhinoceros beetle in Coconut	Local		Irrigated	12	5	16304	14000	15315	12500	22.5	16850	48000	31150	2.85	13500	35250	21750	2.61
Pulses (Special pulses programme) Green gram	Integrated crop management practices in Green gram	VBN 2		Irrigated	10	4	8.32	7.36	7.84	6.53	20.06	13268	28376	15108	2.14	11873	22856	10983	1.93
Pulses (Special pulses programme) Black gram	Integrated crop management practices in Black gram	VBN 4		Irrigated	10	4	9.08	8.21	8.63	7.02	22.93	13657	31238	17581	2.28	12293	24582	12289	1.99
Pulses	Popularisation of drought mitigation technologies in Pulses (Black gram)	VBN 4	-	Rainfed	10	5	Continued												
Cereals																			

Paddy	Integrated pest and disease management in paddy	ADT 36,		Irrigated	10	5	58.76	40.00	47.15	39.00	20.91	29400	59440	30040	2.02	27920	52100	24180	1.87
Paddy	Popularization of CO(R)H3 paddy in SRI method		Co(R)H3	Irrigated	10	5	73.42	67.74	70.58	52.13	35.4	35217	77638	42421	2.20	31367	57343	25976	1.83
Millets																			
Vegetables	Popularisation of COBH2 Brinjal	-	COBH2	Irrigated	10	1	497	241	302	238	26.89	64000	1,66,000	1,02,000	2.59	39,000	68,500	29,500	1.76
Flowers																			
Ornamental																			
Fruit																			
Spices and condiments																			
Commercial																			
Medicinal and aromatic																			
Fodder	Popularization of fodder bank at village level	Guinea grass-CO2	CN hybrid-Co4	Irrigated	10	1													
		Guinea Grass + Hedge Lucerne intercropping																	
					Guinea Grass		1910	1170	1520	Fodder sorghum		42864	152000	109136	3.55	15849	32800	16951	2.07
					Hedge Lucerne		370	220	290			9392	34800	25408	3.71				

		CN Hybrid + Hedge Lucerne intercropping							328									
					CN Hybrid	2960	2230	2570			67106	257000	189894	3.83				
					Hedge Lucerne	390	260	330			10287	39600	29313	3.85				

* 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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Black gram		
No. of pods / plant	32	25
% incidence of pod borer	13	24
Green gram		
No. of pods / plant	28	22
% incidence of pod borer	14	26
Paddy		
No. of productive tillers/m^2	392	312
No. of panicles/ m^2	319	256
Sunflower		
No. thrips / plant	4	30
No. of leaf hopper/plant	5	26
Alternaria (PDI)	9	26
Rust (PDI)	10	30
Sesame		
No. of pods / plant	71	63
Groundnut		
No. of pods / plant	26	21
Paddy		
Pest incidence in % Stem borer Leaf folder	 11 10	 23 26
Disease incidence in % Blast	 9	 16
Coconut		
Rhinoceros beetle - % damage in coconut palms	11.4	1.7
Co 4 grass		
No. of tillers/ clump	35	-
Brinjal		
No.of fruits/ plant	57	39

5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (q/ha)				% Increase	*Economics of demonstration Rs./unit)				*Economics of check (Rs./unit)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Dairy																	
Poultry																	
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
Others (pl.specify)																	

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

** BCR= GROSS RETURN/GROSS COST

Data on additional parameters other than yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.)

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

5.B.3. Fisheries

Type of Breed	**Name of the technology demonstrated**	**Breed**	**No. of Demo**	**Units/ Area (m^2)**	**Yield (q/ha)**				**% Increase**	***Economics of demonstration Rs./unit) or (Rs./m2)**				***Economics of check Rs./unit) or (Rs./m2)**			
					Demo			**Check if any**		**Gross Cost**	**Gross Return**	**Net Return**	** **BCR**	**Gross Cost**	**Gross Return**	**Net Return**	** **BCR**
					H	L	A										
Common carps	Popularisation of composite fish culture in village ponds	Rohu, catla, mrigal, common carp and silver carp	5	5	7	7	7	-	-	33,500	80,000	46,500	2.38	-	-	-	
Mussels																	
Ornamental fishes																	
Others (pl.specify)																	

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

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

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

5.B.4. Other enterprises : **Nil**

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
Mechanical paddy transplanter Single row cono weeder Paddy harvester	1,69,000 (Hiring 1600/day) 1,500 Hiring 1100/hr	Transplanting paddy seedlings using paddy transplanter Weeding using cono weeder Harvesting using tractor operated combine	10	2	26	140	81.50	10,100	23,900	67,200	43,300	2.81	29,800	62,400	32,600	2.10
Motorized sugarcane sett cutter	9,500	Seed cane cutting using motorized sugarcane sett cutter	50	10	3	12	75	900	82,700	2,80,000	1,97,300	3.38	78,900	2,05,000	1,26,100	2.59

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

FLD on mechanization in paddy cultivation

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Drudgery reduction level	High	low
Time saving in %	81.5	-
Cost saving	72.14	-

FLD on mechanical sugarcane sett cutter

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Drudgery reduction level	High	low
Time saving in %	75	-
Reduction of seed cane in %	50	-

5.B.6. Cotton

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

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

5.B.6.2 Production technology demonstrations

Performance of demonstrations

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

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

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

Desi hybrids (AXA)																	
HXB Hybrids																	
HXH Hybrids																	
Herbacium Varieties																	
Hirsutum Varieties																	
Arboreum Varieties																	

5.B.6.3 Integrated pest management demonstrations

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

5.B.6.4 Demonstrations on farm implements

Name of the implement	**Area (Ha)**	**No. of Demo.**	**Name of the technology demonstrated**	**Labour requirement for operation (Rs./ha)**		
				Demo	**Local check**	**% change**
Motorized sugarcane sett cutter	10	50	Popularization of motorized sugarcane sett cutter	300	1200	75.00
Mechanical paddy transplanter, Cono weeder and Paddy harvester combine	2	10	Mechanization in paddy cultivation	3900	14000	72.14
Total				**4200**	**15200**	**72.37**

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

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

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

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1.	Paddy	Popularization of Co(R)H-3 paddy in SRI method	High yielding characters were appreciated by the farmers
2.	Paddy	Popularization of mechanization in rice cultivation	Reduction in cost of cultivation
3.	Paddy	Integrated pest and disease management in paddy	Low incidence of pests and diseases
4.	Sugarcane	Popularization of Sugarcane sett cutter	Reduction in labour cost
5.	Groundnut	Introduction of HYV and integrated crop management practices in groundnut in rabi season	Productivity enhancement and cost effective technology
6.	Sesame	Introduction and popularization of latest variety TMV 7 sesame and integrated crop management practices	Productivity enhancement and cost effective technology
7.	Sunflower	Designer seed module for pest and disease management in Sunflower	Reduction of pest and disease incidence in sunflower and ultimate yield increase
8.	Coconut	Management of rhinoceros beetle in coconut	Reduction in pest population
9.	Black gram	Popularisation of drought mitigation technologies in pulses (Black gram VBN-4)	In progress
10.	CN hybrid, Guinea grass, Hedge Lucerne, Subabul	Popularization of fodder bank at village level	Productivity enhancement and cost effective technology
11.	Greengram	Integrated crop management practices in Green gram	Productivity enhancement and cost effective technology
12.	Black gram	Integrated crop management practices in Black gram	Productivity enhancement and cost effective technology
13.	Brinjal	Popularisation of COBH2 Brinjal	High yielding characters were appreciated by the farmers

5.B.6.7 Farmers reactions on specific technologies

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1.	Paddy	Popularization of Co(R)H-3 paddy in SRI method	Farmers were eagerly participated in the demonstration and they observed the increased productivity due to the adoption of SRI
2.	Paddy	Popularization of mechanization in rice cultivation	The response of farmers was high as they realized the importance of mechanization
3.	Paddy	Integrated pest and disease management in paddy	Farmers were eagerly participated in the demonstration and they observed the reduction in pest & diseases
4.	Sugarcane	Popularization of Sugarcane sett cutter	Reduction in labour requirement

			Production of good quality setts
5.	Groundnut	Introduction of HYV and integrated crop management practices in groundnut in rabi season	Realized the impact of good quality seeds and new high yield varieties because they have used their own seeds for sowing
6.	Sesame	Introduction and popularization of latest variety TMV 7 sesame and integrated crop management practices	Realized the impact of good quality seeds and new high yield varieties because they have used their own seeds for sowing
7.	Sunflower	Designer seed module for pest and disease management in Sunflower	Realized the impact of polymer in increasing seedling growth, seedling vigour and ultimately the yield and in reduction of pest and disease incidence in sunflower
8.	Coconut	Management of rhinoceros beetle in coconut	Involvement of farmers were high as they have observed reduction in rhinoceros beetle population
9.	Black gram	Popularisation of drought mitigation technologies in pulses (Black gram VBN 4)	In progress
10.	CN hybrid, Guinea grass, Hedge lucerne, Subabul	Popularization of fodder bank at village level	High productivity evidenced by the demonstration was observed by the farmers. Cost reduction in feeding of animals
11.	Green gram	Integrated crop management practices in Green gram	Productivity enhancement through the adoption of ICM strategies was observed by the farmers and they were satisfied with the technological interventions
12.	Black gram	Integrated crop management practices in Black gram	Productivity enhancement through the adoption of ICM strategies was observed by the farmers and they were satisfied with the technological interventions
13.	Brinjal	Popularisation of COBH2 Brinjal	Farmers responses are good for the usage of new hybrid. Additional revenue due to high yield

5.B.6.8 Extension and Training activities under FLD

S. No	Activity	No. of activities organised	Number of participants	Remarks
1.	Field days	6	310	
2.	Farmers Training	31	1240	
3.	Media coverage	2	-	
4.	Training for extension functionaries	5	252	

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Cereals																	
Bajra																	
Maize																	
Paddy	Popularization of CO(R)H-3 paddy in SRI method	CO(R)H3	10	5	73.42	67.74	70.58	52.13	35.4	35217	77638	42421	2.20	31367	57343	25976	1.83
Sorghum																	
Wheat																	
Others (pl. specify)																	
Total																	
Oilseeds																	
Castor																	
Mustard																	
Safflower																	
Sesame																	
Sunflower	Designer seed module for pest and disease management in sunflower	KBSH 41	10	10	24.40	21.80	22.40	16.60	38%	18,000	60,480	42,480	3.36	16,000	44,820	28,820	2.80
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

PART VII. TRAINING

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production	11	145	44	189	52	34	86	189	86	275
Nursery management										
Integrated Crop Management	5	52	39	91	25	9	34	77	48	125
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Improved Nursery techniques in hybrid brinjal	1	10	5	15	5	5	10	15	10	25
Improved Nursery techniques for vegetable production	1	8	2	10	12	3	15	20	5	25
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										

Grading and standardization										
Protective cultivation										
Others (pl.specify)										
b) Fruits										
Production technologies for Papaya	1	10	5	15	5	5	10	15	10	25
Quality enhancement methods in Banana	1	12	3	15	9	1	10	21	4	25
Post harvest technology	1	8	2	10	13	2	15	21	4	25
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										

Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology	1	10	7	17	5	3	8	15	10	25

Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	14	179	59	238	73	39	112	252	98	350

Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture	1	15	5	20	2	3	5	17	8	25
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										

Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**37**	**449**	**171**	**620**	**339**	**104**	**305**	**642**	**283**	**925**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems	2	21	10	31	10	9	19	31	19	50
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production	4	61	39	100	21	8	29	56	15	71
Nursery management										
Integrated Crop Management	2	18	12	30	14	8	22	32	20	52
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify) NADP organic farming training	12	610	205	815	224	161	385	834	366	1200
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising (Brinjal)	4	55	10	65	22	13	35	77	23	100
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Post harvest technology	3	27	18	45	20	10	30	47	28	75
Others (pl.specify)										

b) Fruits										
Production technology for Papaya	5	55	20	75	35	15	50	90	35	125
Quality enhancement methods in Banana	5	40	25	65	33	27	60	73	52	125
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										

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

and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										

Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										

Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**37**	**887**	**339**	**1226**	**379**	**251**	**630**	**1240**	**558**	**1798**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	2	31	28	59	15	21	36	46	49	95
Training and pruning of orchards										
Protected cultivation of vegetable crops	1	8	6	14	6	5	11	14	11	25
Commercial fruit production										
Integrated farming										
Seed production	4	156	44	200	34	14	48	121	31	152
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										

Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify) Mushroom Production	3	22	32	54	10	12	22	32	44	76
TOTAL	**10**	**217**	**110**	**327**	**65**	**52**	**117**	**213**	**135**	**348**

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

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Nursery Management of Horticulture crops	1	10	8	18	8	12	20	18	22	40
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture	2	16	12	28	05	12	17	21	24	45
Mushroom Production										
Bee-keeping										

Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify) Mushroom Production	1	12	45	57	5	28	33	17	73	90
TOTAL	**4**	**38**	**65**	**103**	**18**	**52**	**70**	**56**	**119**	**175**

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	2	31	11	42	11	7	18	42	18	60
Integrated Pest Management										
Integrated Nutrient management	1	23	7	30	7	4	11	30	11	41
Rejuvenation of old orchards										
Protected cultivation technology										
Improved nursery techniques	1	30	2	32	10	-	10	40	2	42
Production and use of organic inputs										
Care and maintenance of farm machinery and implements	1	23	10	33	7	3	10	30	13	43
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total	**5**	**137**	**30**	**137**	**35**	**14**	**49**	**142**	**44**	**186**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management -Mealy bug Management	1	32	10	42	6	4	10	38	14	52
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify) Quality seed production	2	32	10	42	12	6	18	44	16	60
Total	**3**	**64**	**20**	**84**	**18**	**10**	**28**	**82**	**30**	**112**

7.G. Sponsored training programmes

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Increasing production and productivity of crops	16	434	159	593	148	59	207	582	218	800
1.b.	Commercial production of vegetables	14	275	108	383	123	54	177	398	162	560
2	**Production and value addition**										
2.a.	Fruit Plants										
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	**Soil health and fertility management**	24	1173	522	1695	467	238	705	1640	760	2400
4	**Production of Inputs at site**										
5	**Methods of protective cultivation**										
6	**Others (pl. specify)**										
7	**Post harvest technology and value addition**										
7.a.	Processing and value addition	1	28	22	50	11	9	20	39	31	70
7.b.	Others (NADP-Precision Farming farmers training-Drip irrigation for Horticulture crops)	12	327	13	340	45	5	50	372	18	390
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	**Livestock and fisheries**										
10	**Livestock production and management**										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c	Fisheries Nutrition										
10.d	Fisheries Management										
10.e.	Others (pl.specify)										
11.	**Home Science**										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	**Agricultural Extension**										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl.specify)										
	Total	**67**	**2237**	**824**	**3061**	**794**	**365**	**1159**	**3031**	**1189**	**4220**

Details of sponsoring agencies involved

1. NAD-Organic Farming, TNAU, Coimbatore – Tamil Nadu State Govt. scheme
2. IAMWARM, Scheme, TNAU, Coimbatore – Tamil Nadu Govt.
3. NADP-Precision Farming, TNAU, Coimbatore – State Govt. scheme.
4. NADP(Phase II)(RKVY) scheme "Strengthening of Quality Seed Production & Distribution"-Govt. Of India
5. Lentil scheme, Home science college, Madurai – Govt. of India

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

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**	2	20	15	35	11	4	15	31	19	50
1.a.	Commercial floriculture Production	2	28	12	40	8	2	10	36	14	50
1.b.	Commercial fruit production	3	25	5	30	14	6	20	39	11	50
1.c.	Commercial vegetable production	2	33	5	38	10	2	12	43	7	50
	Commercial Medicinal and aromatic plants production	2	27	6	33	12	5	17	39	11	50
1.d.	Integrated crop management										
1.e.	Organic farming										
1.f.	Others (pl. specify)										
2	**Post harvest technology and value addition**										
2.a.	Value addition										
2.b.	Others (pl. specify)										
3.	**Livestock and fisheries**										
3.a.	Dairy farming										
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing										
3.d.	Piggery										
3.e.	Poultry farming										
3.f.	Others (pl. specify)										
4.	**Income generation activities**										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery and implements										
4.d.	Rural Crafts										

4.e.	Seed production	1	11	8	19	4	2	6	15	10	25
4.f.	Sericulture										
4.g.	Mushroom cultivation	1	-	18	18	-	7	7	-	25	25
4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	Others (pl.specify)										
5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	Grand Total	**12**	**144**	**69**	**213**	**59**	**28**	**87**	**203**	**97**	**300**

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	6	167	76	243	43	28	71			-
Kisan Mela	-	-	-	-	-	-	-			-
Kisan Ghosthi	-	-	-	-	-	-	-			-
Exhibition	3	209	109	318	94	380	474			-
Film Show	-	-	-	-	-	-	-			-
Method Demonstrations	6	80	32	112	24	17	41			-
Farmers Seminar	2	126	75	201	67	37	104			-
Workshop	-	-	-	-	-	-	-			-
Group meetings	-	-	-	-	-	-	-			-
Lectures delivered as resource persons	1	42	26	68	75	5	80			
Newspaper coverage	13	-	-	-	-	-	-			-
Radio talks	2	-	-	-	-	-	-			-
TV talks	3	-	-	-	-	-	-			-
Popular articles	-	-	-	-	-	-	-			-
Extension Literature	-	-	-	-	-	-	-			-
Advisory Services	-	-	-	-	-	-	-			-
Scientific visit to farmers field	28	12	2	14	24	24	48			-
Farmers visit to KVK	141	102	7	109	33	4	37			-
Diagnostic visits	76	200	67	267	83	18	101			-
Exposure visits	4	200	-	200	118	-	118			-
Ex-trainees Sammelan	-	-	-		-	-	-			-
Soil health Camp	-	-	-	-	-	-	-			-
Animal Health Camp	-	-	-	-	-	-	-			-
Agri mobile clinic	-	-	-	-	-	-	-			-
Soil test campaigns	-	-	-	-	-	-	-			-
Farm Science Club Conveners meet	-	-	-	-	-	-	-			-
Self Help Group Conveners meetings	-	-	-	-	-	-	-			--
Mahila Mandals Conveners meetings	-	-	-	-	-	-	-			-
Celebration of important days (specify)	-	-	-	-	-	-	-			-
Any Other (Specify)(SAC)	1	-	-	-	-	-	-	20	5	25
Total	**286**	**1138**	**394**	**1532**	**561**	**513**	**1074**	**20**	**5**	**25**

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9. A. Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)						
Oilseeds						
Pulses	Black gram (Breeder seed)	ADT 3	-	0.641	57,690	12
	Black gram	VBN 4	-	0.2	14000	6
	Cowpea	CO 7	-	1.05	2100	5
	Green gram	VRM 1	-	2.06	14420	8
Commercial crops			-			
Vegetables	Brinjal	VRM 1	-	0.995	746	14
	Annual Moringa	PKM 1	-	0.315	46575	12
Flower crops			-			
Spices			-			
Fodder crop seeds			-			
Fiber crops			-			
Forest Species			-			
Others (specify)	Sunhemp		-	4.59	13770	11
Total			**-**	**9.851**	**1,49,301**	**68**

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	Brinjal			420	252	6
	Chilli			250	125	4
	Moringa			4	40	1
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation	Coconut			4366	14128	26
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						
Total				**5040**	**1,45,45**	**37**

9.C. Production of Bio-Products

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

9.D. Production of livestock materials

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

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

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

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)
(B) Literature developed/published

Item	Title	Authors name	Number
Research papers			
Technical reports			
News letters	KVK News letter (Quarterly)	Programme Coordinator	2000
Technical bulletins			
Popular articles			
Extension literature	Mushroom production technology	Programme Coordinator and Subject Matter Specialists	500
Others (Pl. specify) Pamphlet	Papaya mealy bug management	-do-	500
Brochure	KVK activities	-do-	500
Booklet	Mushroom cultivation	-do-	500
	Organic Farming	-do-	500
Leaflet	SRI Techniques	-do-	500
	Pro-tray nursery techniques	-do-	500
TOTAL			

10.B. Details of Electronic Media Produced

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

Success Story – 1 : Promotional achievement of Bt cotton spread by KVK in the Vellore district

The Front line demonstration on cotton (Production technology) was conducted in an area of 50 acres (20 ha) involving 50 progressive and enthusiastic farmers of the Gudiyatham region wherein the crop was of much negligence among the farming masses. The trial villages include Suraloor,Velleri,Goodamangalam and periyathambiyur villages of Gudiyatham block in the vellore district. Some unusual cultivators having seen little profit by way of raising cotton varieties in the early years were still eager enough to raise the crop. Seeing the profound eagerness expressed by the unusual cotton growers, the KVK intervened to admit the cause at once and promoted Bt cotton production technology as a challenging task during the year 2009 (kharif). The KVK scientific community popularized the advantages of farming Bt cotton over that of the traditional varieties and hybrids by way of trainings, video shows and power point presentations in their nativity before the onset of the monsoon. It also provided the farmers with details of the retailers of Bt cotton seeds in the vellore district and the various brands available and with the price spell. The farmers were appraised about the technological interventions to be adopted in Bt cotton cultivation for assured yield conservation and were also nurtured with the factors responsible for yield reduction in the crop and the ways and means to overcome them. Having convinced about the production technologies promoted, the farmers exhibited keen interest in improved methodology. They formed groups and implemented the technologies advocated by the scientists. Among the 50 farmers group, Thiru.M.Muthusamy S/o Munisamy Gounder, Velleri village obtained a highest kapas yield of 19.74q/ha and with an additional income of Rs.32,990/ha in the trial plot.

The production technologies imparted to the farmers through FLD programme during 2009-10 by the KVK scientific community gained momentum by way of ten fold increase in cotton acreage during 2010-11. By, 2010-11, the area under cotton increased to 600 acres in Velleri village alone. The people readily admitted the impact created by the KVK and appreciated the cause. Similar increase in cotton acreage was also noticed in the adjoining villages of the Gudiyatham region and the kapas procurement centres has also been established in the region after this novel change. The average kapas yield recorded in the region was upto 18-19q/ha thus earning more profit when compared to other crops.

Success Story – KVK intervention on Pulse production technologies

The area under pulses in Vellore District is increasing due to constant interventions by the scientists of KVK and the department of Agriculture. The demonstrations on pulses *viz*., blackgram, greengram were conducted by KVK in Velleri, Paratharami, Kalavai & Mecheri villages. Prior to demonstrations, trainings were given to the farming community in the villages concerned for imparting knowledge on technological interventions. Demonstrations on specific technologies like herbicide application and pest management were also conducted for proper adoption of agro techniques by the farmers. The production technologies imparted to the farmers through front line demonstrations by the KVK scientists of Vellore District resulted in increased area under pulses especially green and blackgram. The accelerated pulse production programme on redgram by the department of Agriculture led to increase in area under redgram significantly. The KVK scientists were involved in providing technical guidance and helped in dissemination of agrotechniques in the accelerated pulse production programme. Due to these interventions by these KVK scientists, the area under pulses is increasing with significant improvement in productivity.

Title of the Case study: A case study on "Cumbu Napier Hybrid Fodder among small and marginal farmers of Vellore district"

c) Situation/Background:

KVK was started during 2004 to cater the needs of the farming community of Vellore district. Majority of the farmers were Small and Marginal farmers. The fragmentation of land and rainfed farming kept them at low level of socio-economic condition and they struggle for their livelihood from agriculture alone. The lone dependence on rainfed farming for years, pushed them to go in for dairy farming and backyard poultry with external source of feed (readily available mixtures). This has lead to adoption of dairy farming in the district.

What KVK has tried to achieve?

KVK has planned to promote Cumbu Napier Hybrid Fodder (CO(CN)4) grass which has the special features of profuse tillering (25-30/clumps & non lodging); Ultra soft juicy stem (3.4 % Brix); More leaf stem ratio ; Free from pest and diseases and superior ratooning ability as an alternate crop to the exiting Co2 and Co3 fodder grass. The cause aims to boost up the overall milk production and ultimately uplift the socio-economic status of the farmers.

Technology/Process/Programme activities/Intervention

A series of interventions has been made to promote CO(CN)4

- Cumbu napier hybrid (Co(CN)4) forage grass was raised in the KVK farm during 2007-08 for further multiplication and to provide as input source for the Front line demonstration farmers
- On and Off campus training programmes were conducted on Cumbu napier hybrid cultivation to cattle growers/SHG's and village youth.
- Five front line demonstrations on Cumbu napier hybrid cultivation were conducted in Gudiyatham block, Vellore District benefiting 250 farmers indirectly.
- In order to spread the cultivation of cumbu napier hybrid, field days were conducted and cumbu napier hybrid stem cuttings were distributed to cattle farmers.
- Local NGO's were invited for training programmes and their target farmers were provided with cumbu napier hybrid rooted slips/stem cuttings.
- To reinforce/motivate the farmers, the Assistant Agricultural Officers (AAO's) and AO's from Department of Agriculture were sensitized through village level meetings during the conduct of FLD's.
- The total programme was carried out for a period of two years creating awareness to about 250 farm families.

Effect of the technology/process/result/impact

- Awareness and adoption level of CO (CN)4 increased drastically among the farmers through various interventions.
- CO(CN)4 cultivation area spread to 51 hectares and about 200 farmers cultivate CO(CN)4. More farmers started cultivating in the interspaces in coconut gardens, backyards throughout the district
- Yield of CO (CN 4) recorded 328 t/ha/yr.
- Gross income/ha/yr is Rs. 3,28,000 with an expenditure of Rs.77,393
- The net income recorded in a hectare per year is Rs. 2,50,607 with a cost benefit ratio of 4.23

Outcome

- KVK's intervention has led to increase in the area of CO(CN)4 cultivation to the tune of 40 ha.
- Knowledge, Skill, Decision making and Socio-economic condition of the farmers improved.
- Increase in knowledge on fodder cultivation was found in 375 farmers

- The average milk yield has increased from 5.5 litre/day/animal to 7.5 litre/day/ animal
- 20-35% reduction in external feed cost was achieved

Evaluation

The success was measured / evaluated based on the participatory field discussion with the farmers and by the testimonials of the farmer

KVK Intervention on Mushroom Cultivation

Training on Mushroom production was imparted to 207 farmers in vellore district during 2010-11. Cultivation techniques was explained with demonstration on oyster and milky mushroom production. So far 700 numbers of spawn bottles were supplied to the farmers on need basis. The number of participants trained during 2010-11 details are provide below.

S. No	Category	Number	No. of beneficiaries
1.	Vocational training	2	50
2.	One day training with demo	7	87
3.	SHG/NGO/Ruralyouth	3	70

Around eight farmers are successfully producing oyster mushroom in and around vellore district. The feedback was obtained from mushroom growers who started the mushroom unit after attending training.

A model feedback data is presented below,

Name of the farmer : Udayakumar

Location : Vellore

Investment to produce 25 kg mushroom/day

Capital investment (Shed construction)	Rs. 10,000.00
Inputs (Paddy straw, spawn, covers etc.,)	Rs. 2000.00
Labour cost	Rs.500.00
Water/Electricity charges	Rs.500.00
Miscellaneous (Disinfestations)	Rs.500.00
TOTAL	**Rs.13500.00**

Income Generation : Sale price : Rs.120/kg

For 25 kgs : Rs.30,000/-

Net profit : 30,000 – 13,500 = Rs. 16,500/-

Sustaining the commercial production of oyster mushroom depends on climatic conditions Oyster mushroom grows well at 25-27^0 C being a hottest district, sustaining of this enterprise become difficult. Production generally high during winter (Oct, Nov, Dec) and generally reduced during summer. Many farmers do this business during cooler months and unable to meet the demand during hotter period. This is the major constraint in mushroom production of Vellore district.

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

- Farmers participatory operational research has been initiated to conduct the research programmes in the farmers holdings by he farmers
- Under precision farming, three clusters were formed in the district in sugarcane, banana and vegetable crops. Fertigation in combination with drip irrigation enabled the farmers achieve assured productivity and overcome severe water crisis. Moreover the intervention enables the farmers farm throughout the year with minimal irrigational support. Besides commodity groups were also formed in Mango and Banana in

vellore district. This helps the farmers to know the market situation, price range, intelligence, marketability of the commodity. Now the commodity groups are directly marketing his produce to the exporters without any middle men.

- ❖ Exposure visits were arranged for the farmers which enabled them to learn the latest technologies on precision farming directly from the beneficiaries.
- ❖ Information and communication technologies (ICTs) play a vital role in information dissemination, social networking and knowledge transfer. In order to effectively reach the farmers, KVK Virinjipuram has initiated an innovative, simple and easy to use method through digital documentation of farmers plant protection problems and find solutions for advisory and follow up. The Scientists of KVK document the symptoms of pest and disease infestation from the farmers, who visits the KVK for advisory and also from the farmers field. The documentation process involves digitations of symptom through a digital camera and recording the farmers cropping system, plant protection measures adopted by him etc., The scientists analyse the data and provide recommendations back to the farmers. The digital photographs, thus collected from the farmers were documented in a compact Disc. The stored symptoms in the form of digital photographs will be retrieved by the scientists for research and advisory to the farmers. The stored symptoms are used by the farmer for easy recognition and identification of the pest and disease problems and find solutions for the same. So far around 200 farmers pest and disease problems were recorded/ digitized and solutions have be provided for managing their pest and disease problems.

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

S. No.	Crop/ Enterprise	ITK Practiced	Purpose of ITK
1.	Vermi-compost	Sprinkling of jaggery on soil to attract earthworm	To trap earthworms dwelling in soil
2.	Red gram, Lablab	Red earth slurry is mixed with red gram and cowpea seeds to safe guard the seeds from bruchid infestation.	Low cost grain storage method
3.	Red gram	Red gram intercrop with cotton	Borer pest management
4.	Turmeric	Soaking the rhizomes in cow dung slurry for over night	Curing of rhizome
5.	Gourds	Rubbing if seeds with sand and wood ash	Scarification to remove hard seed coat
6.	Paddy	Storing the hulled rice with acora calamus powder and with curry, Nochi, Neem leaves	Protect the rice grain borer pests
7.	Various crops	Extract of cow dung	Growth promoter

8.	Lab-lab	Sprinkle of ash powder on the vines in lab lab	To manage pest and disease menace
9.	Moringa	Apply cow dung past over the cut portion of the stem/branch	Prevention of exhaustion of moisture from sun scorch and to trigger young growth of young sprouts
10.	Pumpkin	Removal of flower buds for use in rangoli decoration during December-early January months	To reduce the number of infertile male flowers and to promote formation of more number of female flowers for fruit formation

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

- ❖ Farmers participatory operational research
- ❖ PRA methods
- ❖ Key informer method
- ❖ Farmers Association
- ❖ Commodity groups
- ❖ Farm Science Club

10.G. Field activities

i. Number of villages adopted : 2
ii. No. of farm families selected : 50
iii. No. of survey/PRA conducted : 2

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Establishment of Soil and water testing lab is in progress

1. Year of establishment : 2011 (Likely)
2. List of equipments purchased with amount :

S. No.	Particulars	Cost (Rs.)
1.	Physical balance	6,760.00
2.	Chemical Balance	20,592.00
3.	pH meter	5,970.00
4.	Conductivity bridge	11,326.00
5.	Kjeldahl digestion and distillation	2,33,170.00
6.	Spectrophotometer	39,104.00
7.	Flame Photometer	45,240.00
8.	Water Distillation Unit	36,400.00
9.	Shaker	20,800.00
10.	Water bath rectangular	7,249.00
11.	Hot air Oven	17,680.00
12.	Hot plate	7,956.00
13.	Grinder (willy mill)	32,760.00
14.	Laboratory table	78,000.00
15.	HCL Desktop computer system	28,500.00
16.	HP laserjet printer	9,100.00
17.	GPS (Gramin eTrex HCx)	19,965.00
18.	Portable soil and water analysis kit	53,635.00
19.	Fume hood	19,760.00
20.	RO System for water input	13,500.00
21.	Racks, almirah, angle iron racks, wash basin, exhaust fan, gas burner, soil and plant, chemical storage cabins	2,12,558.00

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

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

Details of samples analyzed during the 2010-11 : NIL

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

10.I. Technology Week celebration

Period of observing Technology Week : From 20.03.2010 to 24.03.2010

Total number of farmers visited : 1050

Total number of agencies involved : 10

Number of demonstrations visited by the farmers within KVK campus : 12

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized	10	800	
Exhibition	1	900	
Film show	12	520	
Fair	-	-	
Farm Visit	208	208	
Diagnostic Practicals	10	400	
Supply of Literature (No.)	15	1000	
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	1	1050	

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

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries

B. Major area coverage under alternate crops/varieties

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

C. Farmers-scientists interaction on livestock management

State	**Livestock components**	**Number of interactions**	**No.of participants**
Total			

D. Animal health camps organized

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

E. Seed distribution in drought hit states

State	**Crops**	**Quantity (qtl)**	**Coverage of area (ha)**	**Number of farmers**
Total				

F. Large scale adoption of resource conservation technologies

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
Total			

G. Awareness campaign

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers
Total												

PART XI. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Mushroom production	72	68 %	-	Rs. 3,000/ unit
Precision farming	100	30 %	Rs. 8,000/ acre	Rs.35,000/ acre
SRI	358	50 %	Rs. 9,500/acre	Rs. 14,400/ acre
Vermi-compost production	104	8 %	-	Rs. 3,000/ unit
Introduction of Hybrid Rice	75	25 %	Rs. 8,000/ acre	Rs. 12,000/ acre

11.B. Cases of large scale adoption

In Vellore district, the rice growers adopt traditional method of cultivation that consumes lot of water, involve more number of labourers and recorded low yield. The KVK, vellore intervened and introduced System Rice Intensification, for the first time in the villages Viz. Kalapalampattu, Panapakkam, Ocheri and Kalavai. The steps followed in the propaganda of SRI are: informal meetings, pre-sowing trainings, demonstration, hands on intensive training, exposure visit, free distribution of inputs, video shows and street meetings, training to extension personnel, etc. Now, within a period of one and a half years, the area under SRI in Vellore district is around 4500 ha.

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

1. SRI has spread to an area of 4500 ha in Vellore district.
2. Vermi compost: 25 units are under operation under the guidelines of KVK, Vellore district.
3. Precision farming is adopted in an area of 100 ha.
4. Mushroom production : 8 units are involved in the production of mushroom

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
Department of Agriculture	Monthly Zonal meetings, Training to extension personnel, technical advice, joint implementation of government schemes, supervision of the implementation of schemes
Department of Agricultural engineering, Horticulture and Plantation crops, Animal Husbandry, TANUVAS, Vellore.	Zonal meetings, Training to extension personnel, technical advice, joint implementation of government schemes, supervision of the implementation of schemes
Collectorate	Farmers Grievances Redressal meetings, technical advice, Agriculture Production Council meetings, Gram Sabha meetings
DRDA, Vellore	Conducting training programmes and technical advise
DKM College and VIT	Technical Guidance
ATMA	Preparation of Strategic research Plan for the district, technical advice, demonstrations
NGOs ; Exonera; SEEDS ; Worth Trust RUSHA; CARE Trust; Srinivasa Service Trust; SKETCH Trust	Technical advice and provision of trainings
Department of Forest	Conducting training programmes on mushroom cultivation and vermin--compost
State Bank, NABARD & Union Bank	Collaborative training programmes

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.)
TN IAMWARM – Poiney basin	9.11.10	World Bank	14,44,000
TN IAMWARM – Pambanar & Varattar	14.5.10	World Bank	19,03,000
NADP-Organic Farming	27.11.2009	Government of Tamil Nadu	4,00,000
NADP-Quality seed production	28.03.2010	Government of Tamil Nadu	1,49,500

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No : YES

S. No.	Programme	Nature of linkage	Remarks
1	Off-campus training	Technical input provider	
2	Vocational Training	Collaborative training programmes and exhibitions were organized	-
3	OFT		
4	FLD		

Coordination activities between KVK and ATMA during 2010-11

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	**Meetings**				
02	**Research projects**				
03	**Training programmes**	Trainings, Work shop, Farmer scientist interaction meet	3	1	
04	**Demonstrations**				
05	**Extension Programmes**				
	Kisan Mela				
	Technology Week		1	1	
	Exposure visit	Farmers from Thiruvallur and Vellore district visited KVK Farm	3	-	
	Exhibition	Collaborative activity	5	5	
	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				

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

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

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

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

12.F. Details of linkage with RKVY : NIL

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

12. G Kisan Mobile Advisory Services : NIL

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 (Acre)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
	Precision farming in Sugarcane, and Annual moringa	2010	1	Sugarcane-CO 86032	Setts	10 tons	4,300	15372	Acute water scarcity prevailing in the farm
			3	Annual moringa-PKM1	Seeds	26 kg	2800	39000	

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.(q)	Cost of inputs	Gross income	
Cereals									
Pulses									
Blackgram (Breeder seed)	11.1.11	22.3.11	0.90	ADT 3	(Breeder seed)	6.41	24500	57690	
Blackgram	18.6.10	2.9.10	0.80	VBN 4	TFL	2.0	6500	14000	
Cowpea	26.7.10	29.9.10	0.35	Co 7	-	1.05	980	2100	
Greengram	26.7.10	11.10.10	0.30	VRM 1	TFL	2.06	8900	14420	
Oilseeds									
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables Brinjal				VRM 1		0.995		746	
Others (specify)									

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

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

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

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

13.E. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
October 2008	-	-	-
November 2008	-	-	-
December 2008	-	-	-
January 2009	-	-	-
February 2009	-	-	-
March 2009	-	-	-
April 2009	-	-	-
May 2009	-	-	-
June 2009	-	-	-
July 2009	-	-	-
August 2009	34	2	-
September 2009	50	2	-

13.F. Database management

S. No	Database target	Database created
1.	District Profile, Progressive Farmers List	Database creation is completed

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

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
Constructed by Dept. of Agricultural Engineering, Vellore		Pond	-	-	-	-	7	-	-
		Paired row planting in Sugarcane	5	03		230	6	-	-
		Drip irrigation in moringa	05	05		260	14	-	-

PART XIV - FINANCIAL PERFORMANCE

14.A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute							
With KVK	State Bank of India	Poigai	07126	Saving A/c	11339961458		SBIN0007126

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

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

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

S. No.	Particulars	Sanctioned (Rs.)	Released (Rs.)	Expenditure (Rs.)
A. Recurring Contingencies				
1	**Pay & Allowances**	45,00,000	75,10,037	57,32,121
2	**Traveling allowances**	1,00,000		99,962
3	**Contingencies – Rs.13,00,000**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2,20,000		2,19,255
B	POL, repair of vehicles, tractor and equipments	1,70,000		93,307
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	80,000		79,991
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	50,000		46,960
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) FLD on Special pulse programme	1,85,000 40,000		1,75,691 39,430
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	90,000		85,860
G	Training of extension functionaries	10,000		10,000
I	Chemicals and glasswares for soil and water testing labs	2,50,000		2,50,000
J	Petty items-such as pestle and mortar	1,00,000		1,00,000

K	Soil and plant sample processing and storage facility	50,000		50,000
L	Library (Purchase of journal, newspaper and magazines)	5,000		4,900
M	Farmers Field School	25,000		24,173
N	Extension Activities	25,000		23,984
TOTAL (A)		**59,00,000**		**70,35,634**
B. Non-Recurring Contingencies				
1	Digital camera	25,000		24,300
2	SWTL	10,00,000		10,00,000
3	Furniture and Furnishing	5,00,000		4,97,302
4	Generator	1,00,000		91,089
5	EPABX system	50,000		49,690
6	Library (Purchase of assets like book and journals)	10,000		9,948
Total(B)		**16,85,000**		**16,72,329**
C. REVOLVING FUND		0	-	0
GRAND TOTAL (A+B+C)		**75,85,000**	**75,10,037**	**87,07,963**

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

Year	**Opening balance as on 1st April**	**Income during the year**	**Expenditure during the year**	**Net balance in hand as on 1st April of each year**
April 2008 to March 2009	91344.37	96411	39312	148443.37
April 2009 to March 2010	148443.37	111876	27342	232977.37
April 2010 to March 2011	232977.37	62548	82590	212935.37

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	Pulses	Assessment of the performance of the pulse wonder in pulses	5
Varietal Evaluation			
Integrated Pest Management	Chillies	Management of Chillies pest and disease complex	5
Integrated Crop Management	Redgram	Assessment of planting method in redgram	5
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries	Paddy	Assessment of efficient mechanical weeding Practices in SRI	5
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Others (Pl. specify)			
Total			

Summary of technologies assessed under livestock

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Disease Management	Poultry	Control of Ranikhet disease in *desi* chicken	50
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management	Dairy cows	Area specific mineral mixture for dairy cows	14
Production and Management			
Others (Pl. specify)			
Total			

.Summary of technologies assessed under various enterprises : NIL

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

Summary of technologies assessed under home science : NIL

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

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops : NIL

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 : NIL

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

Summary of technologies refined under various enterprises : NIL

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

Summary of technologies refined under home science : NIL

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

III. FRONTLINE DEMONSTRATION

Cotton

Frontline demonstration on cotton : NIL

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

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

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals																		
Paddy	Crop protection	Integrated pest and disease management in paddy		10	5	47.15	39.00	20.91	Pest incidence in % Stem borer - 11 Leaf folder – 10 Disease incidence in % Blast - 9	23 26 16	29400	59440	30040	2.02	27920	52100	24180	1.87
		Popularization of Co(R) H-3 paddy in SRI method		10	5	70.58	52.13	35.4	No.of productive tillers/m^2 -392 No.of panicles/ m^2 - 319	312 256	35217	77638	42421	2.20	31367	57343	25976	1.83
Millets																		
Oilseeds																		
Groundnut	Integrated Crop Management	Introduction of HYV and integrated crop management practices in groundnut in rabi season		5	1	17.07	14.15	20.7	Pods/plant- 26	21	24.1677.00	51210.00	27043.00	2.12	22986.00	42.450.00	19464.00	1.85
Sesame	Integrated Crop Management	Introduction and popularisation of latest variety TMV 7 sesame and integrated crop management practices		10	5	7.62	6.48	17.6	Pods/plant- 71	63	14633	30480	15847	2.08	13474	25920	12446	1.92

Sunflower	Crop protection	Designer seed module for pest and disease management in sunflower		10	5	2240	1660	38	Thrips/plant- 4 Leaf hopper/plant- 5 Alternaria (PDI) -9 Rust (PDI) - 10	30 26 26 30	18000	60480	42480	3.36	16000	44820	28820	2.80
Coconut	Crop protection	Management of Rhinoceros beetle in coconut		12	5	15315	12500	22.5	Rhinoceros beetle - %damage in coconut palms- 1.7	11.4	16850	48000	31150	2.85	13500	35250	21750	2.61
Pulses (Special pulses programme) Green gram	Integrated Crop Management	Integrated crop management practices in Green gram		10	4	7.84	6.53	20.06	No. of pods / plant- 28 % incidents of pod borer - 14	22 26	13268	28376	15108	2.14	11873	22856	10983	1.93
Pulses (Special pulses programme) Black gram	Integrated Crop Management	Integrated crop management practices in Black gram		10	4	8.63	7.02	22.93	No.of pods / plant- 32 % incidents of pod borer - 13	25 24	13657	31238	17581	2.28	12293	24582	12289	1.99
Pulses					5	Continued..												
Vegetables	Crop improvement	Popularization of COBH2 Brinjal		10	1	302	238	26.89			64000	166000	102000	2.59	39000	68500	29500	1.76
Flowers																		
Ornamental																		
Fruit																		
Spices and condiments																		
Commercial																		

Medicinal and aromatic																		
Fodder	Animal Husbandry	Popularization of fodder bank at village level		10	1				No. of tillers / clump- 35	-								
		Guinea Grass + Hedge Lucerne intercropping																
					Guinea Grass	1520	Fodder sorghum 328				42864	152000	109136	3.55	15849	32800	16951	2.07
					Hedge Lucerne	290					9392	34800	25408	3.71				
		CN Hybrid + Hedge Lucerne intercropping																
					CN Hybrid	2570					67106	257000	189894	3.83				
					Hedge Lucerne	330					10287	39600	29313	3.85				
Plantation																		
Fibre																		
Others (pl.specify)																		
Farm implements	Farm Mechanization	Farm mechanization in paddy cultivation		10	2	26 (Labour requirement)	140	81.5	Drudgery reduction level - High Time saving in % - 81.5 Cost saving – 72.14	Low - -	23900	67200	43300	2.81	29800	62400	32600	2.10
	Farm Mechanization	Mechanical sugarcane sett cutter		50	10	3 (Labour requirement)	12	75	Drudgery reduction level - High Time saving in % - 75 Reduction of seed cane in %- 50	Low - -	82700	280000	197300	3.38	78900	205000	128100	2.59

	Total																	

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

Livestock

Category	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																		
Poultry																		
Rabbitry																		
Pigerry																		
Sheep and goat																		
Duckery																		
Others (pl.specify)																		

	Total																	

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

Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps	Composite fish culture	Popularisation of composite fish culture in village ponds		5	5	7	-				33,500	80,000	46,500	2.38	-	-	-	-
Mussels																		
Ornamental fishes																		
Others (pl.specify)																		
	Total																	

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

Other enterprises : NIL

Category	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Oyster mushroom																	
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
Others (pl.specify)																	
Total																	

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

Women empowerment : NIL

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

Farm implements and machinery

Name of the implement	**Crop**	**Name of the technology demonstrated**	**No. of KVKs**	**No. of Farmer**	**Area (ha)**	**Filed observation (output/man hour)**		**% change in major parameter**	**Labor reduction (man days)**				**Cost reduction (Rs./ha or Rs./Unit ect.)**			
						Demonstration	**Check**									
Mechanical paddy transplanter Single row cono weeder Paddy harvester		Transplanting paddy seedlings using paddy transplanter Weeding using cono weeder Harvesting using tractor operated combine		10	2	26	140	81.5		114				10700		

Motorized sugarcane sett cutter		Seed cane cutting using motorized sugarcane sett cutter		50	10	3	12	75		9				71200		

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

Demonstration details on crop hybrids

Crop	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
				Demonstration	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Cereals										
Bajra										
Maize										
Rice	Co(R)H 3	10	5	7058	5213	35.4	35217	77638	42421	2.20
Sorghum										
Wheat										
Others (pl.specify)										
Total										
Oilseeds	KBSH 41	10	10	21.80	16.60	38	18,000	60,480	42,480	3.36
Castor										

Mustard										
Safflower										
Sesame										
Sunflower										
Groundnut										
Soybean										
Others (pl.specify)										
Total										
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										
Others (pl.specify)										
Total										
Vegetable crops										
Bottle gourd										
Capsicum										
Others (pl.specify)										
Total										
Cucumber										
Tomato										
Brinjal										
Okra										
Onion										
Potato										
Field bean										
Others (pl.specify)										
Total										
Commercial crops										

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

IV. Training Programmes

Farmers' Training including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production	11	145	44	189	52	34	86	189	86	275
Nursery management										
Integrated Crop Management	5	52	39	91	25	9	34	77	48	125
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Improved Nursery techniques in hybrid brinjal	1	10	5	15	5	5	10	15	10	25
Improved Nursery techniques for vegetable production	1	8	2	10	12	3	15	20	5	25
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										

Grading and standardization										
Protective cultivation										
Others (pl.specify)										
b) Fruits										
Production technologies for Papaya	1	10	5	15	5	5	10	15	10	25
Quality enhancement methods in Banana	1	12	3	15	9	1	10	21	4	25
Post harvest technology	1	8	2	10	13	2	15	21	4	25
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										

Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology	1	10	7	17	5	3	8	15	10	25

Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										

Integrated Pest Management	14	179	59	238	73	39	112	252	98	350
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture	1	15	5	20	2	3	5	17	8	25
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										

Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**37**	**449**	**171**	**620**	**339**	**104**	**305**	**642**	**283**	**925**

Farmers' Training including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems	2	21	10	31	10	9	19	31	19	50
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production	4	61	39	100	21	8	29	56	15	71
Nursery management										
Integrated Crop Management	2	18	12	30	14	8	22	32	20	52
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify) NADP organic farming training	12	610	205	815	224	161	385	834	366	1200
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising (Brinjal)	4	55	10	65	22	13	35	77	23	100
Exotic vegetables										
Export potential vegetables										
Grading and standardization										

Protective cultivation										
Post harvest technology	3	27	18	45	20	10	30	47	28	75
Others (pl.specify)										
b) Fruits										
Production technology for Papaya	5	55	20	75	35	15	50	90	35	125
Quality enhancement methods in Banana	5	40	25	65	33	27	60	73	52	125
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										

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

Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management										

Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										

Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**37**	**887**	**339**	**1226**	**379**	**251**	**630**	**1240**	**558**	**1798**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	2	31	28	59	15	21	36	46	49	95
Training and pruning of orchards										
Protected cultivation of vegetable crops	1	8	6	14	6	5	11	14	11	25
Commercial fruit production										
Integrated farming										
Seed production	4	156	44	200	34	14	48	121	31	152
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										

Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify) Mushroom Production	3	22	32	54	10	12	22	32	44	76
TOTAL	**10**	**217**	**110**	**327**	**65**	**52**	**117**	**213**	**135**	**348**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	1	10	8	18	8	12	20	18	22	40
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture	2	16	12	28	05	12	17	21	24	45
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										

Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify) Mushroom Production	1	12	45	57	5	28	33	17	73	90
TOTAL	**4**	**38**	**65**	**103**	**18**	**52**	**70**	**56**	**119**	**175**

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	2	31	11	42	11	7	18	42	18	60
Integrated Pest Management										
Integrated Nutrient management	1	23	7	30	7	4	11	30	11	41
Rejuvenation of old orchards										
Protected cultivation technology										
Improved nursery techniques	1	30	2	32	10	-	10	40	2	42
Production and use of organic inputs										
Care and maintenance of farm machinery and implements	1	23	10	33	7	3	10	30	13	43
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total	**5**	**137**	**30**	**137**	**35**	**14**	**49**	**142**	**44**	**186**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management -Mealy bug Management	1	32	10	42	6	4	10	38	14	52
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify) Quality seed production	2	32	10	42	12	6	18	44	16	60
Total	**3**	**64**	**20**	**84**	**18**	**10**	**28**	**82**	**30**	**112**

Sponsored training programmes

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Increasing production and productivity of crops	16	434	159	593	148	59	207	582	218	800
1.b.	Commercial production of vegetables	14	275	108	383	123	54	177	398	162	560
2	**Production and value addition**										
2.a.	Fruit Plants										
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	**Soil health and fertility management**	24	1173	522	1695	467	238	705	1640	760	2400
4	**Production of Inputs at site**										
5	**Methods of protective cultivation**										
6	**Others (pl. specify)**										
7	**Post harvest technology and value addition**										
7.a.	Processing and value addition	1	28	22	50	11	9	20	39	31	70
7.b.	Others (NADP-Precision Farming farmers training-Drip irrigation for Horticulture crops)	12	327	13	340	45	5	50	372	18	390
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	**Livestock and fisheries**										
10	**Livestock production and management**										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c	Fisheries Nutrition										
10.d	Fisheries Management										
10.e.	Others (pl.specify)										
11.	**Home Science**										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	**Agricultural Extension**										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl.specify)										
	Total	**67**	**2237**	**824**	**3061**	**794**	**365**	**1159**	**3031**	**1189**	**4220**

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

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**	2	20	15	35	11	4	15	31	19	50
1.a.	Commercial floriculture Production	2	28	12	40	8	2	10	36	14	50
1.b.	Commercial fruit production	3	25	5	30	14	6	20	39	11	50
1.c.	Commercial vegetable production	2	33	5	38	10	2	12	43	7	50
	Commercial Medicinal and aromatic plants production	2	27	6	33	12	5	17	39	11	50
1.d.	Integrated crop management										
1.e.	Organic farming										
1.f.	Others (pl. specify)										
2	**Post harvest technology and value addition**										
2.a.	Value addition										
2.b.	Others (pl. specify)										
3.	**Livestock and fisheries**										
3.a.	Dairy farming										
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing										
3.d.	Piggery										
3.e.	Poultry farming										
3.f.	Others (pl. specify)										
4.	**Income generation activities**										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery and implements										
4.d.	Rural Crafts										
4.e.	Seed production	1	11	8	19	4	2	6	15	10	25
4.f.	Sericulture										
4.g.	Mushroom cultivation	1	-	18	18	-	7	7	-	25	25
4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	Others (pl.specify)										
5	**Agricultural Extension**										

5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	Grand Total	**12**	**144**	**69**	**213**	**59**	**28**	**87**	**203**	**97**	**300**

V. Extension Programmes

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	6	167	76	243	43	28	71			-
Kisan Mela	-	-	-	-	-	-	-			-
Kisan Ghosthi	-	-	-	-	-	-	-			-
Exhibition	3	209	109	318	94	380	474			-
Film Show	-	-	-	-	-	-	-			-
Method Demonstrations	6	80	32	112	24	17	41			-
Farmers Seminar	2	126	75	201	67	37	104			-
Workshop	-	-	-	-	-	-	-			-
Group meetings	-	-	-	-	-	-	-			-
Lectures delivered as resource persons	1	42	26	68	75	5	80			
Newspaper coverage	13	-	-	-	-	-	-			-
Radio talks	2	-	-	-	-	-	-			-
TV talks	3	-	-	-	-	-	-			-
Popular articles	-	-	-	-	-	-	-			-
Extension Literature	-	-	-	-	-	-	-			-
Advisory Services	-	-	-	-	-	-	-			-
Scientific visit to farmers field	28	12	2	14	24	24	48			-
Farmers visit to KVK	141	102	7	109	33	4	37			-
Diagnostic visits	76	200	67	267	83	18	101			-
Exposure visits	4	200	-	200	118	-	118			-
Ex-trainees Sammelan	-	-	-		-	-	-			-
Soil health Camp	-	-	-	-	-	-	-			-
Animal Health Camp	-	-	-	-	-	-	-			-
Agri mobile clinic	-	-	-	-	-	-	-			-
Soil test campaigns	-	-	-	-	-	-	-			-
Farm Science Club Conveners meet	-	-	-	-	-	-	-			-
Self Help Group Conveners meetings	-	-	-	-	-	-	-			--
Mahila Mandals Conveners meetings	-	-	-	-	-	-	-			-
Celebration of important days (specify)	-	-	-	-	-	-	-			-
Any Other (Specify)(SAC)	1	-	-	-	-	-	-	20	5	25
Total	**285**	**1138**	**394**	**1532**	**561**	**513**	**1074**	**20**	**5**	**25**

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	Black gram	ADT3 Breeder seed	6.41	57690	12
	Black gram	VBN 4	2.0	14000	6
	Green gram	VRM (Gg)1	2.06	14420	8
	Cowpea	Co(Cp)7	1.0	2100	5
Commercial crops					
Vegetables	Annual moringa	PKM1	0.315	46525	12
	Brinjal	TNAU Brinjal VRM-1	0.0099	746	14
Flower crops					
Spices					
Fodder crop seeds					
Fiber crops					
Forest Species					
Others	Sun hemp	CO 1	4.59	13770	11
Total			**16.38**	**1,49,301**	**68**

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	4356	14128	76
Spices					
Tuber					
Fodder crop saplings	Cumbu Napier hybrid forage grass	CO(CN)4	34000 stem cuttings	17000	61
Forest Species					
Others					
Total			**38356**	**31128**	**137**

Production of Bio-Products: Nil

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

Production of livestock and related enterprise materials: Nil

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 : Nil

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

VII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted : 1 SAC meeting was conducted on 10.02.2011
Number of SAC official members attended: 13
Number of SAC farmer members attended: 4

IX. NEWSLETTER

Number of issues of newsletter published : 4

X. RESEARCH PAPER PUBLISHED: Nil

Number of research paper published

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

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

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